

RPS



# Proposed Alterations to Ringaskiddy Port Redevelopment

## Screening for Appropriate Assessment



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# 1 INTRODUCTION

This report has been prepared by RPS on behalf of the Port of Cork (POC). The purpose of this report is to document the evaluation and analysis that RPS has undertaken on behalf of POC to establish whether or not the proposed alterations (ABP Ref. PC0216) to the previously permitted development of existing port facilities at Ringaskiddy Deepwater Port (ABP Ref. 04.PA0035) are likely to have a significant effect on any European site.

This exercise considers the proposed alterations and has been undertaken in view of best scientific knowledge and in view of the conservation objectives of the site(s) concerned.

An Bord Pleanála has been furnished with this report along with an allied Environmental Impact Statement to assist the competent authority in fulfilling its duties in accordance with Part XAB of the Planning and Development Acts 2000 to 2015 which transposes certain aspects of Article 6(3) and 6(4) of the Habitats Directive 92/43/EEC.

## 1.1 GUIDANCE DOCUMENTS

Appropriate Assessment Guidelines for Planning Authorities have been published by the Department of the Environment Heritage and Local Government (DEHLG, 2010a). In addition to the advice available from the Department, the European Commission has published a number of documents which provide a significant body of guidance on the requirements of Appropriate Assessment, most notably including, 'Assessment of Plans and Projects Significantly Affecting Natura 2000 sites - Methodological Guidance on the Provisions of Article 6(3) and (4) of the Habitats Directive 92/43/EEC' (EC, 2001), which sets out the principles of how to approach decision making during the process.

These principal national and European guidelines have been followed in the preparation this screening for appropriate assessment report. The following list identifies these and other pertinent guidance documents:

- Communication from the Commission on the Precautionary Principle., Office for Official Publications of the European Communities, Luxembourg (EC, 2000a);
- Managing Natura 2000 Sites: the provisions of Article 6 of the 'Habitats' Directive 92/43/EEC, Office for Official Publications of the European Communities, Luxembourg (EC, 2000b);
- Assessment of plans and projects significantly affecting Natura 2000 sites: Methodological guidance on the provisions of Articles 6(3) and (4) of the Habitats Directive 92/43/EEC. Office for Official Publications of the European Communities, Brussels (EC, 2001);
- Guidance document on Article 6(4) of the 'Habitats Directive' 92/43/EEC – Clarification of the concepts of: alternative solutions, imperative reasons of overriding public interest, compensatory measures, overall coherence, opinion of the commission; (EC, 2007);
- Estuaries and Coastal Zones within the Context of the Birds and Habitats Directives - Technical Supporting Document on their Dual Roles as Natura 2000 Sites and as Waterways and Locations for Ports. European Commission (EC, 2009);
- Appropriate Assessment of Plans and Projects in Ireland. Guidance for Planning Authorities. Department of the Environment, Heritage and Local Government, Dublin (DEHLG, 2010a);
- Department of Environment Heritage and Local Government Circular NPW 1/10 and PSSP 2/10 on Appropriate Assessment under Article 6 of the Habitats Directive – Guidance for Planning Authorities (DEHLG, 2010b);
- Guidance document on the implementation of the birds and habitats directive in estuaries and coastal zones with particular attention to port development and dredging. European Commission (EC, 2011a);

- European Commission Staff Working Document ‘Integrating biodiversity and nature protection into port development’ (EC, 2011b);
- Marine Natura Impact Statements in Irish Special Areas of Conservation: A working document, National Parks and Wildlife Service, Dublin (NPWS, 2012);
- Interpretation Manual of European Union Habitats. Version EUR 28. European Commission (EC, 2013); and

## 1.2 APPROACH USED IN THIS REPORT

EC (2000a) notes that the implementation of an approach based on the precautionary principle should start with a scientific evaluation, as complete as possible, and where possible, identifying at each stage the degree of scientific uncertainty, and also that decisions taken based on the precautionary principle should be maintained so long as scientific information is incomplete or inconclusive. EC (2001) notes also that predicting the response of a receptor to a disturbance effect can be difficult and, in the absence of firm scientific information, requires a precautionary approach.

In accordance with EC (2001) guidance, this screening exercise has not taken into consideration mitigation measures designed to reduce the environmental impacts of the activities to be undertaken.]

The threshold for a likely significant effect is treated in the screening exercise as being above a *de minimis* level. A *de minimis* effect is a level of risk that is too small to be concerned with when considering ecological requirements of an Annex I habitat or a population of Annex II species present on a European site necessary to ensure their favourable conservation condition. If low level effects on habitats or individuals of species are judged to be in this order of magnitude and that judgment has been made in the absence of reasonable scientific doubt, then those effects are not considered to be likely significant effects.

This NIS takes into consideration the specialist assessments associated with the allied EIS for the proposed alterations, and applies any mitigation measures proposed therein.

The most up-to-date Conservation Objectives (COs) available have been applied to the assessment conducted in this report and are clearly identified by their date of publication (or otherwise) on a site-by-site basis in this report.

## 2 THE PROPOSED ALTERATIONS

The proposed alterations are relatively modest in nature in the context of the already permitted development. These are described more fully at Chapter 3 of the allied EIS and to where the reader should now cross-refer to get an understanding of what is proposed,

Importantly the proposed alterations do not include any intensification of use when compared the works covered by the extant approval. The proposed alterations are summarised in Table 1.

**Table 1: Summary of Alterations**

<p><b>Landside Container Handling (refer to EIS Section 3.5)</b></p> <ul style="list-style-type: none"> <li>• A change in the landside container handling system from the permitted Rubber Tyred Gantry (RTG) with truck / trailers to a Straddle Carrier (SC) operation.</li> <li>• Internal container stacking arrangement and height amended to suit new container handling system. Containers are stacked 3 high over the majority of the site.</li> <li>• The lower stack height requires an increased footprint</li> <li>• Change in position of lighting columns</li> <li>• Use of part of the permitted general cargo storage area for storage of the increased container footprint.</li> <li>• Change in the extent of the container yard (increase of 5% in terminal area).</li> <li>• Overall increase in development footprint of 7%</li> </ul>
<p><b>Main Berth and Mooring Dolphins (refer to EIS Section 3.6)</b></p> <ul style="list-style-type: none"> <li>• Minor alterations to the geometry of the southern end of the main berth 1. 5.6% increase in number of piles as a result of phased construction.</li> <li>• Dredge pocket extended approximately 46m southwards to accommodate berthing along the full length of the main berth</li> <li>• 15,000m<sup>3</sup> additional volume of dredging (4% increase in overall dredge volume) / 3750m<sup>2</sup> additional dredge area (4 % increase in overall dredge area)</li> <li>• Removal of two existing mooring dolphins</li> <li>• Construction of three replacement mooring dolphins</li> </ul>
<p><b>Entrance and Interchange Area (refer to EIS Section 3.8)</b></p> <ul style="list-style-type: none"> <li>• Entrance and exit areas moved and realigned to facilitate improved circulation and separation at the interchange area</li> <li>• Provision of additional queuing capacity</li> </ul>
<p><b>Maintenance, Office and Customs Buildings (refer to EIS Section 3.7)</b></p> <ul style="list-style-type: none"> <li>• New Maintenance Workshop building provided within a dedicated area to the south of the existing Ferry Terminal access road</li> <li>• Single storey building previously proposed as a maintenance building is relocated to the South of the terminal site</li> <li>• Change of use of previously proposed maintenance building to a customs inspection building</li> <li>• Number of entrance/exit kiosks reduced</li> <li>• Provision of separate refrigerated container (reefer) gantry structures</li> </ul>

### 3 EUROPEAN SITES CONSIDERED

Three European Sites are described in Table 2 and illustrated in Figure 1.

**Table 2: European Sites located within 16km Buffer zone of Ringaskiddy Port and Disposal at Sea site**

Code	Site	Distance
SPA Code 004030	Cork Harbour SPA	Monkstown Creek component of SPA is located 770m NW of the new mooring dolphins and 800m NW of the additional area to be dredged for optimised berth geometry. The area of proposed marine works is located 110m NNE of existing mooring dolphins upon which the Deepwater berth Common Tern colony breeds each summer.
SPA Code 004022	Ballycotton Bay SPA	The SPA is located 29km by sea from the proposed alterations, and 16km by sea from the marine dump site off Roches Point.
SAC Code 001058	Great Island Channel SAC	The SAC is located 5.5km north of the proposed alterations .

Details in relation to the qualifying features of the Cork Harbour SPA, Ballycotton Bay SPA and Great Island Channel SAC are described in Tables 3 – 5 respectively. The information contained in these tables is based on publicly available data on these European Sites, sourced from NPWS. Site specific Conservation Objectives for Cork Harbour SPA were published in December 2014; for Ballycotton Bay SPA in August 2014 and for Great Island Channel SAC in June 2014.

Natura 2000 Standard Data Forms for these European sites were also reviewed. This information is further supplemented by the findings in Ireland's Article 17 Report to the European Commission's 'The Status of EU Protected Habitats and Species in Ireland' (NPWS, 2013) as summarised in Table 6; the Cork Harbour SPA Conservation Objectives Supporting Document (v1) published in November 2014; and a Programme of measures by Ireland to ensure full compliance with the CJEU Judgment in Case C 418/04 (DAHG, 2015).

#### 3.1 CORK HARBOUR SPA (SITE CODE 004030)

The site has twenty-four qualifying interests as noted in Table 3.

**Table 3: Cork Harbour SPA Qualifying Features**

Cork Harbour SPA [IE0004030] SCIs		Season	Qualifying Population <sup>1</sup>
[A004]	Little Grebe <i>Tachybaptus ruficollis</i>	Wintering	68 individuals
[A005]	Great Crested Grebe <i>Podiceps cristatus</i>	Wintering	218 individuals
[A017]	Cormorant <i>Phalacrocorax carbo</i>	Wintering	620 individuals
[A028]	Grey Heron <i>Ardea cinerea</i>	Wintering	47 individuals
[A048]	Shelduck <i>Tadorna tadorna</i>	Wintering	1426 individuals
[A050]	Wigeon <i>Anas penelope</i>	Wintering	1750 individuals
[A052]	Teal <i>Anas crecca</i>	Wintering	807 individuals
[A056]	Pintail <i>Anas acuta</i>	Wintering	84 individuals
[A065]	Shoveler <i>Anas clypeata</i>	Wintering	135 individuals
[A069]	Red-breasted Merganser <i>Mergus serrator</i>	Wintering	90 individuals
[A130]	Oystercatcher <i>Haematopus ostralegus</i>	Wintering	791 individuals
[A140]*	Golden Plover <i>Pluvialis apricaria</i>	Wintering	805 individuals
[A141]	Grey Plover <i>Pluvialis squatarola</i>	Wintering	66 individuals
[A142]	Lapwing <i>Vanellus vanellus</i>	Wintering	3614 individuals
[A149]	Dunlin <i>Calidris alpina</i>	Wintering	4936 individuals
[A156]	Black-tailed Godwit <i>Limosa limosa</i>	Wintering	412 individuals
[A157]*	Bar-tailed Godwit <i>Limosa lapponica</i>	Wintering	45 individuals
[A160]	Curlew <i>Numenius arquata</i>	Wintering	1345 individuals
[A162]	Redshank <i>Tringa totanus</i>	Wintering	1614 individuals
[A179]	Black-headed Gull <i>Larus ridibundus</i>	Wintering	948 individuals

Cork Harbour SPA [IE0004030] SCIs		Season	Qualifying Population <sup>1</sup>
[A182]	Common Gull <i>Larus canus</i>	Wintering	2630 individuals
[A183]	Lesser Black-backed Gull <i>Larus fuscus</i>	Wintering	261 individuals
[A193]*	Common Tern <i>Sterna hirundo</i>	Breeding	69 pairs
[A999]	Wetlands & Waterbirds		2,587 ha (NPWS estimate)
<b>Key to Table</b>			
<sup>1</sup> As obtained from Standard Natura Data Form.			

Cork Harbour is a large, sheltered bay system, with several river estuaries (Rivers Lee, Douglas, Owenboy and Owennacurra). The SPA site comprises most of the main intertidal areas of Cork Harbour, including all of the North Channel, the Douglas River Estuary, inner Lough Mahon, Monkstown Creek, Lough Beg, the Owenboy River Estuary, Whitegate Bay and the Rostellan and Poul nabibe inlets. Conservation Objectives for Cork Harbour SPA have not been updated to reflect the additional overwintering assemblage of Ringabella Creek, an additional subsite of Cork Harbour SPA added to the Natura 2000 network in late 2015. This narrow estuary is located downstream of Minane Bridge and is located 6km south of Ringaskiddy Port.

Conservation objectives for the 22 no. wintering species are to maintain the favourable conservation conditions of the species in Cork Harbour SPA as measured by two attributes and targets.

*Population Trend:* The long term population trend is stable or increasing.

*Distribution:* No significant decrease in the range, timing or intensity of use of areas by the species, other than that occurring from natural patterns of variation.

The conservation objectives for the wetlands is to maintain the favourable conservation conditions of the wetland habitat in Cork Harbour SPA as a resource for the regularly-occurring migratory waterbirds that utilise it, as measured by the following attribute and target.

*Habitat Area:* The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 2,587 hectares, other than that occurring from natural patterns of variation.

Conservation objectives for the breeding Common Tern are to maintain the favourable conservation conditions of the species in Cork Harbour SPA as measured by the following six attributes and targets.

*Breeding population abundance:* apparently occupied nests (AONs): No significant decline.

*Productivity rate:* fledged young per breeding pair: No significant decline.

*Distribution:* breeding colonies: No significant decline.

*Prey biomass available:* No significant decline.

*Barriers to connectivity:* No significant increase.

*Disturbance at breeding site:* Human activities should occur at levels that do not adversely affect the breeding common tern population.

### 3.2 BALLYCOTTON BAY SPA (SITE CODE 004022)

The site has twelve qualifying interests as noted in Table 4.

**Table 4: Ballycotton Bay SPA Qualifying Features**

Ballycotton Bay SPA [IE0004022] SCIs		Season	Qualifying Population <sup>1</sup>
[A052]	Teal <i>Anas crecca</i>	Wintering	903 individuals
[A056]	Ringed Plover <i>Charadrius hiaticula</i>	Wintering	167 individuals
[A140]*	Golden Plover <i>Pluvialis apricaria</i>	Wintering	2383 individuals
[A141]	Grey Plover <i>Pluvialis squatarola</i>	Wintering	124 individuals
[A142]	Lapwing <i>Vanellus vanellus</i>	Wintering	2782 individuals
[A156]	Black-tailed Godwit <i>Limosa limosa</i>	Wintering	136 individuals
[A157]*	Bar-tailed Godwit <i>Limosa lapponica</i>	Wintering	175 individuals
[A160]	Curlew <i>Numenius arquata</i>	Wintering	853 individuals
[A162]	Turnstone <i>Arenaria interpres</i>	Wintering	179 individuals
[A182]	Common Gull <i>Larus canus</i>	Wintering	584 individuals

Ballycotton Bay SPA [IE0004022] SCIs		Season	Qualifying Population <sup>1</sup>
[A183]	Lesser Black-backed Gull <i>Larus fuscus</i>	Wintering	1293 individuals
[A999]	Wetlands & Waterbirds		281 ha (NPWS estimate)
<b>Key to Table</b>			
<sup>1</sup> As obtained from Standard Natura Data Form.			

Ballycotton Bay is an east-facing coastal complex. The site comprises two sheltered inlets which receive the flows of several small rivers. The principal habitat within the site is inter-tidal sand and mudflats. The inter-tidal flats provide the main feeding habitat for the wintering birds. Sandy beaches are well represented, and salt marshes fringe the flats in the sheltered inlets and these provide high tides roosts.

Conservation objectives for the 11 no. wintering species are to maintain the favourable conservation conditions of the species in Ballycotton Bay SPA as measured by two attributes and targets.

*Population Trend:* The long term population trend is stable or increasing.

*Distribution:* No significant decrease in the range, timing or intensity of use of areas by the species, other than that occurring from natural patterns of variation.

The conservation objective for the wetlands is to maintain the favourable conservation conditions of the wetland habitat in Ballycotton Bay SPA as a resource for the regularly-occurring migratory waterbirds that utilise it, as measured by the following attribute and target.

*Habitat Area:* The permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 281 hectares, other than that occurring from natural patterns of variation.

### 3.3 GREAT ISLAND CHANNEL SAC (SITE CODE 001058)

The site has four Features of Interest<sup>1</sup> as noted in Table 5.

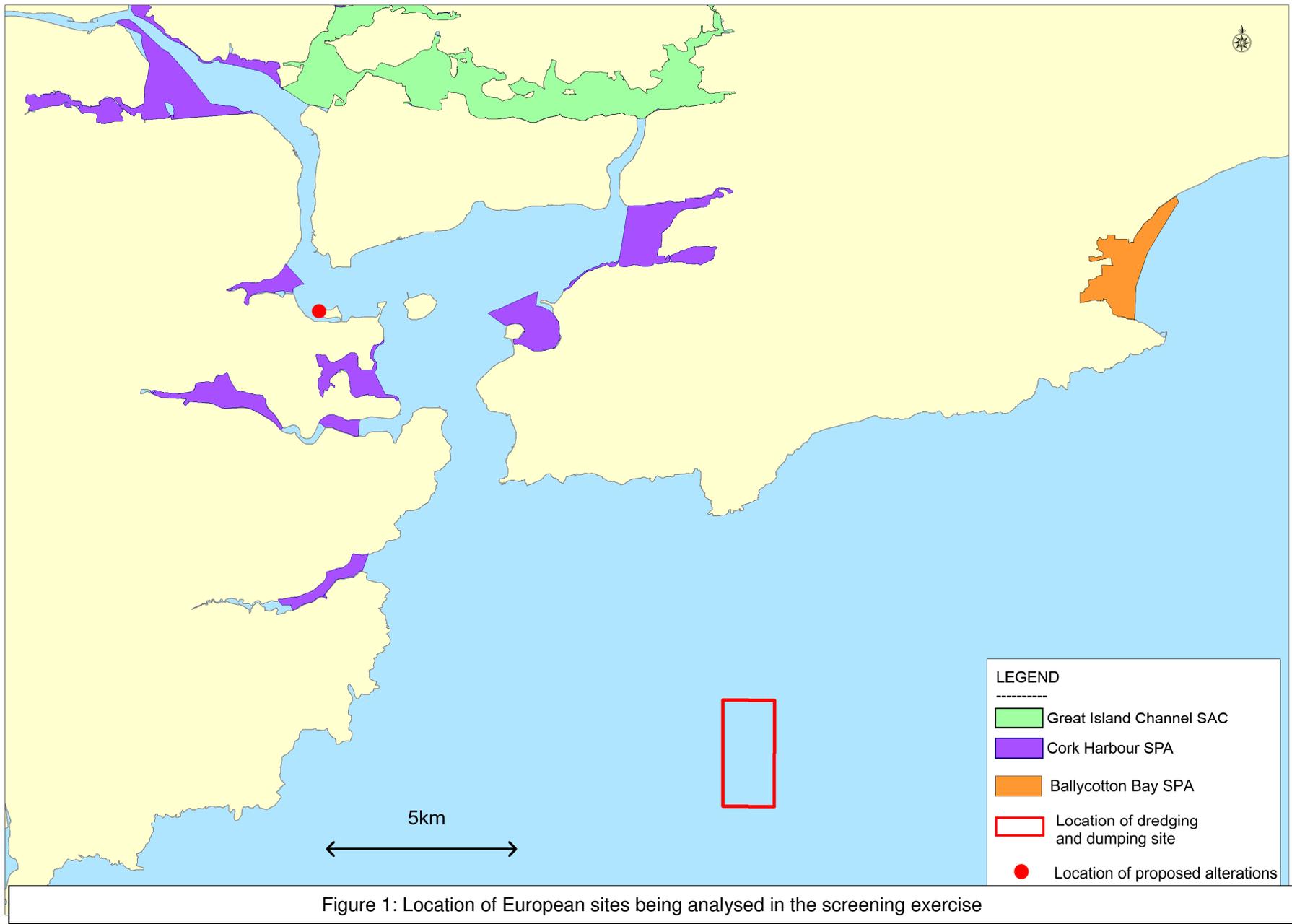
**Table 5: Features of Interest within the Great Island Channel SAC**

Code	Feature
[1130]	Estuaries
[1140]	Mudflats and sandflats not covered by seawater at low tide
[1320]	Spartina swards ( <i>Spartinion maritimae</i> )
[1330]	Atlantic salt meadows ( <i>Glauco-Puccinellietalia maritimae</i> )

The Great Island Channel stretches from Little Island to Midleton, and is an integral part of Cork Harbour. Great Island Channel forms the eastern stretch of the river basin and, compared to the rest of Cork Harbour, is relatively undisturbed. Within the site is the estuary of the Owennacurra and Dungourney Rivers. These rivers, which flow through Midleton, provide the main source of freshwater to the North Channel.

The conservation objective for Great Island Channel SAC is to maintain or restore the favourable conservation condition of two Annex I habitat types; being 'Mudflats and sandflats not covered by seawater at low tide', and 'Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)'. The attributes and targets are defined in the Great Island Channel SAC Conservation Objectives document noted in the footnote below.

<sup>1</sup> NPWS (2014c) Conservation objectives for Great Island Channel SAC [001058]. Version 1. Department of Arts, Heritage & the Gaeltacht.



**Table 6: Conservation Status, Sensitivity and Threats to SAC and SPA Qualifying Interests screened in this assessment**

Qualifying Interest	Site Sensitivity	Conservation Status, Trend in Conservation Status <sup>2</sup>	Threats <sup>3</sup>
Little Grebe Great Crested Grebe Cormorant Grey Heron Shelduck Wigeon Teal Pintail Shoveler Red-breasted Merganser Oystercatcher Ringed Plover Golden Plover Grey Plover Lapwing Dunlin Black-tailed Godwit Bar-tailed Godwit Turnstone Curlew Redshank Black-headed Gull Common Gull Lesser Black-backed Gull Common Tern Wetlands & Waterbirds	Recreational activities are high in some areas of the harbour, including jet skiing which causes disturbance to roosting birds.	The favourable conservation status of a species is achieved when: <ul style="list-style-type: none"> <li>• population dynamics data on the species concerned indicate that it is maintaining itself on a long term basis as a viable component of its natural habitats, and</li> <li>• the natural range of the species is neither being reduced nor is likely to be reduced for the foreseeable future, and</li> <li>• there is, and will probably continue to be, a sufficiently large habitat to maintain its populations on a long term basis.</li> </ul>	<p>Extensive areas of estuarine habitat have been reclaimed since about the 1950s for industrial, port-related and road projects, and further reclamation remains a threat. As Cork Harbour is adjacent to a major urban centre and a major industrial centre, water quality is variable, with the estuary of the River Lee and parts of the Inner Harbour being somewhat eutrophic. However, the polluted conditions may not be having significant impacts on the bird populations. Oil pollution from shipping in Cork Harbour is a general threat.</p> <p>The Natura 2000 Standard Data Form for Cork Harbour SPA notes that there are no serious imminent threats to the wintering birds even though the intertidal areas receive polluted water. Oil pollution from shipping in Cork Harbour is a general threat. Aquaculture occurs though it is not known if this has significant impacts on the birds. Recreational activities are high in some areas, including jet skiing which causes disturbance to roosting birds.</p> <p>Extensive areas of estuarine habitat have been reclaimed since about the 1950s for industrial, port-related and road projects, and further reclamation remains a threat.</p> <p>The Natura 2000 Standard Data Form for Ballycotton Bay SPA notes that past drainage and</p>

<sup>2</sup> <http://www.npws.ie/en/PublicationsLiterature/ConservationStatusReport/>

<sup>3</sup> <http://www.npws.ie/publications/euconservationstatus/>

Qualifying Interest	Site Sensitivity	Conservation Status, Trend in Conservation Status <sup>2</sup>	Threats <sup>3</sup>
			land-claim have damaged this wetland site and remains a continued threat; and also that Increasing visitor pressure may cause disturbance to the birds as this site is part of a Wildfowl Sanctuary.
Estuaries	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Sensitive to changes in salinity and tidal regime as well as coastal development	Inadequate Improving (+)	Pollution to surface waters (limnic & terrestrial, marine & brackish); nautical sports Fishing and harvesting aquatic resources; estuarine and coastal dredging; other outdoor sports and leisure activities; bottom culture suspension culture; piers / tourist harbours or recreational piers; slipways
Mudflats and sandflats not covered by seawater at low tide	Surface and marine water dependent. Moderately sensitive to hydrological change. Moderate sensitivity to pollution. Sensitive to changes in salinity and tidal regime as well as coastal development.	Inadequate Improving (+)	Pollution to surface waters (limnic & terrestrial, marine & brackish); Fishing and harvesting aquatic resources; Bottom culture; Hand collection; Estuarine and coastal dredging; Nautical sports; Other outdoor sports and leisure activities
Spartina swards (Spartinion maritimae)	Marine water dependent. Medium sensitivity to hydrological changes. As Spartina is considered to be an invasive species in Ireland, it is assessed in a different way to other habitats. Increases in the area and extent of Spartina swards are actually considered to be unfavourable and as future expansion is considered likely, the overall conservation status of this habitat is rated as poor.	Poor	n/a
Atlantic salt meadows (Glauco-Puccinellietalia maritimae)	Marine and groundwater dependent. Medium sensitivity to hydrological change. Sensitive to changes in salinity and tidal regime as well as overgrazing, erosion and accretion	Inadequate Stable (=)	Climate Change; Intensive cattle grazing; intensive sheep grazing; paths, tracks, cycling tracks; disposal of household / recreational facility waste; disposal of industrial waste reclamation of land from sea, estuary or marsh; polderisation; Modification of hydrographic functioning, general; Erosion; invasive non-native species

## 4 SCREENING EXERCISE

The purpose of this Screening exercise is to establish whether or not the proposed alterations (ABP Ref. 04.PC0216) to the previously permitted development of existing port facilities at Ringaskiddy Deepwater Port are likely to have a significant effect on any European site.

### 4.1 POTENTIAL IMPACTS ON GREAT ISLAND CHANNEL SAC

It is considered that there are two mechanisms by which a significant effect on the Conservation Objectives of the SAC might potentially occur as a result of the proposed alterations to the permitted development, as follows:

- Smothering of habitats within the SAC by hydrological pathway of effect as a result of deposition of suspended sediments arising from dredging or disposal operations; and
- Deterioration of habitats within the SAC by hydrological pathway of effect as a result of pollution incidences arising from dredging or disposal operations.

No direct habitat loss or habitat disturbance is predicted 5.5km up the Cork Harbour main channel (River Lee) from Ringaskiddy Port as a result of the proposed alterations to the permitted development.

### 4.2 POTENTIAL IMPACTS ON BALLYCOTTON BAY SPA

It is considered that there are two mechanisms by which an adverse effect on the Conservation Objectives of the SPA might potentially occur as a result of the proposed alterations to the permitted development, as follows:

- Smothering of habitats within the SPA by hydrological pathway of effect as a result of deposition of suspended sediments arising from dredging or disposal operations; and
- Deterioration of habitats within the SPA by hydrological pathway of effect as a result of pollution incidences arising from dredging or disposal operations.

No direct habitat loss or habitat disturbance in the SPA is predicted 29km by sea from the proposed alterations, and 16km by sea from the marine dump site off Roches Point.

### 4.3 POTENTIAL IMPACTS ON CORK HARBOUR SPA

It is considered that there are three mechanisms by which an adverse effect on the Conservation Objectives of the SPA might potentially occur as a result of the proposed alterations to the permitted development, as follows:

- Smothering of habitats within the SPA by hydrological linkage as a result of deposition of suspended sediments arising from dredging or disposal operations;
- Deterioration of habitats within the SPA by hydrological linkage as a result of pollution incidences arising from dredging or disposal operations; and
- Direct noise and visual disturbance.

No direct habitat loss or habitat disturbance in the SPA is predicted in Monkstown Creek located 770m NW of the new mooring dolphins and 800m NW of the additional area to be dredged for optimised berth geometry.

### 4.4 SCREENING MATRIX

Tables 7 provides an analysis of whether or not significant effects are likely to occur to the European Sites identified in Table 2 as a result of the proposed alterations. These effects are predicted having applied the precautionary principle set out in Commission Guidance and as required by the Court of Justice of the European Union in Cases C-127/02 (Waddenzee).

**Table 7: Screening Matrix of potential effects of the Port redevelopment on European Sites**

Site Code	Site Name	Qualifying Interests	Description of potential effect	Likely Significant Effect
001058	Great Island Channel SAC	<ul style="list-style-type: none"> <li>Estuaries</li> <li>Mudflats and sandflats not covered by seawater at low tide</li> <li>Spartina swards (<i>Spartina maritima</i>)</li> <li>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritima</i>)</li> </ul>	<ul style="list-style-type: none"> <li>Construction stage deterioration of Annex I habitats within the SAC by hydrological linkage as a result of pollution incidences arising from construction or operation of the proposed alterations is possible.</li> <li>Construction stage smothering of Annex I habitats within the SAC by hydrological linkage as a result of deposition of increased suspended sediments arising from dredging or disposal operations associated with the proposed alterations is possible.</li> </ul>	The risk of a pollution incident causing contaminants to reach the SAC, or elevated suspended sediment reaching the SAC as a result of dredging of 15,000m <sup>3</sup> of seabed material is very low as the European site is 5.5km up the river channel from the proposed alterations, and 20km from the Dump Site through the mouth of Cork Harbour and up the River Lee. Tidal flows in the Lower Harbour facilitate significant mixing of the water column and significant effects are not likely at such a distance.
004022	Ballycotton Bay SPA	<ul style="list-style-type: none"> <li>11 species of overwintering birds</li> <li>Wetlands &amp; Waterbirds</li> </ul>	<ul style="list-style-type: none"> <li>Construction stage deterioration of habitats necessary for the favourable conservation condition of SCI species within the SPA by hydrological linkage as a result of pollution incidences arising from construction or operation of the proposed alterations is possible.</li> <li>Construction stage smothering of habitats necessary for the favourable conservation condition of SCI species within the SPA by hydrological linkage as a result of deposition of increased suspended sediments arising from dredging or disposal operations associated with the proposed alterations is possible.</li> </ul>	The risk of a pollution incident causing contaminants to reach the SPA, or elevated suspended sediment reaching the SPA as a result of dredging of 15,000m <sup>3</sup> of seabed material is very low as the European site is 29km by sea from the proposed alterations, and 16km by sea from the marine dump site. Tidal flows in the Western Celtic Sea facilitate significant mixing of the water column and significant effects are not likely at such a distance.
004030	Cork Harbour SPA	<ul style="list-style-type: none"> <li>22 species of overwintering birds</li> <li>1 species of breeding bird</li> <li>Wetlands &amp; Waterbirds</li> </ul>	<ul style="list-style-type: none"> <li>Construction stage deterioration of habitats necessary for the favourable conservation condition of SCI species within the SPA by hydrological linkage as a result of pollution incidences arising from construction of the proposed alterations is possible.</li> <li>Construction stage smothering of habitats necessary for the favourable conservation condition of SCI species within the SPA by hydrological linkage as a result of deposition</li> </ul>	The risk of a pollution incident causing contaminants to reach the SAC, or elevated suspended sediment reaching the SPA as a result of dredging of 15,000m <sup>3</sup> of seabed material cannot be discounted given the proximity of the European site. The Monkstown Creek component of SPA is located 800m NW of the additional area to be dredged for optimised berth geometry. Dredge plume circulation patterns in the Ringaskiddy Deepwater Basin, and tidal flows between the Oyster Bank headland at Ringaskiddy East and Monkstown Creek are unknown. Any effect that the ADM Training Wall may have on altering dredge plumes is

Site Code	Site Name	Qualifying Interests	Description of potential effect	Likely Significant Effect
			<p>of increased suspended sediments arising from dredging operations associated with the proposed alterations is possible.</p> <ul style="list-style-type: none"> <li>• Long term operational stage changes to the sediment transport regime within the SPA as a result of the new built elements of the proposed alterations changing the natural coastal processes regime in the area is possible.</li> <li>• Direct noise and visual disturbance due to the construction of the proposed alterations is possible.</li> </ul>	<p>unknown.</p> <p>Once constructed, the main berth as altered (Refer to EIS Figure 3.15) results in a very small change to the permitted development berth profile in the context of the overall shoreline/waterline context of Ringaskiddy Port. The new dolphins will be constructed on piles and will not likely alter circulation patterns of a sediment transport regime. Significant effects arising from long term changes to the sediment transport regime are not likely given the minor change to the permitted development berth profile and open piled structure of the new dolphins.</p> <p>The area of proposed marine works is located 110m NNE of existing mooring dolphins upon which the Deepwater berth Common Tern colony breeds each summer. A clear view occurs from the nearest existing dolphin upon which the Common Tern colony nest to the nearest existing dolphin to be removed, at 135m. The furthest seaward existing dolphin is 150m from the nearest nesting dolphin. These structures to be removed are illustrated in Figure 3.17. The replacement dolphins and walkway infrastructure are illustrated in Figure 3.18 and will be, at their closest point, 110m from the nearest nesting dolphin, and with an unobscured view. The new dolphins will be located at 110m, 130m and 155m from the nearest nesting dolphin. The permitted development quay wall design is located 150m from the nearest nesting dolphin. The proposed alteration quay wall design is located 144m from the nearest nesting dolphin.</p> <p>The area where replacement dolphins are to be located is part of the main feeding area for terns within the dredged deepwater port basin, but equally feeding also occurs widely beyond the basin in the wider harbour.</p> <p>Construction of the main berth is considered to be sufficiently screened from the nesting dolphins by existing infrastructure including the ferry terminal building, passenger gangway and mooring infrastructure, which results in obscured views to and from Ringaskiddy East. The proposed alterations require marine</p>

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				<p>disassembly and construction in full view of the tern colony. It is possible that if these marine works were to be undertaken within the Common Tern breeding season, a loss of attractiveness of the nest site would occur. This will not however occur, as the removal of existing and construction of new marine structures will occur in the period between September and April inclusive.</p> <p>All permitted dredging and disposal of dredged material at sea is restricted to the period between September and April inclusive. Additional dredging under the proposed alterations will also occur in this period, increasing the total quantum of dredging from 305,000m<sup>3</sup> to 320,000m<sup>3</sup>. The breeding tern colony will not be present. No likely significant effects upon this species will occur.</p> <p>The Monkstown Creek component of Cork Harbour SPA is located 770m NW of the nearest new mooring dolphin and 800m NW of the additional area to be dredged for the proposed alterations. The area where marine components of the proposed alterations occur is one of the least used parts of the wider area surveyed for overwintering waterbirds in recent years (Refer to Appendix 15.5 of the allied EIS, and Appendix 15.5 of the EIS prepared for the permitted development). No significant ecological effects are predicted to occur to the overwintering waterbird populations as a result of changes to container berth 1 and removal and construction of mooring dolphins</p> <p>Once construction is completed, potential effects relate only to operational port activity. The proposed main berth and mooring dolphins are located 600m south of the ADM Liquids Jetty, the intertidal mussel bank and 800m south of the Training Wall and Cork Harbour SPA. These locations are where the overwintering population of waterbirds are chiefly recorded roosting and feeding. the proposed alterations to the permitted development are located in and adjacent to an operational Port. The Cork Harbour SPA SCI species currently co-exist alongside the Port's operations including daily human and shipping presence on the quayside, periodic maintenance dredging, and the amenity and commercial use of the shoreline, basin and channel. When the permitted development is</p>

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				<p>added to this characterisation of the immediate area, the sites of the proposed alterations can be described as being contained within and at the quayside of a major multi-modal Tier 1 deepwater port with ongoing operations 7 days a week throughout the year. Overwintering birds which use the waters and structure around the port are habituated to the daily operations of the port. Given the distance (&gt;750m) between the proposed alterations and the SPA, significant effects are not likely at such a distance.</p>

## 5 CONCLUSION

The Screening exercise was completed in compliance with the relevant European Commission and national guidelines. The potential impacts during the construction and operation of the proposed alterations to permitted Ringaskiddy Port Redevelopment and the associated disposal at sea of dredged material have been considered in the context of the European Sites potentially affected, their Qualifying Interests, Special Conservation Interests and conservation objectives.

From the findings of the Screening exercise, it can be concluded on the basis of objective scientific information that the proposed alterations:

- are not directly connected with or necessary to the management of any Natura 2000 site; and
- will not likely give rise to significant effects on the qualifying interests of Ballycotton Bay SPA or Great Island Channel SAC.

In relation to Cork Harbour SPA, it can be concluded on the basis of objective scientific information that long term changes to the sediment transport regime within the SPA; and construction and operational stage noise and disturbance arising from the proposed alterations are not likely to result in likely significant effects.

The possibility cannot however be excluded on the basis of objective scientific information that the following aspects of the proposed alterations will result in a likely significant effect upon Cork Harbour SPA in view of its conservation objectives:

- pollution incidences arising from construction
- deposition of increased suspended sediments arising from dredging

Deterioration of wetland habitats necessary for the favourable conservation condition of SCI species within the SPA as a result of pollution incidences arising from construction of the proposed alterations is possible and cannot be excluded. Smothering of intertidal habitats necessary for the favourable conservation condition of SCI species within the SPA as a result of deposition of increased suspended sediments arising from dredging operations associated with the proposed alterations is also possible and cannot be excluded.

Having regard to the methodology employed and the findings of the screening stage exercise, it is concluded that a Natura Impact Statement (NIS) must be prepared. This NIS shall focus on the possibility of pollution incidents and dredging resulting in a likely significant effect upon Cork Harbour SPA in view of its conservation objectives.