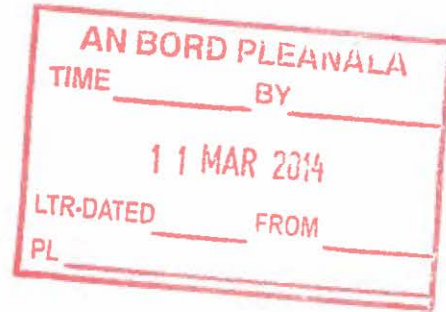


*An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht*

Your Ref: **PL61.PA0033**
Our Ref: **SID-2014-GE-02**
(Please quote in all related correspondence)

11 March 2014

The Secretary
An Bord Pleanála
64 Marlborough Street
Dublin 1
Email to: bord@pleanala.ie



Re: Strategic Infrastructure Development Application for Galway Harbour Extension

A chara

On behalf of the Department of Arts, Heritage and the Gaeltacht, please find outlined below the recommendations/observations of the Department of Arts, Heritage and the Gaeltacht with regard to built and natural heritage.

Archaeology

Having considered the results of all relevant archaeological reports, and in concurrence with the mitigation proposed in the reports, the follow are the recommendations of the Department:

Lough Atalia Railway Bridge and Underbridge works:

- All works to lower the underbridge area (road) to be archaeologically monitored.
- Any excavations necessary around the bridge (either beneath it, in proximity to it or specifically to its piers) to be carried out under archaeological supervision and in such a way that no impact occurs to the bridge structure itself.
- The applicant to engage the services of a suitably qualified archaeologist to monitor the work and the monitoring shall be licensed under the National Monuments Acts 1930-2004, with the licence application being accompanied by a detailed method statement.

Forthill Graveyard (GA094-099):

- All groundworks in the vicinity or proximity of the protected site of Fonthill Cemetery to be archaeologically monitored. This to include all proposed works for the roadway, footpath and construction of a bicycle lane; and
- The applicant to engage the services of a suitably qualified archaeologist to monitor the work and the monitoring shall be licensed under the National Monuments Acts, 1930-2004, with the licence application being accompanied by a detailed method statement.

Underwater Archaeology:

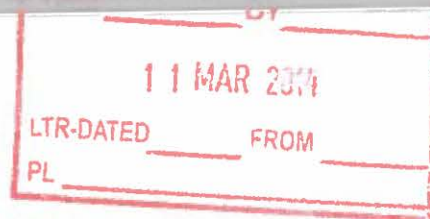
- All works for the proposed new port extension, including dredging operations, foreshore works, reclamation works and any associated works for compounds, roadways, etc. to be fully archaeologically monitored;

- The dredged material, that is to be pumped into lagoons, to be archaeologically monitored and tested. A strategy for the archaeological testing, accompanied by a metal detection survey, to be agreed. This shall also incorporate overall monitoring of the material during its dumping phase. An agreed method statement, to include a finds retrieval strategy (involving spreading the material, sieving the material and metal detection of the material) to accompany the licence application. The nature and extent of archaeological testing and percentages of material to be sieved to be agreed as part of the licence application process and informed by an accompanying detailed method statement;
- Should any potential site or wreck be impacted during the course of the dredging works or works on the foreshore, the monitoring archaeologist shall have the works in that area suspended pending full resolution of the possible cultural material or sites;
- The applicant to engage the services of a suitably qualified maritime archaeologist with experience in dealing with marine dredging to monitor the works (that is all dredging, dumping and on site works) and the monitoring shall be licensed under the National Monuments Acts 1930-2004, with the licence application being accompanied by a detailed method statement;
- Sufficient archaeological personnel shall be engage to cover all aspects of the Harbour Extension works, and provision shall be made to allow the archaeologist be on board the dredger during the course of all dredging operations. Sufficient personnel shall also be based on land (i.e. on the foreshore or lagoon areas) to archaeologically mitigate works there;
- Details of how the archaeological mitigation is to operate shall be included in the method statement attached to the licence application. This shall include informing on communication among archaeologists on site, engagement with dredging crews, reporting of discoveries, etc;
- Provision to be in place from the outset to have a suitable storage facility, including suitable tanks, both for immediate storage on board the dredger, but also on land for storage during the course of the extension works, for any waterlogged or artefactual material that may be recovered;
- Sufficient funding and suitable storage facilities shall be in place for the long-term storage and conservation of any archaeological material that is recovered and that will require full recording, analysis and conservation; and
- If potential archaeology, including any possible wreck site, is impacted during the course of the works, following suspension of works in that area, it shall be a requirement that an archaeological dive inspection be undertaken to determine the nature and extent of the impact on the site or material. This inspection to be carried out by suitably qualified underwater archaeologists and shall be licensed to this Department. Further archaeological mitigation may be required pending the results of the dive inspection, including preservation *in situ* (avoidance), archaeological testing or preservation by record (full archaeological excavation).

Architectural Heritage

The proposed port extension appears to be on recently reclaimed land or on proposed reclaimed land. There appears to be little in the EIS about cultural heritage excepting a reference at 14.10 to the Lough Atalia Road Bridge being protected. The Department is of the view that more information is needed on this and any other impacts on cultural heritage. It would appear that the said reference is to the railway overbridge, which is a Victorian structure. A new railway spur is proposed to serve the new port facilities. The Department recommends that some clarity is provided by way of further information on any impacts to cultural heritage, both as regards protected railway infrastructure/structures and any other material assets coming within the category of cultural heritage.





Nature conservation

Introduction:

In the observations below, relating to nature conservation, reference is made to the associated EIS (Environmental Impact Statement), NIS¹ (Natura Impact Statement) and other project information. The Board is advised that this submission focuses on the Natura 2000 issues, rather than the broader context of the issues covered in the Environmental Impact Statement, on which this Department commented on scoping stage.

Consultations

The National Parks and Wildlife Service of the Department has engaged in and welcomed consultations with the applicants and their agents, and the Board, as outlined in the Planning Report and EIS. In addition, the Department has records of meetings and submissions relating to the proposed extension of Galway Port that date back to 2004. The Department also made a submission to the Board on the information to be contained in an EIS on 30/01/11.

During the course of these meetings and submissions, this Department provided extensive advice to the applicant on, *inter alia*,

- the guidance available, both nationally and from the European Commission, that should be followed when preparing the submission, including the Commission's "Guidance document on Article 6 (4) of the Habitats Directive 92/43/EEC";
- the need to consider the qualifying interests, species of conservation interest, the conservation objectives of the sites and their attributes and targets;
- the need to consider all potential impacts of the project on the conservation objectives of the sites;
- the need to develop mitigation measures, to identify systematically which effects the mitigation will address or to provide explanation of the lack thereof;
- the need for use of existing data and more detailed and thorough analysis to quantify the effects of the proposed project and to support conclusions of levels of effect or adverse impact;
- consideration of the effects of the proposed project in-combination with others, and cumulative effects.

General

The proposed development is located within and adjacent to the European sites, Galway Bay Complex cSAC (site code 000268) and Inner Galway Bay SPA (site code 004031). It comprises an extension to, and some redevelopment of the existing Galway Harbour Enterprise Park development which is also located partly within these two European sites. The current application area is 85.39ha in total, and the development footprint within this is 28.07ha (excluding dredge areas, the turning circle and approach channels).

Assessment of Significance of Effect:

The applicant has concluded for a range of conservation objectives that the effects of the proposed development are "indeterminate". This Department has previously recommended to the applicant that in such instances where any residual impact is considered to be "indeterminate" or "indeterminate negative", that it would be appropriate in such instances to conclude that an adverse effect on integrity cannot be discounted.

As currently proposed and on the basis of the information provided, this Department is of the view that this development does not meet the requirements for approval under Article 6(3) of the Habitats Directive, it being contrary to the conservation objectives of one or more than one European site (i.e. the Inner Galway Bay SPA 004031 and Galway Bay Complex SAC 000268), including, but not limited to², the qualifying interests, harbour seal (1365) and the marine habitats,

¹ A Natura Impact Statement means 'a statement, for the purposes of Article 6 of the Habitats Directive, of the implications of a proposed development, on its own or in combination with other plans or projects, for one or more than one European site, in view of the conservation objectives of the site or sites', and 'shall include a report of a scientific examination of evidence and data, carried out by competent persons to identify and classify any implications for one or more than one European site in view of the conservation objectives of the site or sites' (Section 177T of the Planning and Development 2000, as amended)

² Note the applicant's statement on page 41 of the NIS that legacy issues, when considered in-combination with this proposed development, pose the risk of significant impact to a range of other habitats and species.

reefs (1170) and mudflat and sandflat not covered by seawater at low tide (1140). A conclusion by the applicant of a permanent impact on Lough Corrib SAC is also noted (page 134 of the NIS). It is this Department's understanding that, should An Bord Pleanála reach the same conclusion in its appropriate assessment, the applicant will seek a determination that this project must be carried out for imperative reasons of overriding public interest (hereafter referred to as IROPI). If it is concluded by the Board in due course that this project does in fact meet the IROPI requirements, Ireland will be obliged to undertake "all compensatory measures to ensure that the overall coherence of Natura 2000 is protected".³

This Department welcomes the efforts the applicant has made to understand the effects of the proposed development on the sites in question, and to progress through the decision-making processes established to meet the requirements of Articles 6 (3) and 6 (4) of the Habitats Directives.

It is this Department's view that the level of analysis undertaken by the applicant, as presented in the Natura and Environmental Impact Statements do not adequately identify how the proposed development would adversely affect the integrity of the sites concerned. Thus, it is not yet clear *whether* any of the remaining effects on the sites that cannot be avoided, reduced or mitigated can be compensated, or *how* they can be compensated in order to retain the coherence of the Natura 2000 network. This also has implications for the assessment of the alternatives proposed and assessed.

These issues will need to be resolved before any consent is provided as "measures in the compensation programme must address specifically those effects, so that the elements of integrity contributing to the overall coherence of the Natura 2000 network are preserved in the long term. Thus, these measures should be the most appropriate to the type of impact predicted and should be focused on objectives and targets clearly addressing the Natura 2000 elements affected."⁴

It is this Department's view that the appropriate assessment process under Article 6(3) should result in a clear conclusion regarding the consequences of the proposed development for the integrity of the site(s) concerned before consideration is given to progression through Article 6(4). This Department would like to note that the Commission's Guidance on Article 6(4) sets out clear standards for the 6(3) assessment in order to allow for progression through 6(4); it is this Department's view that the NIS as presented does not yet meet these standards and this is explained in more depth throughout this Department's submission.

The Department suggests that An Bord Pleanála request the applicant to further develop its analysis and undertake any further research and survey work as required to conclude the assessment of the implications of the project for the sites concerned to the standards required. This would also be in the interests of the applicant as it may narrow the requirements for any compensatory measures, if the proposed development is consented. Furthermore, the capacity of the Minister for Arts, Heritage and the Gaeltacht to furnish an opinion on the sufficiency of any proposed compensatory measures will also rely on the quality of the assessments underpinning the Board's decision.

In combination effects:

The effects of past projects, referred to as legacy issues in the NIS, are assessed in the context of in combination effects. The NIS (section 2.1.4.6) acknowledges that earlier development at the site and in the surrounding area had an effect on the SAC and SPA. The estimates are that there was permanent loss of a total of 15.84ha of Annex I habitat or potential Annex I habitat that was also likely to have been the habitat of Annex I (Birds Directive) or Annex II (Habitats Directive) species.

In the context of the timelines involved, the Board should note that Inner Galway Bay SPA (004031) was classified as an SPA on 21/11/94, prior to the original grant of permission for the Galway Harbour Enterprise Park development in 1995.

³ Article 6(4) of the Habitats Directive.

⁴ P16, Cion's *Guidance Document on Article 6 (4) of the Habitats Directive 92/43/EEC*, 2012.



Supporting plans:

As stated in the EIS and Planning Report, the expansion of Galway Port is supported by the Regional Planning Guidelines for the West Region 2010-2022, Galway City Development Plan 2011-2017, and Galway County Development Plan 2009-2015. The Department is aware that these plans were subject to appropriate assessment prior to their adoption. The assessments did not identify the potential for adverse effects on the integrity of a European site to arise, and so did not address the question of an IROPI case. Similarly, no specific mitigation was included in the plans to address a possible future project where Article 6(4) may apply.

Other development applications:

The Department is also aware that part of the current project has been advanced by Galway City Council as a Part 8 application (ref. LA 7/2013), i.e. improvement and regrading of Lough Atalia Road at the railway bridge and related pipework connecting to the Galway Harbour Enterprise Park site. Observations made in relation to that application are attached, for the Board's information.

Site-Specific Conservation Objectives:

Site specific conservation objectives⁵, and associated supporting documents and GIS datasets, are available for the two European sites, Inner Galway Bay SPA 004031 and Galway Bay Complex SAC 000268 from www.npws.ie. The site-specific objectives for the Galway Bay Complex SAC 000268 have been available since April 2013, while those for Inner Galway Bay SPA 004031 have been available since May 2013.

The NIS as a stand-alone document:

The Board is advised that the applicant has included information within the EIS that is relevant to the conclusions of the NIS and the appropriate assessment that is to be undertaken by the Board.

Recent extreme weather events:

It is recommended that the applicant be asked to clarify or confirm that predictions and models used in the assessments covered the potential for such extreme storm conditions as recently experienced, and remain valid.

Coastal Lagoons (1150).**Consideration of the Site's Conservation Objectives, Scientific Analysis and Mitigation:**

The applicant appears to have assessed all the key potential impacts of the project in view of the conservation objectives for the coastal lagoons within Galway Bay Complex SAC. Reasonable conclusions as to the likely effects from activities associated with the development were reached in relation to Lough Atalia. The applicant has not identified any significant effects on the attributes and targets of the conservation objectives.

In relation to the main drivers of lagoon-functioning such as salinity and water-level fluctuations, modelling studies were undertaken. The modelling work identified the likelihood of some slight salinity changes but these are compared with the very widely fluctuating salinities currently present in Lough Atalia. Taking into account the known salinity tolerances of the lagoon biota, a reasonable conclusion is reached that the ecological impacts would not be significant.

The applicant also considered another factor, turbidity. While turbidity is not listed in the attributes for coastal lagoon in this Department's Conservation Objectives, it could be relevant in this case. This Department is of the view that the applicant's mitigation measure for this, dredging on the ebb tide only, is practical and appropriate.

It appears that EIS and NIS completion preceded the recent storms of late 2013 and early 2014. Based on a recent NPWS site visit, this has had the effect of modifying the stony banks, including in terms of area (increased) and location (extended inland and into Renmore Lagoon to the east of the application area for the port). As a result, it would be advised to seek an update in relation to

⁵ NPWS (2013) *Conservation Objectives: Galway Bay Complex SAC 000268, Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht
 NPWS (2013) *Conservation Objectives: Inner Galway Bay SPA 004031, Version 1*. National Parks and Wildlife Service, Department of Arts, Heritage and the Gaeltacht

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the lagoon and the implications of the proposed development for the stability of the barrier for Renmore Lagoon should also be assessed.

A minor point is that in Fig 1.7.3 Lough Atalia and Renmore are incorrectly indicated.

Terrestrial and other coastal habitats:

The Department considers that more detailed information is required to describe and evaluate the terrestrial and coastal habitats of the receiving environment to the east of the proposed development, including in terms of the site specific conservation objectives, the flora and vegetation communities present, correspondence with Annex I habitats, and the structure and functions necessary for their long-term maintenance. The primary concerns are in relation to stony bank and saltmarsh habitats; the former forms part of the barrier to Renmore Lough lagoon.

Impacts on perennial vegetation of stony banks (1220), Atlantic salt meadows (1330) and Mediterranean salt meadows (1410) are stated to be "*unlikely but must be considered to be Indeterminate*". The conclusion in relation to the Annex I habitat, Perennial vegetation of stony banks [1220], is that there will be negative impacts on one of the conservation objectives, but the level of impact is deemed indeterminate so an adverse effect on integrity of the site cannot be discounted. Losses of two Annex I salt marsh habitats as a result of the development (in combination effect; losses have already occurred) have resulted to the extent of 7.69ha. These losses were primarily outside the SAC. This is considered to be a negative impact on the conservation objectives; the level of residual impact is not considered significant but is deemed indeterminate in the context of the site.

Baseline information on coastal habitats, and the assessment of likely significant effects on them, should also be reassessed in the light of recent changes resulting from storm events, taking the site-specific conservation objectives into account.

Recommendation: to request further information and analysis in order to reach a conclusion on the significance of the effects on the site.

Mammals (Otters, Seals, Cetaceans):

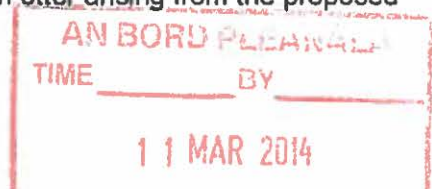
Otter:

The use of Galway Bay Complex cSAC (IE000268) and associated intertidal/terrestrial habitats by otter are described and referred to in the documentation provided by the proponent. The potential for foraging otters from adjacent SACs (Lough Corrib (000297) and Connemara Bog Complex (002034)) to use the site is also recognised. Although no otter holts were located within the area of the proposed works, the available data collectively indicate that the SAC represents an area of importance for the species. Within this designated area, it is also clear that the site of the proposed development overlaps with aquatic and terrestrial habitat in regular and year-round use by otters.

Based on current knowledge of this species within the site concerned, the documentation provided by the project proponent, associated impact assessments and proposals for mitigation and monitoring, temporary negative impacts on 5 of the 8 conservation objective targets for otter in Galway Bay Complex cSAC can be expected (*i.e.*, those related to the distribution, terrestrial habitat, marine habitats, fish biomass and commuting) should the proposed development be granted consent by the planning authority and subsequently proceed. These losses are quantified in the NIS except in the case of fish biomass which is considered "indeterminate". This Department is not aware of any published material or survey methodology which would allow a more informed assessment of this complex impact.

Conclusion

The NIS demonstrates that otters use the area in question and occur in areas adjacent to the proposed works (including adjacent SACs) which are likely to be impacted. No holts were identified during the survey work and given the current level of disturbance in the area, this is not unexpected. Nonetheless, a further detailed otter survey in advance of any construction is recommended. In consideration of the likely and potential impacts on otter arising from the proposed development, their nature and extent in space and time as outlined in the proponent's application, it is this Department's view that the adverse impacts on otter arising from the proposed



development will be mitigated by the correct protective and environmental management actions, such as those described in the development application.

Recommendation: a further detailed otter survey in advance of any construction is recommended, as suggested in Section 3.4.4.1.4 of the NIS.

Harbour seal:

The use of Galway Bay cComplex SAC (IE000268), Galway Bay and associated intertidal/terrestrial habitats by harbour seal are described and referred to in the documentation provided by the proponent. All available data collectively indicate that the SAC represents a significant area of national and regional importance for the species. Within this designated area it is also clear that the site of the proposed development overlaps with aquatic habitat in regular and year-round use by harbour seals.

Based on current knowledge of this species within the site concerned, the documentation provided by the project proponent, associated impact assessments and proposals for mitigation and monitoring, it is the Department's view that three of the five conservation objective targets for harbour seal in Galway Bay Complex SAC (*i.e.*, those related to the conservation of breeding, moulting and resting sites) could continue to be met should the development be granted consent by the planning authority and subsequently proceed.

Potential adverse impacts on harbour seals that may arise from the development as it is currently described include (i) the permanent removal of known and suitable aquatic habitat for foraging, transit and other aquatic behaviours, (ii) the temporary displacement of harbour seals from local areas of aquatic and/or haul-out activity while site development work is under way, (iii) the potential longer-term displacement of harbour seals from former areas of regular activity while the developed site is operational, (iv) the effect of collisions with shipping and other vessels, (v) direct disturbance and/or injury due to sound and intensified motorised vessel/plant/construction activities, and (vi) secondary impacts due to localised disruption of normal ecological activity (*e.g.*, via the displacement or removal of prey species).

Based on current knowledge of this species within the site concerned, the documentation provided by the project proponent, associated impact assessments and proposals for mitigation and monitoring, it is the Department's view that the full nature and scale of adverse impacts on harbour seals arising from the proposed development is not well understood and the likely future outcomes with respect to (i) species range within the site (*i.e.* conservation objective target 1) and (ii) the impact of human activities on the harbour seal population (*i.e.* conservation objective target 5) are difficult to predict.

Conclusion

Given the spatial and temporal scale of the development proposed at this location within the SAC, the nature of several of the development activities proposed - notwithstanding the planned mitigation and monitoring measures, the permanent loss of an area of subtidal habitat that is regularly used by the species, and the intended growth of maritime activity arising from the completed development, it is this Department's view that an adverse effect on the integrity of the designated site, arising from the Galway Harbour Extension project in its current proposed form, cannot be ruled out.

Recommendation: It is recommended that a comprehensive and robust desktop analysis of (i) harbour seal aquatic habitat use and (ii) the observed impacts of similar developments and associated coastal/maritime activities on harbour seal populations is undertaken by the proponent. This should be done with the assistance of a suitably qualified seal ecologist and be based on international scientific research as well as information currently available from Ireland. The purpose of this analysis would be to better inform and better determine appropriate final conclusions in the relevant impact statements regarding the likelihood and significance of any adverse effect on the integrity of the designated site arising from the proposed development.

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Grey seal:

The use of Galway Bay and its intertidal/terrestrial habitats by grey seal are described and referred to in the documentation provided by the proponent. All available data collectively indicate that small numbers of grey seals occur regularly within the waters of the bay and utilise a range of intertidal/terrestrial haul-out sites to rest, moult and/or breed in comparatively low numbers. The nearest regular grey seal haul-out sites to the proposed development location lie within Oranmore Bay (c. 5-6km away). The nearest SAC designated for grey seal is situated at Slyne Head Islands cSAC (IE000328) over 75km from the proposed development site.

Potential adverse impacts on grey seals that may arise from the development as it is currently described include (i) the effect of collisions with shipping and other vessels, (ii) direct disturbance and/or injury due to sound and intensified motorised vessel/plant/construction activities, and (iii) secondary impacts due to localised disruption of normal ecological activity.

Based on current knowledge of this species within the site concerned, the documentation provided by the project proponent, associated impact assessments and proposals for mitigation and monitoring, it is the Department's view that any residual adverse impacts on grey seals arising from the proposed development would be most likely to occur (a) in the short term around the immediate period of development (*i.e.* within 5-10 years of work commencement) and (b) at the level of individual animals. An adverse impact at the population or species level is considered to be unlikely.

Conclusion

In consideration of the likely and potential impacts upon grey seal arising from the proposed development, their nature and extent in space and time as outlined in the proponent's application, it is this Department's view that the adverse impacts on grey seals arising from the proposed development may be mitigated by correct protective and environmental management actions, including those described in the development application but subject to the additional recommendation on mitigation for marine mammals.

Cetacean species:

The use of Galway Bay by various species of cetacean (*i.e.* whales, dolphins and porpoises) is described and referred to in the documentation provided by the proponent. The available data collectively indicate that several species of cetacean occur regularly within the waters of the bay. Most appear to be small toothed cetacean species, particularly harbour porpoise, bottlenose dolphin and short-beaked common dolphin (*Delphinus delphis*). All are wide-ranging pelagic species that may travel over many tens or hundreds of kilometres as part of their normal ecological activity and annual life history cycles. However as demonstrated in the documentation provided by the proponent a few species may also occur within or immediately adjacent to the site proposed for development.

The nearest SACs designated for an Annex II cetacean species are situated at West Connacht Coast SAC (site code IE002998) and the Lower River Shannon SAC (site code IE002165). Both sites are designated for bottlenose dolphin and are situated over 70km from the proposed development site. The Lower River Shannon SAC lies within an area that has also been considered as an alternative development site to the proposed Galway Harbour location.

In accordance with the strict protection provided to all Annex IV cetacean species in Irish waters, it is the Department's view that relevant licensable plans or projects should undergo an appropriate and comprehensive risk assessment specific to any and all cetacean species occurring in the operational area concerned. In the context of the proposed extensive marine development, the Department's *Guidance to Manage the Risk to Marine Mammals from Man-made Sound Sources in Irish Waters (January 2014)* provides instructive information such that the risk to protected marine mammal species arising from underwater sound can be characterised, assessed and managed as appropriate. This guidance and the associated risk assessment requirements were first published by the Department in public consultation form in March 2012. Potential adverse impacts on cetaceans that may arise from the development as it is currently described include (i) the effect of collisions with shipping and other vessels, (ii) direct disturbance and/or injury due to sound and intensified motorised vessel/plant/construction activities, and (iii) secondary impacts

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due to localised disruption of normal ecological activity. Detailed Environmental Impact and Natura Impact Statements are provided by the project proponent as part of the current application. However, these do not clearly present activity-specific assessments of risk in relation to all Annex IV cetacean species likely to occur at the site. It is the Department's view that such a detailed risk assessment, including clarification of the role of acoustic deterrent devices, should be undertaken as part of the decision-making process.

Recommendation: It is recommended that a detailed assessment of risk in relation to all Annex IV cetacean species is undertaken and used to inform the decision-making process for this proposed development.

Marine Annex I habitats:

Applicant's analysis of all relevant impacts and pathways to the site's Conservation Objectives:

In the documents circulated to this Department, there has been an extensive evaluation of the potential adverse effects associated with the proposed development to marine Annex I habitats. These are noted to include direct and indirect loss and disturbance of habitats. It appears that the breakdown of potential effects have evaluated the majority of effects and assigned them a likelihood of occurrence. This approach has given a clear impression of the likely impact of the development of Galway Harbour Extension. Both near-field and far-field effects of the potential construction and operation of the new Port facilities have been examined. It is concluded by the applicant that there is no potential for Annex I habitat interaction with designated sites outside of Galway Bay Complex, with which this Department concurs on the basis of the information provided. The supporting evidence included within the EIS demonstrates the validity of this assertion although this could be usefully incorporated to a greater extent in the NIS.

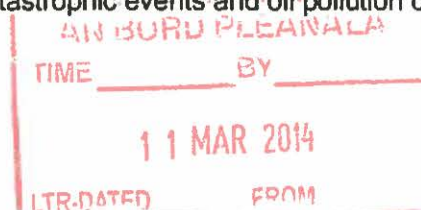
It is clear that the proposed development would result in a substantial loss of *Mudflat and sandflat not covered by seawater at low tide* (1140) and intertidal *Reef* (1170) beneath the direct footprint of the harbour extension. In documentation supplied by the applicant, this is evaluated as totalling 5.93 hectares. Due to the nature of the habitat as they present at this location, it is not appropriate to delineate the individual contribution of each Annex I habitat type. This is because both habitats are interspersed and an individual Annex I habitat area calculation could not be completed with accuracy. The majority of the development would occur in transitional waters (ones with lower salinity). This type of habitat does not conform to the definition of the habitat type *Large Shallow Inlets and Bays* and hence it is not a qualifying interest for Galway Bay Complex SAC. It can be concluded that the most significant direct impact to that SAC would be from the loss of intertidal Annex I habitat beneath the intended built structures.

Consideration of the attributes for the Conservation Objectives for the SPAs:

The assessment has used the conservation objectives for Galway Bay Complex and has reviewed against the relevant attributes. The intertidal area beneath the footprint of the harbour development is a complex of *Mudflat and sandflat not covered by seawater at low tide* and intertidal *Reef*. Due to the nature of the habitat, as noted above, it is not appropriate to delineate the individual contribution of each Annex I habitat type. However, the required attributes are examined and it can be concluded that a likely significant effect would occur to both of the above Annex I habitats. A similar analysis is undertaken for *Large Shallow Inlets and Bays* and this is excluded from a likely significant effect.

Scientific Analysis Undertaken:

The overall suite of information included in the submitted documents presents the necessary data to analyse the potential interaction. There are some issues with data being presented in the EIS rather than the NIS and so the Board is advised that the appropriate assessment will need to consider information provided within the EIS and the NIS. This could be improved by better referencing and more detail being presented within the NIS e.g. Chapter 8 on Water in the EIS, Appendix 4.2 Environmental Management Framework, Appendix 4.3 Oil Spill Contingency Plan etc. The potential impacts related to the modelling of the changed hydrodynamic environment, management of invasive species, management of catastrophic events and oil pollution contingency



plans could be explained in the NIS as they are relevant to excluding a potential for negative interaction as a result of the operation of the proposed development.

Conclusions about the scale of the significance of the effect, with reference to the targets for the Conservation Objectives, and its adverse impact on integrity of the site:

While the presentation of the conclusion in the final section of the NIS could be improved, the applicant has shown that the direct loss of Annex I habitats within the footprint of the site is irreconcilable through mitigation. However, some of the mitigation proposed in earlier sections (mostly centred on general good environmental practice) could be interpreted to ameliorate the effects.

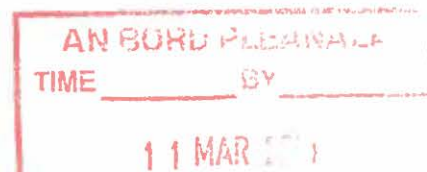
Further Analysis and Clarity Required on the Impact of the proposed development on marine Annex I habitats:

It is this Department's view that the greater clarity is required for the final determination of significance of effect on marine Annex I habitats, as has already been identified for other environmental receivers. It is noted in Section 3.7 that "*it is not possible to determine exactly what the impact of these habitat losses*" would have on the designated sites but "*based on the precautionary principle, such indeterminate impacts have to be considered as significant*". This logic isn't fully developed in the remainder of the conclusion. What has been referred to as "indeterminate" should rather be a "likely significant effect" using this logic. A clear determination of significance in relation to the proposed development and a more exact phrasing of the remaining/residual conservation issues in relation to the development would be helpful in reconciling the purpose of the NIS, in accordance with the requirements of the Directive. Reaching a conclusion of "indeterminate impact" is thus not satisfactory. It should be noted that in relation to Annex I marine habitats the supporting evidence is within the document, however, the presence of "indeterminate" conclusions would make the task of assessing the completeness of the overall document difficult, and particularly if the application proceeds to an Article 6(4) or compensatory measures process.

In-combination with other projects and cumulative effects

The potential for in-combination effects has been recognised within the NIS. It is considered that the most notable effect would be produced from the "legacy issues" associated the development of the Galway Enterprise Park. However, the assessment has added the habitats that have been found at this site to result in a cumulative loss of habitats within the footprint of the overall development. This is calculated to be 14.51 hectares of the intertidal Annex I habitats (*Mudflat and sandflat not covered by seawater at low tide* and *intertidal Reef*). There are a number of activities associated with the construction of the proposed harbour that could temporarily impact on Annex I habitats within this site. The qualifying feature habitat has the potential to be degraded during construction operations from a range of activities including blasting, dredging, run-off of sediments, pollution events etc. However, since the overall intention would be to build over these habitats, there is no net effect beyond the total loss of 5.93 hectares. Measures designed around managing the marine environment are likely to restrict the potential effect to a temporary area surrounding construction works. It is therefore likely that there would not be a significant permanent loss associated with the development exceeding the 5.93 hectares from the national inventory of Annex I habitats (including *Estuaries, Mudflat and sandflat not covered by seawater at low tide* and *Reef*).

Due to the size and configuration of the proposed development, there is a potential for adjacent temporary and permanent impact from the proposed development. However, hydrodynamic modelling developed to support the application has indicated a negligible change in the surface water salinity spreading out from the river plume. It is likely given the small change involved that there would be no alteration to the benthos and it would not impinge on the area of the habitat type *Large Shallow Inlets and Bays* to the south of the harbour mouth. It is indicated that there may be a potential for an increase in salinity due to the canalisation effect of the harbour walls. This may allow competition with euryhaline species in this area from species less tolerant of fluctuations in salinity and may in effect increase the area that could be recognised as *Large Shallow Inlets and Bays*.



Impact of the Project:

As currently configured the proposed development is contrary to the conservation objectives of Galway Bay Complex SAC. Specifically the permanent habitat area within the development area of Galway Harbour Expansion would not remain stable or increasing for *Mudflat and sandflat not covered by seawater at low tide* and intertidal *Reef*. The communities occurring with those habitats would also suffer a reduction in area. It is not considered that any other qualifying marine Annex I habitat would be reduced in area or the expression of broad communities with Galway Bay Complex SAC.

Mitigation measures:

Mitigation proposed in the documentation has been designed to reduce the significance of the effect of the development. It should be noted that it is not possible to identify mitigation that would result in a reduction in the loss of habitat if the development occurs according to the current plan. However, a range of measures to effect good environmental management during construction and operation of the proposed port are likely to reduce the potential impact beyond the footprint of the development. The Department notes that the applicant has proposed monitoring to allow validation of those mitigating measures.

Birds:**Applicant's analysis of all relevant impacts and pathways to the site's Conservation Objectives:**

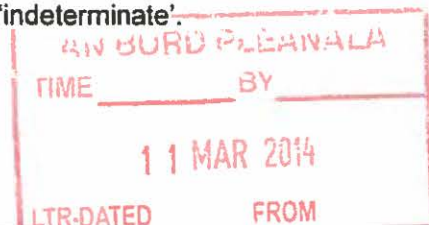
It is stated in the EIS (NTS Vol 2A) that the harbour extension will open up the area for new berths for recreational boating. Table 2 (page 3) sets out a projected increase of over 1000% in the number of marina berths at Galway Harbour. With such an increase in the berth capacity, it is likely that there will be a concomitant increase in the levels of recreational boating activities of Inner Galway Bay SPA. With the exception of airborne noise potentially impacting on the Common Tern and underwater noise for diving birds, the applicant does not seem to have considered the potential impact of such an increase in vessel activity potentially causing birds to be *displaced* from favoured feeding or roosting areas. This is of particular relevance to those species of bird that use subtidal areas and are known to be sensitive to disturbance (e.g. Great Northern Diver). In this case, the disturbance reaction caused by the vessels to the birds may not exclusively arise from a noise stimulus. Therefore, the full potential for the impact of vessels (both shipping and recreational boating) on the listed species of Inner Galway Bay SPA and thus, on its conservation objectives, has not yet been fully assessed.

Table 3.13 considers that the loss of seabed during both capital dredging and maintenance dredging (every ten years) of the turning circle is a temporary impact. The NIS does not fully consider that such dredging of the turning circle may permanently reduce the value of this subtidal habitat for some species.

Described in more detail below, the NIS does not seem to have comprehensively and critically assessed the importance or otherwise of the marine areas that was lost to the birds as a result of the previous development. The importance of the habitats contained in the actual footprint of the proposed development and its zone of influence is also not fully and critically assessed in detail for each of the listed wintering waterbird species of Inner Galway Bay SPA. Thus the assessment of the significance of the effects on the conservation objectives is incomplete.

Consideration of the attributes for the Conservation Objectives for the SPAs:**Breeding species listed for Inner Galway Bay SPA**

Inner Galway Bay is listed for three breeding species namely Cormorant, Sandwich Tern and Common Tern. For each of these breeding species, all attributes were assessed with no significant impacts predicted. However, the assessment goes on to assess the impacts separately (*i.e.* impacts during Construction Phase; impacts during the Operational Phase; and in-combination effects). This results in a common and repeated statement of "*this impact is not likely to be significant, but is indeterminate*". With no proposed mitigation stated in Table 3.11, the residual impact for all these three breeding species is considered to be 'indeterminate'.



Wintering waterbirds listed for Inner Galway Bay SPA

For each wintering waterbird species listed for Inner Galway Bay SPA, the relevant conservation objective is composed of two separate attributes, each with its own target. The first attribute relates to population trend with a target that the long term population trend is to be stable or increasing. The second attribute relates to the distribution of the species within the SPA; the associated target sets out that no significant decrease in the range, timing or intensity of use of the areas by the species is to occur.

Table 3.11 of the NIS presents the individual assessments of the wintering waterbird species listed for Inner Galway Bay SPA. If a particular species was not recorded during the 2011 – 2012 bird surveys (*i.e.* Teal, Shoveler, Ringed Plover, Golden Plover, Lapwing, Dunlin and Bar-tailed Godwit), the impact on the population trend target is considered to be indeterminate and the impact on the target distribution is 'probably ... zero/insignificant, but this is indeterminate.'

- The impact of the Galway Harbour Extension during both the construction and operational phases are assessed in the NIS for this group and are considered to be not significant.
- The in-combination effects are restricted to a reference to the permanent loss arising from a previous port development. However, there is no stated assessment of the likely suitability or otherwise of the habitat that was lost set out in table 3.11.

The assessment of the level of residual impact for these species (*i.e.* 'No significant residual impact is expected') is not complete. A more complete and critical assessment should be made for each of these aforementioned species of the suitability of the habitat contained in the areas (supplemented by bird survey data where available) that was lost as a result of the previous development and the areas that are proposed to be in filled as part of the proposed GHE (this is achieved to some degree in Table 2.7 of the NIS) as well as the associated areas that could potentially be impacted through the construction and operational phases of the development. A more intensive and critical assessment should be undertaken on each of these species, as a result of which it is possible that the conclusion of 'no significant residual impact is expected' could be justified.

All the remaining wintering waterbirds listed for Inner Galway Bay SPA (*i.e.* those species that were recorded using the marine part of the development site during the 2011-12 bird surveys: Great Northern Diver, Cormorant, Grey Heron, Light-bellied Brent Goose, Wigeon, Red-breasted Merganser, Curlew, Redshank, Turnstone, Black-headed Gull and Common Gull) also seem to have been treated as a homogenous group. In Table 3.11 this apparent 'batch' approach results in an assessment for each species stating that both the impacts during the construction phase and the impacts during the operational phase are 'not likely to be significant, but are indeterminate.' For each of these aforementioned species, it is concluded that 'the level of residual impact is not considered to be significant as similar suitable habitat is present in the surrounding area and usage of the site by the species was recorded but not extensive. However, a measure of the level of impact is difficult to assess in the context of the overall Natura 2000 site and is therefore considered indeterminate.'

This approach which ultimately led to an indeterminate conclusion for each species endeavours to group and assess disparate species in a collective fashion. This approach may well be the reason why the level of residual impact for all these species is considered to be 'indeterminate.' This approach is also contrary to the advice provided by this Department to the applicant that "*the draft NIS should for each species, assess each of the potential impacts, describe/propose various mitigation measures where warranted and where possible and then group those species and relevant potential impacts where the assessor considers that significant impacts, taking into account appropriate mitigation measures, cannot be ruled out*".⁶

For example, some of the species in this group were recorded in the 2011-12 bird surveys as occurring irregularly and/or in relatively small numbers (e.g. Redshank and Common Gull). This bird-survey-derived knowledge should inform the assessment of the importance of the habitats contained in the areas that are proposed to be in filled as part of the GHE, as well as the

⁶ Discussed with the applicant at a consultation meeting on 30th July, 2013, at the offices of NPWS, Custom House, Galway.

associated areas that could potentially be impacted through the construction and operational phases of the development. A similar species-by-species assessment should be undertaken to determine the overall in-combination significance of the proposed GHE on the two relevant targets associated with the conservation objective for the various listed wintering waterbird species. In particular, the in-combination section should consider the habitats contained in the area that was previously developed and the areas that are likely to be associated with the consented Harbour Flights operation. It is possible that a more intensive and critical assessment for some of these particular species may deliver a conclusion of 'No significant residual impact is expected' rather than the current statement that the residual impact is 'indeterminate', thus improving the adequacy of the analysis and providing greater clarity on the impact of the development on the integrity of the site.

However, it is also readily apparent that the development site holds relatively important concentrations of some species. Up to 5.5% and 4.8% of the 2011/12 Great Northern Diver and Turnstone populations were recorded on the development site. Furthermore these species were regularly recorded within the development site during the non-breeding period of September to April inclusive (Turnstone was recorded on 12 out of 14 surveys and Great Northern Diver was recorded 13 times out of 14 surveys). Neither the NIS nor Chapter 7 of the EIS attempts to categorise the listed species to their sensitivity to disturbance. Some species are more sensitive to boat traffic than others. For example, in an analysis undertaken by Furness et al (2012)⁷, Great Northern Diver was assigned the maximum sensitivity score in relation to ship traffic, noting that they fly from boats that are at a distance greater than 1km from them.

The level of displacement for each wintering waterbird species caused by the construction, operation and in-combination effects needs to be of a significant magnitude and persistence in order that the overall effect will be measurable in terms of the overall site abundance total for that species. It may be possible after a more intensive and critical assessment of these impacts that it could be robustly concluded that this conservation objective target will not be contravened for several of these listed waterbird species.

An unambiguous determination of assessing the likely impact of the proposed GHE on the second relevant target (*i.e.* "No significant decrease in the range timing or intensity of use of the areas other than that occurring from natural patterns of variation") for more species is more readily achieved. If the applicant were to examine the patterns of bird use in Inner Galway Bay SPA on a species-by-species basis and undertake a more comprehensive desk study of the behaviour and ecology of the various species, an informed prediction of the likely displacement that could arise from the construction and operation phases of the GHE is achievable. Therefore, rather than leaving an indeterminate conclusion of residual impact, it could possibly be rationally deduced whether this target may or may not be undermined for some species.

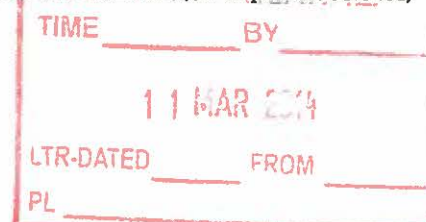
For some species based on the data presented (e.g. Great Northern Diver), it is not possible to conclude with certainty that such a development in combination with other impacts does not contravene this conservation target.

Mitigation measures:

Page 149 – 150 of the NIS sets out various impacts for the listed birds of Inner Galway Bay SPA under a range of headings (e.g. Construction phase, Disturbance – physical presence; Construction phase, Disturbance – noise; Operational phase, Disturbance noise). For certain species, the severity of these impacts ranged from 'Temporary Moderate Negative Impact' to 'Permanent Moderate Negative Impact.' Neither Table 3.11 nor Table 3.14 sets out any mitigation measures to ameliorate these impacts. This is in stark contrast with the level of the proposed mitigation measures for some SAC-related species.

The lack of proposed mitigation measures to minimise the potential of direct injury caused to the birds by blasting and possibly other operations is of concern. However some proposed mitigation

⁷ Furness, R. W., Wade, H. M., Robbins, A. M. C., and Masden, E. A. 2012. Assessing the sensitivity of seabird populations to adverse effects from tidal stream turbines and wave energy devices. *ICES Journal of Marine Science*, 69.



measures although not ascribed to the listed birds of Inner Galway Bay SPA could well be of relevance to the birds' interests (e.g. Implementation of Emergency Spill Contingency Plan). A more systematic approach to the applicability of mitigation measures is required in order to minimise adverse impacts on the integrity of the site and to ensure compensation measures are only considered when these safeguards provided for by the Directive are ineffectual.

Other issues of substance concerning the analysis presented within the NIS:

Use of Traught Survey Area

Chapter 7 of the EIS, which informs the NIS, presents bird survey counts from Traught Beach. This area is described as a marine area of equivalent size to that surveyed at the site of the proposed development. The stated purpose of this survey work to compare the numbers of divers using the marine area with those at the site of the proposed development. The EIS does not say if the Traught survey area was chosen at random or if it was known as an area regularly used by divers (*Gavia* sp.). If it is the latter, then using this site as a comparator for the proposed GHE area results in a comparison that is biased and the independent importance of the GHE study area for Great Northern Diver could be underestimated. This in turn leads to an underestimation of the impact of the development on the conservation objectives for the SPA.

Lough Corrib SPA

The listed special conservation interests for Lough Corrib SPA include breeding populations of Common Scoter, Black-headed Gull, Common Gull, Common Tern and Arctic Tern. Pages 150-151 of the NIS set out various impacts ranging from 'Temporary Moderate Negative Impact' to 'Permanent Significant Negative Impact'. These impacts are then brought forward to section 3.7 of the NIS where it states that '*The specific links between usage of the Inner Galway Bay SPA and Lough Corrib SPA by these species are not known i.e. it is not possible to say that the individuals identified would use both Natura 2000 sites or whether completely separate populations exist. However, applying the precautionary principle means that the impact is indeterminate.*' It is unclear to this Department whether the applicant has interrogated the potential ecological links between some of the species that breed on Lough Corrib and the areas relevant to the proposed GHE development to a sufficient degree. From the level of analyses presented in the NIS the arrival at an 'indeterminate' conclusion of significance could again be the result of an incomplete assessment.

Species specific ecological characteristics and their relative sensitivity to disturbance

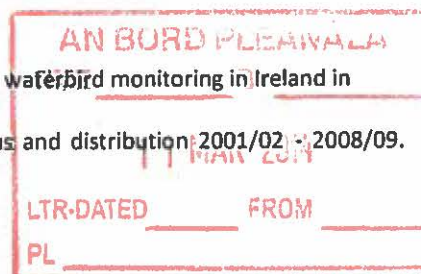
In Table 3.11 where the listed species of Inner Galway Bay SPA are assessed there seems to be very little stated emphasis on the species-specific differences in relation to their foraging ecology and their sensitivity to disturbance. If one was to incorporate these species-specific properties more critically into the assessment, it may ultimately lead to fewer instances of "indeterminate" assessments and increase the robustness of any Article 6(3) assessment.

Incomplete desk review in the EIS which informs the NIS

In Chapter 7 of the EIS, which informs the NIS, the desk study states that two publications comprehensively summarise the wintering waterbirds of Inner Galway Bay. One of these referenced sources is over 30 years old and the other more than 13 years old. It goes on to highlight that Inner Galway Bay was ranked 24th in a list of 56 internationally important sites for wintering waterbirds, citing a publication that is over 20 years old. It is a concern that the EIS fails to report on the latest Irish Wetland Bird Survey results of waterbird monitoring in Ireland in 2010/11 which was published over a year ago in the Journal *Irish Birds*. In this publication, Inner Galway Bay is ranked 15th of Ireland's internationally important sites in terms of recorded waterbird abundance (see Table 2 of Crowe et al 2012⁸). The desk study (7.5.6.1) also fails to highlight the fact that Inner Galway Bay is ranked in numerical terms to be the most important site in Ireland for several species, including and most importantly for Great Northern Diver but also others (e.g. Red-breasted Merganser; see Boland & Crowe 2012⁹).

⁸ Crowe, O., Boland, H. and Walsh A. 2012. Irish Wetland Bird Survey: results of waterbird monitoring in Ireland in 2010/11. *Irish Birds* 9 (3) 385 – 398.

⁹ Boland, H. and O. Crowe. 2012. Irish Wetland Bird Survey: waterbird status and distribution 2001/02 – 2008/09. BirdWatch Ireland, Kilcoole, Co. Wicklow.



Given the date of submission of this application and the completion of the EIS and NIS, the most recent revision of the Birds of Conservation Concern in Ireland was not available (published February 2014). However, this is now in the public realm and changes to the status of some of the species are relevant to this assessment (see Colhoun & Cummins, 2013¹⁰) and any appropriate assessment to be undertaken by the Board. Of particular note is that Great Northern Diver is now considered to be an amber-listed species primarily on account of Ireland's importance on a European scale for supporting significant numbers of this species during the non-breeding period.

Conclusions about the scale of the significance of the effect, with reference to the targets for the Conservation Objectives, and its adverse impact on integrity of the site:

Breeding species listed for Inner Galway Bay SPA

As previously stated, the assessment examines each of the relevant targets for the three breeding species (Cormorant, Common Tern and Sandwich Tern) and sets out that no significant impact is expected for each attribute it concludes that with regard to the level of residual impact is difficult to assess in the context of the overall Natura 2000 site and is therefore considered indeterminate. In relation to these three breeding species, there is no clear conclusion within the NIS even though the applicant predicts no impact for each of the attributes and targets of the conservation objectives.

It is therefore recommended that these species be reassessed more critically and intensively against the relevant conservation objectives with a view to producing a clear determination as to whether the construction and operational phases of the GHE, in combination with other pressures, will significantly impact on the relevant attributes and targets, and thus the conservation objectives of the site.

Wintering waterbirds listed for Inner Galway Bay SPA

A number of species were not recorded in the development site as part of the 2011 – 12 bird survey work (*i.e.* Teal, Shoveler, Ringed Plover, Golden Plover, Lapwing, Dunlin and Bar-tailed Godwit). For these species, Table 3.11 sets out clear conclusions that no residual impact is expected. But the assessments for these species are incomplete (see above).

For those wintering waterbird species listed for Inner Galway Bay SPA that were recorded at least once during the 2011 – 12 bird survey work (*i.e.* Great Northern Diver, Cormorant, Grey Heron, Light-bellied Brent Goose, Wigeon, Red-breasted Merganser, Curlew, Redshank, Turnstone, Black-headed Gull and Common Gull), no clear conclusions are given in Table 3.11 on the scale of the significance of the effect, with reference to the targets for the conservation objectives, and its adverse nature.

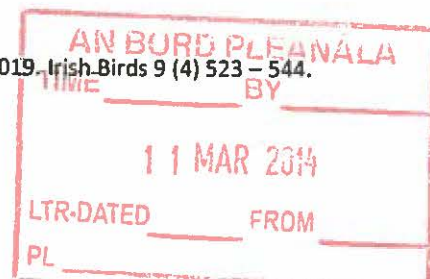
It is therefore recommended that these species be more critically and intensively assessed against the relevant conservation objectives with a view to producing a clear determination of whether the construction and operational phases of the GHE in combination with other pressures will significantly impact on the relevant attributes and targets, and thus the conservation objectives of the site.

Information Gaps:

In section 3.7 of the NIS, reference is made to the significant impact of the loss of the 'wetland and subtidal SPA habitat'. However, a precise estimation of this habitat loss is not given here. Given that it is directly relevant to the conservation objective of Inner Galway Bay, it is necessary that this precise figure be confirmed by the applicant.

The NIS refers to the listed breeding species of Lough Corrib SPA. The assessment to date has not come to a definitive determination of the likely impact of the GHE on these species. The NIS concludes that the impact is indeterminate. The NIS would be greatly improved if the potential impacts of the GHE on the listed species of Lough Corrib was more intensively and critically assessed.

¹⁰ Colhoun, K. and S. Cummins. 2013. Birds of Conservation Concern in Ireland 2014 -2019. Irish Birds 9 (4) 523 – 544.



With regard to listed breeding species of Inner Galway Bay if the applicant continues to conclude that the impacts of the GHE on the relevant attributes and targets are indeterminate for each of these species then further analysis, survey and research work may well be needed to be undertaken to allow the assessment to arrive at a definitive conclusion. Given the level of analysis yet to be undertaken, it is not possible for this Department to provide recommendations on what type of further survey work may be required at this point in time; that can only be informed by the analysis that this submission recommends to be undertaken.

In-combination issues with other projects:

Previous Development:

Table 3.15 of Section 3.7 of the NIS sets out various total impacts for each of the relevant species listed for Inner Galway Bay SPA. The 'total impact' for each species is quantified by way of area impacted by permanent loss or temporary disturbance. For some species e.g. Ringed Plover, the impact of the previous development is quantified as 7.97ha of terrestrial habitat. The reason for this is unclear to this Department as the SPA landward boundary for the general area in question was defined by the high water mark (*i.e.* there was no terrestrial habitat contained in this part of the SPA prior to the Port development of the mid-1990s).

Galway Harbour Flights Operation:

The NIS does not go into a sufficient level of detail in relation to the likely areas associated with the take-off, landing and approach areas that are associated with the consented Galway Harbour flights operation. This is relevant in terms of assessing the in-combination disturbance levels to those birds associated with the subtidal areas of Inner Galway Bay SPA.

Quantification of Adverse Impacts on the Natura 2000 sites:

Adverse Impacts on the listed species of Inner Galway Bay SPA

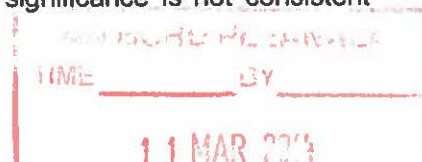
As previously stated, Table 3.15 of the NIS sets out to quantify the total impact for each of the listed species of Inner Galway Bay SPA. The 'total impact' for each species is quantified by way of area impacted by permanent loss or temporary disturbance.

There seems to be some inconsistencies between some species between this table and Table 3.11 (e.g. for Great Northern Diver the residual loss set out in Table 3.11 is 26.93 ha permanent loss and disturbance within an area of 51.78 ha but the total impact of permanent loss set out in Table 3.15 for this species is 35.51 ha). Additionally, for species that feed by diving (e.g. Cormorant and Red-breasted Merganser) the level of permanent habitat loss described in the residual level of impact section of Table 3.11 differs for these species without a stated explanation.

Table 3.13 presents values (in terms of area) of impacts arising out of the previous development and the proposed impacts arising out of the construction and operational phases of the GHE. As previously stated, species differ from each other in terms of their ecology and sensitivity to disturbance. Table 3.13 and the related tables of 3.11 and 3.15 attempt to quantify the impact for each species using this generic approach. For example, the impacts set out in these tables seem to be restricted to actual habitat damage either through in-filling ('permanent loss') or dredging ('temporary loss'). This approach fails to incorporate the potentially permanent displacement due to on-going associated disturbance of some species from the immediate environs of the proposed GHE or areas that would be associated with the GHE.

Adverse effects on the wetland habitat of Inner Galway Bay SPA

One of the conservation objectives for Inner Galway Bay SPA refers to the conservation of the wetland habitat as a resource for regularly occurring migratory birds. The related target sets out that the permanent area occupied by the wetland habitat should be stable and not significantly less than the area of 13,267ha, other than that occurring from natural patterns of variation. The applicant has determined that the loss of 'wetland and subtidal SPA habitat' is deemed to be significant. However, there is a lack of clarity of the overall size of the habitat loss in the context of the SPA (see above). It should be noted that the assessment of significance is not consistent



throughout the NIS for this conservation objective as Table 3.12 indicates that the impact is not significant.

The acknowledgement to this letter, any further information and An Bord Pleanála's decision should ideally be sent to manager.dau@ahg.gov.ie; if this is not possible, correspondence may alternatively be sent to:

The Manager
Development Applications Unit
Department of Arts, Heritage and the Gaeltacht
Newtown Road
Wexford

Is mise, le meas



Muiris Ó Conchúir
Development Applications Unit
Tel: 053-911 7387

Encl (1) Part 8 – LA 7-2013 – Galway City Co – ltr from DAHG to PA 27-02-2014



AN BORD PLEANALA
TIME _____ BY _____
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Appendix to the observations in relation to nature conservation

Legislation concerning mammals relevant to this proposed development

The documents provided as part of the development proposal do not clearly set out the legislation applicable to mammal species and their natural habitats. For this reason the relevant legal provisions are given below.

The Wildlife Acts 1976 to 2012 and additional European/national legislation provide a legal framework for the conservation of Irish wildlife and natural habitats. Under the 1976 Wildlife Act and its subsequent Amendments (2000, 2005, 2010 and 2012) specific protection is given to seals, whales, dolphins and porpoises. It is an offence to hunt (except in some instances under licence or Ministerial permit), injure (except when hunting under such licence) or wilfully interfere with, disturb or destroy the resting or breeding place of a protected species. With regard to the marine environment, the Wildlife Acts 1976 to 2012 extend in scope to waters within Ireland's Territorial Sea (i.e., within the 12 nautical mile limit from the baselines). In the context of the proposed Galway Harbour Extension project the Wildlife Acts 1976 to 2012 are therefore applicable.

The EC Directive on the conservation of natural habitats and of wild flora and fauna (i.e., the Habitats Directive, Council Directive 92/43/EEC) is transposed into national law by the European Communities (Birds and Natural Habitats) Regulations 2011 (S.I. No. 477 of 2011). These regulations consolidate the earlier European Communities (Natural Habitats) Regulations 1997 to 2005 and the European Communities (Birds and Natural Habitats)(Control of Recreational Activities) Regulations 2010. Under the Habitats Directive, the otter and all marine mammal species normally occurring in Ireland must be given protection. The otter, both species of seal breeding in Ireland (i.e., harbour seal, grey seal) and two cetacean species (i.e., harbour porpoise *Phocoena phocoena* and bottlenose dolphin *Tursiops truncatus*) are listed in Annex II of the Directive as species whose conservation requires the designation of Special Areas of Conservation. The otter and all cetaceans (i.e., all species of whales, dolphins & porpoises) are also listed under Annex IV of the Directive as species requiring strict protection. [Note: Section 2.2.9.2 of the NIS mistakenly states that otter is listed on Annex V rather than IV.]

Within these legal obligations various conservation measures are required to be undertaken to protect SACs, among them to avoid "the deterioration of natural habitats and the habitats of species as well as disturbance of the species for which the areas have been designated". With regard to the strict protection of Annex IV species, the Habitats Directive applies within Ireland's 200 nautical mile limit (i.e., within the Exclusive Fishery Zone, also termed the Exclusive Economic Zone or EEZ). In the context of the proposed Galway Harbour Extension project the above European and national legislation is also applicable.

Under Article 6(3) of the Habitats Directive and the corresponding Birds and Natural Habitats Regulations 2011 (i.e., S.I. 477 of 2011), plan- or project-related activities within designated conservation sites must be assessed with regard to their implications for the site and its conservation objectives. The legal obligation under Article 6(3) also extends to *ex situ* activities. Thus Licensing Authorities are legally obliged to ensure that activities outside an SAC, either alone or in combination with other activities, are unlikely to adversely affect the integrity of the site concerned.

Article 12 of the Habitats Directive further requires that Member States take the requisite measures to establish a system of strict protection for Annex IV listed species, including the otter and all cetaceans, in their natural range, prohibiting *inter alia*

all forms of deliberate capture or killing of specimens of these species in the wild;
deliberate disturbance of these species, particularly during the period of breeding, rearing, hibernation and migration;.....

deterioration or destruction of breeding sites or resting places.

In the above context the term 'deliberate' has been interpreted by the European Commission to not only incorporate the intention to commit an offensive action but also, separately, the conscious acceptance of the foreseeable results of such an action. Article 12 applies to all life stages of the listed species. It also requires that Member States establish a system to monitor the incidental

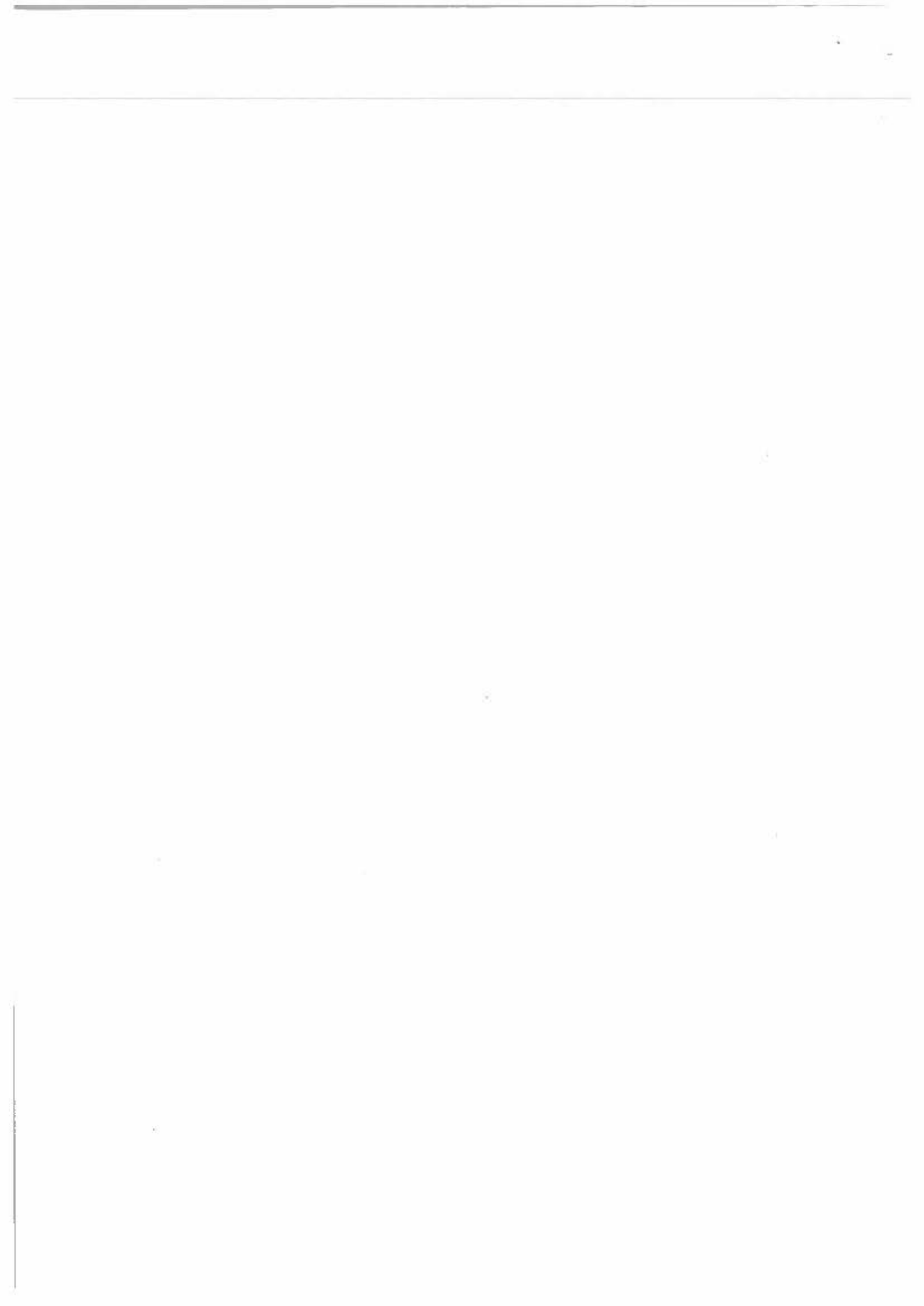
capture and killing of these animals, taking further research or conservation measures as required to ensure that incidental capture and killing does not have a significant negative impact on the species concerned (i.e., affecting the maintenance or restoration of their favourable conservation status - FCS).

An exception from complying with the legislative requirements under Article 12 and the 2011 Regulations may be permitted via a specific derogation licence granted by the Minister in certain cases:

- (a) in the interests of protecting wild fauna and flora and conserving natural habitats;
- (b) to prevent serious damage, in particular to crops, livestock, forests, fisheries and water and other types of property;
- (c) in the interests of public health and public safety, or for other imperative reasons of overriding public interest, including those of a social or economic nature and beneficial consequences of primary importance for the environment;
- (d) for the purpose of research and education, of repopulating and reintroducing these species and for the breeding operations necessary for these purposes, including the artificial propagation of plants, or
- (e) to allow, under strictly supervised conditions, on a selective basis and to a limited extent, the taking or keeping of certain specimens of the species to the extent specified therein.

However (1) it must be demonstrated that there is no satisfactory alternative and the derogation is not detrimental to the maintenance of the populations of the species to which the Habitats Directive relates at a favourable conservation status in their natural range, and (2) a derogation licence will be subject to such conditions, restrictions, limitations or requirements as the Minister considers appropriate.



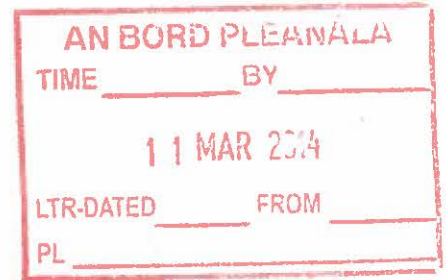


An Roinn
Ealaíon, Oidhreachta agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht

Planning Ref: LA 7/2013 (please quote in all related correspondence)

27 February 2014

Director of Services – Planning
Galway City Council
Halla na Cathrach
Bóthar an Choláiste
Gaillimh
Email: planning@galwaycity.ie



Re: Notice of Part 8 – proposed improvement measures on the Lough Atalia Road

A Chara

On behalf of the Department of Arts, Heritage and the Gaeltacht, I refer to your correspondence in relation to the above proposed development.

Outlined below are the recommendations/observations of the Department in relation to **nature conservation**.

The Department refers to the above Part 8 application for the proposed regrading and realignment of Lough Atalia Road at Townparks, Galway City. Reference is also made to the associated 'Environmental Appraisal – Screening Document to Determine Appropriate Assessment Requirements' (Aquafact, 2013), and to other project information provided. Outlined below are the nature conservation observations of the Department.

Under Section 177U of the Planning and Development 2000, as amended, the Council must carry out the screening for appropriate assessment, and must assess, in view of best scientific knowledge, if the proposed development, individually or in combination with other plans or projects, is likely to have a significant effect on a European site.

The Environmental Appraisal states that the proposed development is located adjacent to the European sites, Galway Bay Complex cSAC (site code 000268) and Inner Galway Bay SPA (site code 004031). Part 8 drawings, including drawings 1254-2100 and 1254-2112, and the project description, indicate that the proposed development is also located in and will discharge to these European sites as it includes construction of the rising main from the pumping station to the existing Galway Harbour Enterprise Park main drainage (835m).

The Council should note that all parts of a project should be subject to screening for appropriate assessment, and this should include all lands and works areas required at construction and operation stages, whether on a permanent or temporary basis, and whether works and project elements are above or below ground. The Department is concerned that a works method statement, and a drainage and sediment control plan are not yet available for the project, and that sites for the storage or disposal of excavated materials arising from the construction works are not yet identified. In the Environmental Appraisal and other Part 8 documentation, as currently presented, there are uncertainties as to the full extent of the project and its likely effects on European sites.

The Council is advised that SAC and SPA have published site-specific conservation objectives with supporting documents, and associated GIS datasets, which are available from www.npws.ie. This information has not been used in the Environmental Appraisal.

In the Environmental Appraisal, it is noted that mitigation measures are listed (section 6), and that the consideration of in combination effects (section 7) occurs after the following conclusion in section 5.3: "*It has been determined during the screening process that none of these sites be impacted [sic] in any way by the proposed project, alone or in-combination, with other projects. Appropriate assessment is therefore not required.*" Regarding potential in combination effects, the Council will be aware that there is a current application with An Bord Pleanála for the new Galway Port development.

The Department considers that there are uncertainties regarding the full extent of the project and its likely significant effects, alone and in combination with other plans and projects, on European sites. The deficiencies and uncertainties outlined above should be addressed when the Council, as the competent authority, carries out or revises the screening for appropriate assessment. At that stage, if uncertainties remain regarding the likely significant effects on European sites arising from the project alone or in combination with other plans and projects, an appropriate assessment will be required, and this will necessitate a Section 177AE application to the Board.

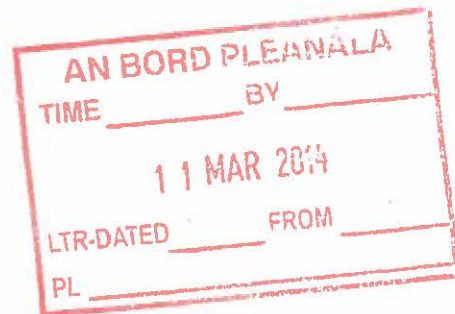
The acknowledgement to this letter and further information should be solely sent to this Department's Development Applications Unit at manager.dau@ahg.gov.ie; if this is not possible, correspondence may alternatively be sent to:

The Manager
Development Applications Unit
Department of Arts, Heritage and the Gaeltacht
Newtown Road
Wexford

Is mise, le meas

Muiris Ó Conchúir

Muiris Ó Conchúir
Development Applications Unit
Tel: 053-911 7387
E manager.dau@ahg.gov.ie



Kieran Doherty

From: SIDS
Sent: 12 March 2014 10:03
To: Kieran Doherty
Subject: FW: Our Ref: SID-2014-GE-02; Your Ref: PL61.PA0033 - Galway Harbour Extn Application
Attachments: SID-2014-GE-02 ltr DAHG to ABP 11-03-2014.pdf; Part 8 - LA 7-2013 - Galway City Co - ltr from DAHG to PA 27-02-2014.pdf; ATT00001.txt; ATT00002.htm
Importance: High

From: Bord
Sent: 12 March 2014 09:10
To: SIDS
Subject: FW: Our Ref: SID-2014-GE-02; Your Ref: PL61.PA0033 - Galway Harbour Extn Application
Importance: High

From: Manager Dau [<mailto:Manager.Dau@ahq.gov.ie>]
Sent: 11 March 2014 17:11
To: Bord
Subject: Our Ref: SID-2014-GE-02; Your Ref: PL61.PA0033 - Galway Harbour Extn Application
Importance: High

A chara

Attached is a letter, with enclosure, from this Department in connection with the above-referenced case.

Le meas

Muiris Ó Conchúir
Manager, Development Applications Unit (DAU)
Bainisteoir, Aonad um Iarratais Forbartha
Department of Arts, Heritage & the Gaeltacht
Roinn Ealaíon, Oidhreacht & Gaeltachta
Newtown Road, Wexford
Br an Bhaile Nua, Loch Garman
T: 053-911 7387 (direct/díreach)
Reception/Fáiltiú: 053-911 7500

*An Roinn
Ealaíon, Oidhreacht agus Gaeltachta
Department of
Arts, Heritage and the Gaeltacht*



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