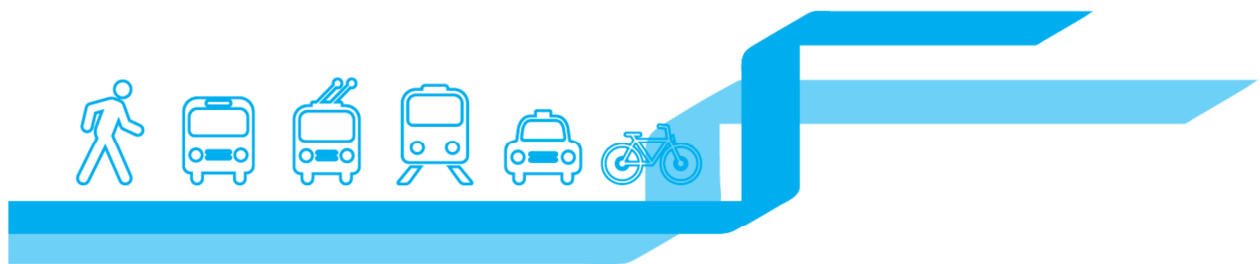


NTA Integrated Implementation Plan 2013-2018



Appropriate Assessment Screening Report

Contents

1. INTRODUCTION	3
1.1 Introduction to Habitats Directive Assessment	3
1.2 Stages of the HDA Process	4
Stage 1: Screening.....	4
Stage 2: Appropriate Assessment	4
Stage 3: Assessment of Alternative Solutions.....	4
Stage 4: Assessment Where no Alternative Exists and Where Adverse Impacts Remain	5
1.3 Screening Methodology	5
2. THE INTEGRATED IMPLEMENTATION PLAN.....	7
2.1 Overview	7
2.2 Overall Programme Approach	7
2.3 Main Components of the Plan	8
2.3.1 Bus.....	8
2.3.2 Light Rail.....	8
2.3.3 Heavy Rail.....	9
2.3.4 Integration and Sustainable Transport Investment.....	10
2.3.5 An Integrated Service Plan.....	11
2.3.6 Integration and Accessibility	11
2.3.7 Integration of Land Use and Transport.....	11
3. DESCRIPTION OF NATURA 2000 SITES	14
4. ELEMENTS OF THE PLAN LIKELY TO AFFECT NATURA 2000 SITES	20
4.1 Direct Impacts	21
4.2 Indirect Impacts	22
4.3 In-Combination Impacts.....	22
5. SCREENING CONCLUSIONS	24

1. INTRODUCTION

1.1 Introduction to Habitats Directive Assessment

The requirement for Habitats Directive Assessment (HDA) (also known as ‘Appropriate Assessment’) of plans or projects originates from Article 6 (3) and (4) of European Union (EU) Council Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora, commonly known as the ‘Habitats Directive’, which is implemented in Ireland through the European Communities (Natural Habitats) Regulations of 1997. The wording of Article 6 (3) of the Directive is as follows:-

‘Any plan or project not directly connected with or necessary to the management of the site but likely to have a significant effect thereon, either individually or in combination with other plans or projects, shall be subject to appropriate assessment of its implications for the site in view of the site’s conservation objectives. In the light of the conclusions of the assessment of the implications for the site and subject to the provisions of paragraph 4, the competent national authorities shall agree to the plan or project only after having ascertained that it will not adversely affect the integrity of the site concerned and, if appropriate, after having obtained the opinion of the general public.’

The wording of Article 6 (4) of the Directive is as follows:-

‘If, in spite of a negative assessment of the implications for the site and in the absence of alternative solutions, a plan or project must nevertheless be carried out for imperative reasons of overriding public interest, including those of a social or economic nature, the Member State shall take all compensatory measures necessary to ensure that the overall coherence of Natura 2000 is protected. It shall inform the Commission of the compensatory measures adopted.’

Appropriate Assessment Guidelines for Planning Authorities were published by the Department of the Environment Heritage and Local Government in December 2009 (DoEHLG, 2009). These Guidelines have been followed, where relevant, in this assessment. The HDA process in the Republic of Ireland should be conducted in full consultation with the National Parks and Wildlife Service. This report will be submitted to relevant staff within NPWS and will form the basis of discussions on the approach to further stages of the HDA process.

The EU has published a number of documents which provide guidance on the requirements of Appropriate Assessment, 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, 2002), which sets out the principles of how to approach decision making during the process and this have been followed as closely as possible.

1.2 Stages of the HDA Process

If necessary, the Appropriate Assessment process progresses through four stages. If at any stage in the process it is determined that there will be no significant effect on any Natura 2000 site, the process is effectively completed. The four stages are as follows:-

- Stage 1 – Screening of the Proposed Works;
- Stage 2 – Appropriate Assessment of the Proposed Works;
- Stage 3 – Assessment of alternative solutions; and
- Stage 4 – Assessment of compensatory measures.

Stages 1 and 2 relate to Article 6(3) of the Habitats Directive; and Stages 3 and 4 to Article 6(4).

Stage 1: Screening

The aim of Stage 1, 'Screening' is to determine whether or not Stage 2, the Appropriate Assessment is required, i.e. to determine whether or not the Plan is likely to negatively affect the conservation objectives on any Natura 2000 site. This is done by examining the design of the proposed project; and the conservation objectives of any Natura 2000 sites that might potentially be affected.

Stage 2: Appropriate Assessment

The aim of Stage 2, the 'Appropriate Assessment' proper, is to identify any significant negative impacts that the plan might have upon Natura 2000 sites and to propose changes to the project design that will avoid any such negative impacts. The project design should then be amended accordingly, thereby avoiding the need to progress to Stage 3, which would require the implementation of measures to mitigate or compensate for the identified negative impacts on Natura 2000 sites.

A key consideration of Appropriate Assessment is that the Plan or Project under consideration must take account of potential impacts on Natura 2000 sites 'in combination' with other plans or projects. Such Impacts are termed 'Cumulative Impacts' and are discussed in Sections 4.2.3 and 4.3.3.

It is an objective of the HDA process to avoid the need to progress to Stage 3, which can be achieved by implementing the avoidance and mitigation measures determined during Stage 2.

Stage 3: Assessment of Alternative Solutions

If it is not possible during the Stage 2 assessment to reduce impacts to acceptable, non-significant levels by avoidance and mitigation, Stage 3 of the HDA process must be undertaken, which is to objectively assess whether alternative solutions exist by which the objectives of the plan or project can be achieved. Explicitly, this means alternative solutions that do not have negative impacts on the conservation objectives of the Natura 2000 site.

This stage of the HDA process involves identifying the key objectives of the plan or project, identifying alternative solutions to achieving those objectives and then assessing each alternative against the criteria used in Stage 2 of the HDA. Clearly this involves a great deal of work on the part of both the practitioner and the proponent of the plan or project.

Fundamentally, there are two pre-conditions that must be met before the Competent Authority (DoECLG) can allow a development that negatively impacts upon the conservation objectives of a Natura 2000 site, and it is at this stage of the HDA process that the first of these is determined: that 'no alternatives exist' (the second precondition relates to 'over-riding public interest' and 'human health and safety considerations' and is determined in Stage 4). It should also be noted that EU guidance on this stage of the process states that, 'other assessment criteria, such as economic criteria, cannot be seen as overruling ecological criteria' (EC, 2002). In other words, if alternative solutions exist that do not have negative impacts on Natura 2000 sites; they should be adopted regardless of economic considerations.

Stage 4: Assessment Where no Alternative Exists and Where Adverse Impacts Remain

As stated above, this Stage of the HDA process is undertaken when it has been determined that negative impacts on the conservation objectives of a site will result from a plan or project, but that no alternatives exist. At this Stage of the HDA process, it is the characteristics of the plan or project itself that will determine whether or not the Competent Authority can allow it to progress. This is the determination of 'over-riding public interest'.

It is important to note that in the case of Natura 2000 sites that include in their Qualifying Features 'Priority' habitats or species, as defined in Appendices 1 and 2 of the Directive, the demonstration of 'over-riding public interest' is not sufficient, and it must be demonstrated that the plan or project is necessary for 'human health or safety considerations'. Where plans or projects meet these criteria, they can be allowed, provided adequate compensatory measures are proposed. Stage 4 of the process defines and describes these compensation measures.

1.3 Screening Methodology

The general approach to the screening assessment in order to determine whether or not particular Natura 2000 sites require further Stage 2 Appropriate Assessment involved an examination of the draft Implementation plan, which comprises the following:

- an infrastructure investment programme, identifying the key objectives and outputs to be pursued by the Authority over the period of the Plan;
- the actions to be taken by the Authority to ensure the effective integration of public transport infrastructure over the period of the Plan;
- an integrated service plan, identifying the key objectives and outputs to be pursued by the Authority in relation to the procurement of public passenger transport services over the period of the Plan;

- the actions to be taken by the Authority to ensure the effective integration of public passenger transport services over the period of the Plan; and
- such other matters as the Authority considers appropriate or as may be prescribed by the Minister for Transport, Tourism and Sport (the “Minister”).

As can be seen from the above, the first section of the Implementation Plan, related to infrastructure investment, will be the most important in terms of the HDA. Other sections related to service improvements and further integration of services are unlikely to have physical impacts on the landscape. However, the implementation of such policies may have an indirect or cumulative impact in combination with other plans.

The HDA Screening process that has been conducted can therefore be summarised as follows:-

- Examination of the key elements of the strategy and its potential impacts on Natura 2000 sites.
- Examination of the Natura 2000 sites including details of the Qualifying Features such as Habitats Directive Annex I habitats and Annex II species; and Birds Directive, Annex I Bird Species.
- Production of a spatial overlay of the Plan alternatives against Natura 2000 sites (cSACs, SPAs); and also rivers and other possible ‘pathways’ for indirect impacts; and other features, to determine if such proposals are likely to affect any Natura 2000 site.
- Determination of the proposals/measures likely to have a direct effect on Natura 2000 sites through the GIS mapping exercise described above. Where there is a direct spatial overlap between a Natura 2000 site and a proposal, e.g. a proposed road crossing a designated river. All sites likely to be directly impacted were ‘screened-in’ for Stage 2 assessment. See Table 4.1 and Table 4.3.
- An assessment of the likelihood of indirect impacts on Natura 2000 sites. Those where impacts were considered possible were also screened-in, for example downstream effects from a river or disturbance from a nearby construction project.

2. THE INTEGRATED IMPLEMENTATION PLAN

2.1 Overview

The Government published its capital programme in November 2011 titled *“Infrastructure and Capital Investment 2012 – 2016: Medium Term Exchequer Framework”*. That programme set out the Government’s capital investment priorities over the five years of the programme. The total public transport investment set out in the programme is €1,428 million over the period 2012 to 2016.

Under that capital investment framework, the amount allocated to public transport infrastructure in the GDA is €715 million to the end of 2016. Within this plan there may be yearly adjustments to reflect Government decisions, particular expenditure timings and other factors.

While the Government’s *“Infrastructure and Capital Investment 2012 – 2016”* sets out investment for the years to the end of 2016, it is required that this Plan will extend to a six year period, to the end of 2018. In line with the provisions of Section 13(4) of the Dublin Transport Authority Act 2008, guidance has been obtained from the Department of Transport, Tourism and Sport indicating that projected figures may be used for proposed capital expenditure for 2017 and 2018. While no commitment has been given in relation to funding in those later years, the Plan has assumed a similar level of funding for those years to that proposed for 2016.

Accordingly, the Authority has prepared this Plan on the basis of the following funding profile:

	2013	2014	2015	2016	2017	2018	Total
Funding (€ m)	140.6	149.2	145	150	150	150	884.8

2.2 Overall Programme Approach

The Infrastructure Investment Programme forms an integral and central part of the Plan. Over the six year period of the Plan, close to €900 million will be invested in public transport infrastructure and related cycling/walking infrastructure under this Plan. The overall Infrastructure Investment Programme is divided into four sub-programmes. These are:

1. Bus;
2. Light Rail;
3. Heavy Rail; and
4. Integration Measures and Sustainable Transport.

The table below indicates the total Infrastructure Investment Programme sub-divided into its constituent sub-programmes.

Sub-Programme	2013 (€m)	2014 (€m)	2015 (€m)	2016 (€m)	2017 (€m)	2018 (€m)
Bus	43.6	39.0	40.0	39.0	42.0	42.0
Light Rail	27.3	30.2	43.5	75.0	65.0	65.0
Heavy Rail	32.1	41.7	26.0	10.5	15.0	15.0
Integration Measures & Sustainable Transport	37.6	38.3	35.5	25.5	28.0	28.0

Yearly Totals	140.6	149.2	145	150	150	150
----------------------	--------------	--------------	------------	------------	------------	------------

Each of these sub-programmes is addressed in turn in the following sections, with details provided on the objectives of the particular sub-programme and projects intended for delivery under that sub-programme.

2.3 Main Components of the Plan

2.3.1 Bus

The proposals in relation to Bus investment are encompassed in four investment areas:

- Bus Fleet Investment;
- Bus Stop and Shelter Provision;
- General Bus Network Improvements; and
- Bus Rapid Transit Schemes.

The area of most concern for the HDA is Bus Rapid Transit as this will require investment in infrastructure and will potentially have significant environmental impacts. It is proposed to progress the development of three BRT routes as part of this Plan. These are:

- Swords / Airport to City Centre;
- Blanchardstown to N11 (UCD); and
- Clongriffin to Tallaght.

It is envisaged that planning consent will be achieved for each of these projects in the early years of the Plan. Subsequent implementation of these schemes will be progressed on an incremental basis in accordance with available funding. At this stage, only indicative corridors have been identified, around which a more detailed route selection process will be undertaken during the lifetime of the plan.

2.3.2 Light Rail

The proposals in relation to light rail investment are encompassed in two investment areas:

- Luas Cross City; and
- Fleet and Network Enhancement.

The Luas Cross City scheme is the main focus of the HDA as it requires significant intervention in the environment of the City Centre and north west inner suburbs. This is the largest public transport project to be constructed during the period of the Plan. This scheme comprises a broadly north / south Luas line extending from St. Stephen's Green in the south to connect to the Maynooth Rail line at Broombridge in Cabra at its northern end. With an overall length of approximately 5.6km, it will have thirteen stops along its route, including serving the major new DIT campus at Grangegorman.

Luas Cross City was approved by An Bord Pleanála in 2012 and construction commenced in June 2013. It has been through the Environmental Impact Assessment and Appropriate Assessment processes but it was felt prudent, nevertheless, to incorporate this project into this plan and HDA process as it comprises a significant proportion of the expenditure over the plan period.

2.3.3 Heavy Rail

The proposals in relation to heavy rail investment are encompassed in seven investment areas:

- City Centre Resignalling Project;
- Phoenix Park Tunnel Link;
- Level Crossing Programme;
- Ticketing / Revenue Systems;
- Central Traffic Control;
- Station Improvement / Other Enhancements Programme
- Network Development.

Of these proposals, the critical ones in terms of environmental impact are the re-use of the Phoenix Park tunnel, construction of new stations and some network development projects. Enhancements such as the City Centre Resignalling programme and other developments in terms of the promotion of rail will be taken into account by the generalised assessment of the impact of increased rail frequency and associated potential increases in passenger numbers.

Under the current configuration of the Irish Rail network, rail services entering Dublin City on the Kildare line terminate in Heuston Station. These services include a mix of inter-city trains from Cork, Waterford, Limerick and Galway, as well as commuter services from Kildare, Carlow, Newbridge and Portlaoise. Heuston station lies some 3km from the commercial core of the city and in excess of 3km from the area of highest density employment in the south eastern quadrant of the city. Hence, passengers currently using the Kildare line and wishing to access the commercial core of the city by public transport must transfer to bus or to the Luas Red line at Heuston station.

A rail connection between Heuston and Connolly stations currently exists and the completion of the City Centre Resignalling project will provide extra train paths through Connolly Station. It is intended to utilise a portion of these additional train paths to facilitate the use of the Phoenix Park Tunnel for the running of through services from the Kildare line to Connolly and through to Grand Canal Dock. The completion of those major signalling works, together with other engineering works, is anticipated to allow commuter services to commence using the Phoenix Park Tunnel Link in late 2015 or early 2016.

Given the funding needs of other investment areas in the overall programme, it is unlikely that any significant network development will be completed during the period of the Plan. However, planning and design work will be progressed on certain rail projects with a view to those projects being available for commencement should additional funding become available for such schemes.

The relevant projects are:

- Electrification and Resignalling from Malahide to Balbriggan; and
- Maynooth Line Electrification and Resignalling.

The electrification and resignalling of the northern line between Malahide and Balbriggan, together with a turnback facility at Balbriggan, would enable DART services to be extended northwards to Balbriggan. This is an integral project of the overall DART Underground programme.

In relation to the Maynooth Line Electrification and Resignalling project, this is a scheme which is also associated with the DART Underground programme. It would see the electrification of the Maynooth line from Connolly to Maynooth. Taken together, these improvements would allow through running of

DART trains from Maynooth to Greystones on the South-Eastern Line, which is a fundamental feature of the revised DART service following the completion of DART Underground.

2.3.4 Integration and Sustainable Transport Investment

This investment sub-programme spans the provision of walking, bus and cycling infrastructure to safety improvements and sophisticated traffic control systems. It also includes supporting initiatives for public transport customers such as travel information provision. Through all its elements it supports the use of the overall public transport system and enhances the accessibility, convenience, and attractiveness of the public transport offering as well as directly providing for the cycling and walking modes of travel.

The main objective is to encourage the continuation of modal shift to cycling, walking and public transport. Within that overall objective, key priorities include:

- Cycling/Walking, including:
 - Development of regional cycle network, including both commuting and recreational routes;
 - Provision of cycle parking facilities, including at public transport interchange points;
 - Expansion of bike sharing schemes;
 - Pedestrianisation and pedestrian improvement schemes; and
 - Pedestrian / cycle / tourist signage.
- Traffic Management, including:
 - Traffic management schemes;
 - Development of bus/cycling/walking transport corridors;
 - Traffic re-routing projects in urban areas, to enhance facilities for shoppers, pedestrians and cyclists; and
 - Traffic control and information schemes, including public transport prioritisation systems; and
 - Development of parking facilities.
- Safety, including;
 - Removal of accident black spots;
 - Provision of pedestrian crossings; and
 - Junction safety improvement schemes.
- Integration Projects, including:
 - Real Time Passenger Information ;
 - Integrated Ticketing ;
 - Integrated Journey Planner; and
 - Other transport Information systems.

2.3.5 An Integrated Service Plan

Over time and as the impacts of investment in the transport system are felt, the aim is that less people will use private motorised transport to access goods, services and amenity and more people will use public transport. An integrated service plan, identifying the key objectives and outputs to be pursued by the Authority in relation to public passenger transport services, is essential to influence decision-making and secure this modal shift.

An integrated network of public transport services needs to provide:

- Appropriate coverage of the area by the public transport network, so that an increasing proportion of the conurbation lives within a reasonable walking distance of public transport;
- Frequent, direct, easily understood and comfortable services to major travel destinations throughout the region, offering predictability to users throughout their daily activities; and
- Easy to use payment systems and information systems both to plan and to react en-route to unforeseen events.

This particular element of the plan will only lead to significant impacts on the environment in combination with the infrastructural elements outlined above and, as such, its assessment is implicit in the assessment of the plan in its entirety.

2.3.6 Integration and Accessibility

The Authority will seek the following improvements in terms of integration and accessibility:

- Expansion of Leap card;
- Further Real Time Passenger Information roll-out;
- On-going Journey Planner development;
- Restructuring of Fares;
- Optimising Interchange; and
- Further development of the Public Transport Brand.

These particular elements of the plan will only lead to significant impacts on the environment in combination with the infrastructural elements outlined above and, as such, their assessment is implicit in the assessment of the plan in its entirety.

2.3.7 Integration of Land Use and Transport

While the statutory responsibility for land use rests with the local authorities, transport planning can only be successful if it is integrated with land use planning. Transport policies aimed at reducing both the need to travel and distances travelled can only be delivered if there are complementary spatial policies locating future populations closer to their employment, education and shopping opportunities. The location of schools, jobs, shops, local services and other land uses relative to the location of residential development, is a critical determinant of the need to travel, the distances to be travelled and the modes of travel chosen.

Additionally, provision of high capacity public transport and walking and cycling infrastructure can only be effective if matched with appropriate development patterns which support and facilitate their use. Accordingly, it is vital that land use planning and transport planning are fully aligned, both spatially and over time. Land use policy, as such, will comprise a key determinant in transport investment decisions at both the strategic and local level over the lifetime of this plan.

As part of this plan, the Authority promotes and seeks to implement the following:

- High volume, trip intensive developments, such as offices and retail, should primarily be focussed into Dublin City Centre and the larger Regional Planning Guidelines higher order centres within the GDA;
- The role and function of district centres and neighbourhood centres should be supported and promoted in order to exploit the levels of accessibility offered by public transport, walking and cycling at these locations. This relates to providing for an appropriate scale of development in these centres which would not undermine development potential in Dublin City Centre or the larger Regional Planning Guidelines higher order centres;
- Except in limited circumstances such as specific physical requirements, trip intensive developments or significant levels of development should not occur in locations not well served by high quality public transport;
- All non-residential development proposals in the GDA should be subject to maximum parking standards. These should be set by the local authorities in the GDA in consultation with the Authority and should vary spatially on the basis of centrality and the level of public transport provision;
- In locations where the highest intensity of development occurs, an approach that caps car parking on an area-wide basis should be applied; and
- For all major employment developments and all schools, travel plans should be conditioned as part of planning permissions and be carried out in a manner consistent with existing guidance
- Residential development located proximate to high capacity public transport should be prioritised over development in less accessible locations in the GDA;
- To the extent practicable, residential development should be carried out sequentially, whereby lands which are, or will be, most accessible by walking, cycling and public transport – including infill and brownfield sites – are prioritised; and
- The strategic transport function of national roads, including motorways, should be maintained by limiting the extent of development that would give rise to the generation of local car traffic on the national road network
- Planning at the local level should promote walking, cycling and public transport by maximising the number of people living within walking and cycling distance of their neighbourhood or district centres and public transport services;
- New development areas should be fully permeable for walking and cycling and the retrofitting of walking and cycling facilities should be undertaken where practicable in existing neighbourhoods in order to give competitive advantage to these modes;
- Development proposals should exploit opportunities to enhance the effectiveness of transport investment;

- The density of employment development should maximise the potential for walking, cycling and public transport;
- Where possible, developments should provide for filtered permeability which provides for walking, cycling, public transport and private vehicle access but which restricts or discourages private car through trips; and
- To the extent practicable, proposals for right of way extinguishments should only be considered where these do not result in more circuitous trips for local residents accessing public transport or local destinations.

These principles are consistent with, and may be regarded as the extension of, prevailing national transport and planning policy. These are also given statutory footing via the Development Plans and Local Area Plans of the seven Local Authorities in the GDA. It is not the intention of this SEA to assess the impact of each of these principles in a specific spatial manner, as this is done via the Development Plan and Local Area Plan processes which zone land. Instead, this SEA will assume these principles as intrinsic to the plan and will assess them in an appropriately broad, general manner.

3. DESCRIPTION OF NATURA 2000 SITES

Clearly a key variable that will determine whether or not a particular Natura 2000 site is likely to be negatively affected is its physical distance from the project site, and it will generally, but not necessarily, be the case that the greater the distance the lower the possibility of impacts.

The Guidelines for Planning Authorities (DoEHLG, 2009) state that the Screening should include the following Natura 2000 sites:-

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

Table 3.1 (cSACs) and Table 3.2 (SPAs) present details of all sites located within 15km of any proposal listed in Section 2. The possibility of impacts beyond 15km was considered, and it was deemed unlikely that any of the projects included would have impacts over distances greater than 15km.

The qualifying features for each site have been obtained through a review of the NPWS Site Synopses for the sites. The threats and conservation objectives have been obtained from work currently underway as part of the Water Framework Directive.

Table 3.1: cSACs Located Within 15km of any Plan Proposal

Site Code	Site Name	Habitat Code	Habitat	Species Code	Species
000391	Ball;ynafagh Bog	7110 7120 7150	Active Raised Bogs Degraded raised bogs still capable of natural Regeneration Depressions on peat substrates of the Rhynchosporion		
000713	Ballyman Glen	7230 7220	Alkaline fens Petrifying springs with tufa formation (Cratoneurion)		
000199	Baldoyle Bay	1140 1310 1330	Mudflats and sandflats not covered by seawater at low tide Salicornia and other annuals colonizing mud and sand Atlantic salt meadows (Glauco- Puccinellietalia maritima)		

		1410	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)		
		1320	<i>Spartina</i> swards		
			(<i>Spartinion maritimae</i>)		
		6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)		
001957	Boyne Coast and Estuary	2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)		
		2110	Embryonic shifting dunes		
		2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)		
		1130	Estuaries		
		1140	Mudflats and sandflats not covered by seawater at low tide		
		1310	<i>Salicornia</i> and other annuals colonizing mud and sand		
		1330	Atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>)		
		1410	Mediterranean salt meadows (<i>Juncetalia maritimi</i>)		
		1320	<i>Spartina</i> swards (<i>Spartinion maritimae</i>)		
000719	Glen of the Downs	91A0	Old sessile oak woods with <i>Ilex</i> and <i>Blechnum</i> in British Isles		
001209	Glenasmole Valley	6210	Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco Brometalia</i>)(*important orchid sites)		
		6410	<i>Molinia</i> meadows on calcareous, peaty or clayey-silt-laden soils (<i>Molinion caeruleae</i>)		
		7220	Petrifying springs with tufa formation (<i>Cratoneurion</i>)		
000202	Howth Head	1230	Vegetated sea cliffs of the Atlantic and Baltic coasts		
		4030	European dry heaths		
002193	Ireland's Eye	1220	Perennial vegetation of stony banks		
		1230	Vegetated sea cliffs of the Atlantic and Baltic coasts		
000725	Knocksink Wood	7220	Petrifying springs with tufa formation (<i>Cratoneurion</i>)		
		91E0	Alluvial forests with <i>Alnus glutinosa</i> and <i>Fraxinus excelsior</i> (<i>Alno-Padion</i> , <i>Alnion incanae</i> , <i>Salicion albae</i>)		
000204	Lambay Island	1230	Vegetated sea cliffs of the Atlantic and Baltic coasts	1364	<i>Halichoerus grypus</i>
000205	Malahide Estuary	2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)		
		2120	Shifting dunes along the shoreline with <i>Ammophila arenaria</i> (white dunes)		
		1140	Mudflats and sandflats not covered at low tide		
		1310	<i>Salicornia</i> and other annuals colonizing mud and sand		
		1330	Atlantic salt meadows (<i>Glauco- Puccinellietalia maritimae</i>)		
		1410	Mediterranean salt meadows (<i>Juncetalia</i>		

			maritimi)		
		1320	Spartina swards (Spartinion maritimae)		
000206	North Dublin Bay	1140	Mudflats and sandflats not covered by seawater at low tide	1395	<i>Petalophyllum ralfsii</i>
		1310	Salicornia and other annuals colonizing mud and sand		
		1330	Atlantic salt meadows (Glauco- Puccinellietalia maritimae)		
		1410	Mediterranean salt meadows (Juncetalia maritimi)		
		1210	Annual vegetation of drift lines		
		2110	Embryonic shifting dunes		
		2120	Shifting dunes along the shoreline with Ammophila arenaria (white dunes)		
		2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)		
		2190	Humid dune slacks		
		1320	Spartina swards (Spartinion maritimae)		
000397	Red Bog	7140	Transition mires and quaking bogs		
		3150	Natural eutrophic lakes with Magnopotamion or hydrocharition type vegetation		
		7110	Active raised bog		
000208	Rogerstown Estuary	1130	Estuaries		
		1140	Mudflats and sandflats not covered by seawater at low tide		
		1310	Salicornia and other annuals colonizing mud and sand		
		1410	Mediterranean salt meadows (Juncetalia maritimi)		
		2130	Fixed coastal dunes with herbaceous vegetation (grey dunes)		
		2120	Shifting dunes along the shoreline with Ammophila arenaria (white dunes)		
		1330	Atlantic salt meadows (Glauco- Puccinellietalia maritimae)		
		1320	Spartina swards (Spartinion maritimae)		
001398	Rye Water / Carton	7220	Petrifying springs with tufa formation (Cratoneurion)	1014	<i>Vertigo angustior</i>
				1016	<i>Vertigo moulinsiana</i>
000210	South Dublin Bay	1140	Mudflats and sandflats not covered by seawater at low tide		
002122	Wicklow Mountains	7130	Blanket bog (*active only)	1355	<i>Lutra lutra</i>
		4010	Northern Atlantic wet heaths with Erica tetralix		
		4030	European dry heaths		
		91A0	Old sessile oak woods with Ilex and Blechnum in British Isles		
		8220	Siliceous rocky slopes with chasmophytic vegetation		
		8210	Calcareous rocky slopes with chasmophytic vegetation		
		8110	Siliceous scree of the montane to snow levels (Androsacetalia alpinae and Galeopsietalia ladani)		
		4060	Alpine and Boreal heaths		
		3160	Natural dystrophic lakes and ponds		

		3130	Oligotrophic to mesotrophic standing waters with vegetation of the Littorelletea uniflorae and/or of the Isoëto-Nanojuncetea		
		6230	Species-rich Nardus grasslands, on siliceous substrates in mountain areas (and submountain areas, in Continental Europe)		

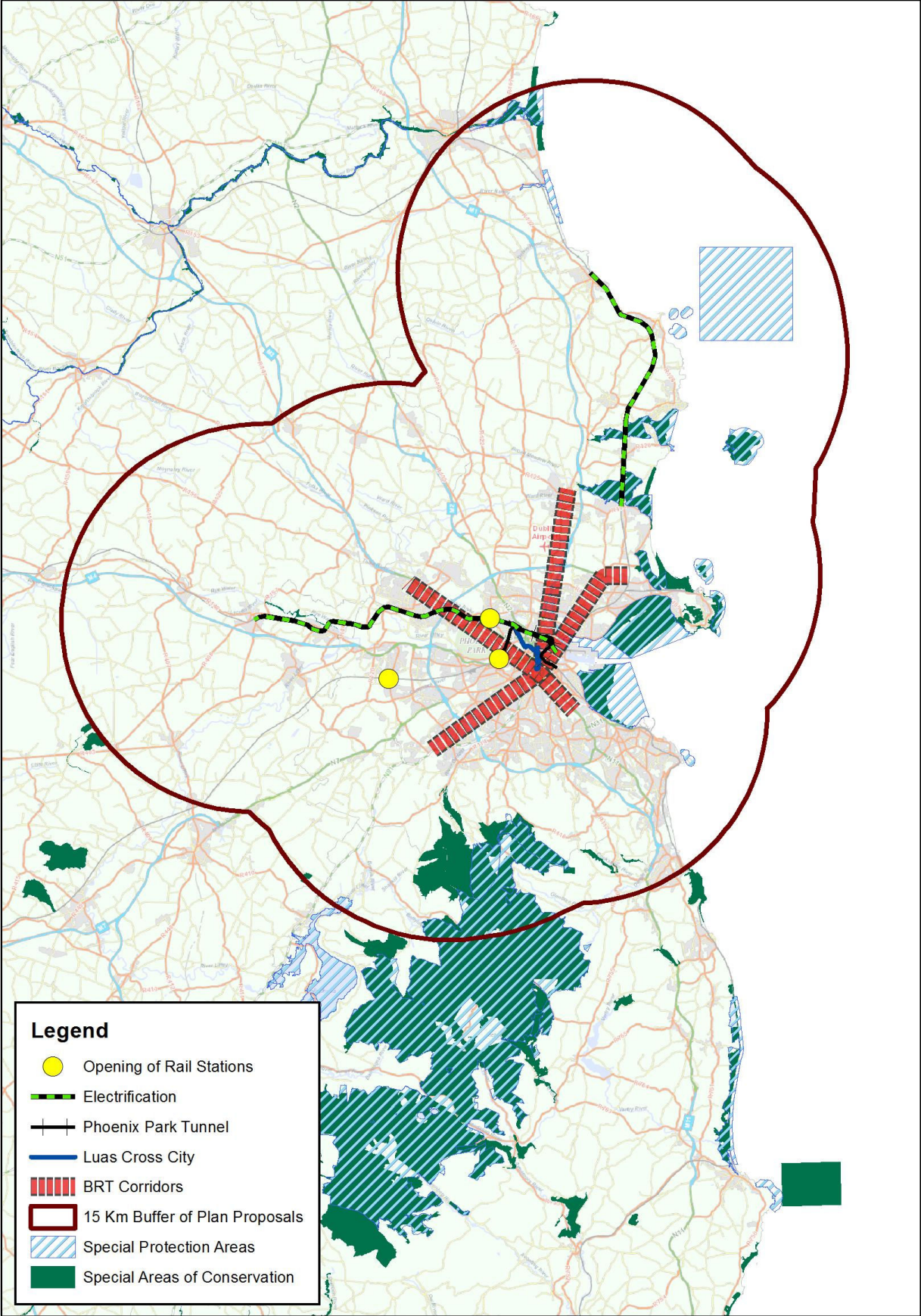
Table 3.2: SPAs Located Within 15km of any Plan Proposal

Site Code	Site Name	Annex I Species	Other Features	Non Annex I Species	Summary of Interest
4016	Baldoyle Bay	Golden Plover, Bar-tailed Godwit	Wintering Waterfowl and Waders	Brent Goose	Baldoyle Bay SPA is of high conservation importance, with an internationally important population of Brent Geese and nationally important populations of a further seven species, including two which are listed on Annex I of the E.U. Birds Directive. The inner estuarine section is a Statutory Nature Reserve and is also designated as a wetland of international importance under the Ramsar Convention
4025	Malahide Estuary	Golden Plover, Bar-tailed Godwit and Ruff	Wintering Waterfowl and Waders	Brent Goose	Broadmeadow/Swords Estuary SPA is a fine example of an estuarine system, providing both feeding and roosting areas for a range of wintering waterfowl. The lagoonal nature of the inner estuary is of particular value as it increases the diversity of birds which occur. The site is of high conservation importance, with an internationally important population of Brent Goose and nationally important populations of a further 12 species.
4113	Howth Head Coast	Peregrine	Breeding Sea Birds		This site is of high ornithological importance, with four seabird species having populations of national importance. It is also a traditional nesting site for Peregrine Falcon.
4117	Irelands Eye	Peregrine	Breeding Sea Birds and other breeding birds		This relatively small island is of high ornithological importance, with seven seabird species having populations of national importance. The regular presence of a breeding pair of Peregrine Falcon is also of note.
4069	Lambay Island	Peregrine	Breeding Sea Birds	Greylag Goose	Lambay is an internationally important seabird colony and one of the top seabird sites in Ireland. Four species have populations of international importance and a further five have populations of national importance. In addition to the seabirds, it also supports a nationally important population of Greylag Goose. The site is also of conservation for the population of Grey Seal, a species that is listed on Annex II of the E.U. Habitats Directive.

4006	North Bull Island	Golden Plover, Bar-tailed Godwit, Ruff, Short-eared owl	Wintering Waterfowl and Waders	Brent Goose, Black tailed Godwit	The North Bull Island SPA is an excellent example of an estuarine complex and is one of the top sites in Ireland for wintering waterfowl. It is of international importance on account of both the total number of waterfowl and the individual populations of Light-bellied Brent Goose, Black tailed Godwit and Bar-tailed Godwit that use it.
4063	Poula-phouca Reservoir	Whooper Swan	Wintering Waterfowl and Waders	Greylag Goose	The principal interest of the site is the Greylag Goose population, which is of international importance. A range of other wildfowl species also occurs, including Whooper Swan, a species that is listed on Annex I of the E.U. Birds Directive. The site is also notable as a winter roost for gulls, especially Lesser Black-backed Gull
04158	River Nanny Estuary and Shore	Golden Plover and Bar-tailed Godwit	Wintering Waterfowl and Waders		This site is of ornithological importance as it supports five species of wintering waterbirds in numbers of national significance. Two species using the site, Golden Plover and Bar-tailed Godwit, are listed on Annex I of the E.U. Birds Directive
4015	Rogerstown Estuary	Golden Plover, Ruff	Wintering Waterfowl and Waders	Brent Goose	Rogerstown Estuary is an important link in the chain of estuaries on the east coast. It supports an internationally important population of Brent Goose and a further 14 species in numbers of national importance.
4122	Skerries Islands	Short-eared Owl, Golden Plover	Wintering Waterfowl and Waders	Brent Goose	The Skerries Islands SPA is of high ornithological importance for both breeding seabirds and wintering waterfowl, with six species having populations of National Importance. In addition there is an internationally important population of Brent Goose. Golden Plover and Short-eared Owl, EU Birds Directive Annex I species, occur regularly in winter.
4024	South Dublin Bay and River Tolka Estuary	Roseate Tern, Common Tern, Arctic Tern, Little Tern, Bar-tailed Godwit and Mediterranean Gull	Wintering Waterfowl and Waders		This SPA supports a range of wintering wildfowl and waders and is of importance as a post-breeding season roost for terns and gulls.
4040	Wicklow Mountains	Merlin and Peregrine		Ring Ouzel, Red Goose	This site is of high ornithological importance as it supports very good examples of upland and woodland bird communities. Several of the species which occur are very rare at a national level. Two species, Ring Ouzel and Red Grouse, are Red-listed and their status is of high conservation concern. Also of note is that Merlin and Peregrine are both listed on Annex I of the E.U. Birds Directive.
4127	Wicklow Head	Peregrine			The site also supports a pair of breeding Peregrines, a species listed on Annex I of the EU Birds Directive. Ravens nest annually on the cliffs, and the heath supports such species as Stonechat, Whitethroat and Linnet.

The map overleaf shows the infrastructural proposals of the Integrated Implementation Plan and the Natura 2000 sites:

Figure 3.1 – The NTA Integrated Implementation Plan and Natura 2000 sites



4. ELEMENTS OF THE PLAN LIKELY TO AFFECT NATURA 2000 SITES

The Plan will provide a framework for the development of transport infrastructure, transport services and associated policies within the Greater Dublin Area for the period to 2018. The exact location and the nature of the infrastructure will be specified to the fullest extent possible where it is known and in other cases approximate alignments based on the information available will be provided.

It is possible that some of the transport projects proposed in the plan, particularly those involving the construction of new infrastructure, have potential to result in both direct impacts on Natura 2000 sites in terms of 'land-take' within the site boundary; or indirect impacts that may result from changes to hydrology or water quality, increased levels of human disturbance, and a range of other possible impacts.

Recognising the link between transport and land use, the Plan is also likely to be taken into consideration in the making of decisions on Development Plans, Local Area Plans and land use planning applications thereby influencing the nature, size and location of future land use development resulting in potential indirect negative impacts to Natura 2000 sites. Should such impacts be identified at future stages of this HDA, this may result in a reconsideration of the screening conclusion relating to some Natura 2000 sites.

It must be borne in mind that Luas Cross City has been granted planning permission and construction has commenced. As such, this project has already been subject to environmental assessment and this HDA will not revisit the findings and planning outcomes from this scheme but the potential regional-level environmental impacts will be taken into account in both the HDA and SEA as intrinsic parts of the plan.

In other cases, particularly the cycling and walking programme, the detail of the infrastructure proposed is not yet known. This programme is developed on a year-by-year basis depending on operational, administrative and financial factors, but will be based on the emerging GDA Cycle Network Plan. The Integrated Implementation Plan itself does not identify particular schemes in this regard, merely the fact that a programme will be implemented and that a particular budget is available over the period of this plan. The environmental impact and the Appropriate Assessment of these schemes will be undertaken as part of County and City Development Plans, Local Area Plans and the National Transport Authority's Greater Dublin Area Cycle Network Plan. Each project will also be subject to project-level Appropriate Assessment and environmental assessment either as part of a planning application or a Part 8 application.

In keeping with best practice, however, the likely potential impacts of the cycling programme should be noted within the scope of this plan. The proposed cycle network plan consists of an "Urban

Network”, an “Inter-urban Network” and a “Green Route Network”. The latter will comprise the focus of the Appropriate Assessment for the Cycle Network Plan.

These Greenway routes make up a combination of existing and proposed routes that are largely off road providing amenities as well as routes to be used for commuting and other purposes. Greenways are generally located in scenic areas, along coastal paths or riverine environments and due to the nature and location of these sites are most likely to come in contact with sites of conservation interest, often within or adjoining Natura 2000 Sites.

Many of the proposed greenways are made up of existing amenity areas but will require upgrading, ranging from minor works to the provision of new pedestrian and cycle facilities. Other Greenways may be new routes and will provide an amenity that did not exist prior to the cycleway. There is potential for greenways to have direct impacts on Natura 2000 sites though construction of pathways within or in proximity to the site or indirectly by providing a new or improved access to sites that are sometimes highly sensitive to disturbance and visitor pressures. The details of the proposed network are fully dealt with in the Appropriate Assessment of the GDA Cycle Network Plan, which is ongoing at the time of writing, however any potential effects of the Implementation Plan in-combination with the GDA Cycle Network have been examined here.

In essence, the projects on which this HDA will focus will be those proposing new infrastructure and those for which details are available, such as potential alignments. As such, Luas Cross City, the proposed BRT lines, the potential electrification of the Northern and Maynooth Rail lines, the reuse of the Phoenix Park Tunnel and the development related to the opening of new stations will comprise the plan for the purposes of this screening exercise.

The possible impacts that might arise from the draft plan have been examined in the context of a number of factors that could potentially affect the integrity of the Natura 2000 sites. Those sites for which potential effects and impacts have been identified will be taken forward to Stage 2 Appropriate Assessment. Those for which no potential impacts are anticipated as a result of actions prescribed by the Plan do not require Stage 2 Appropriate Assessment and are ‘screened-out’ at this stage of the assessment.

4.1 Direct Impacts

This part of the HDA was concerned with identifying those locations where there is a direct spatial overlap and therefore a likelihood of direct impacts on the Natura 2000 site. The nature and significance of direct impacts on Natura 2000 sites vary from site to site and according to the development that is proposed. Examples include the following:-

- Habitat loss or destruction.
- Disturbance of habitats and birds, etc.
- Altered abiotic/site factors (e.g., through soil removal, compaction or erosion); and
- Habitat fragmentation (selective habitat removal and/or introduction of barriers like roads).

The electrification of the Northern rail line has been identified as having a potentially significant impact on birds in Malahide and Rogerstown Estuaries. This is due to the construction of overhead electrical cables and supporting infrastructure such as gantries above the level of the existing rail line and the potential disturbance that may arise.

4.2 Indirect Impacts

This Section presents details of the Natura 2000 sites where it is considered that there is a likelihood of indirect impacts occurring as a result of the proposals of the Strategy. This has been determined by examination of a number of factors including the spatial distance of the Natura 2000 site from a proposal; the sensitivity of the qualifying features of the site to various perturbations and the physical requirements of the site, particularly in terms of hydrology and water quality, and the potential for disturbance to fauna, which are amongst the most frequent pathways by which indirect impacts occur. Some examples of the consequences of typical indirect impacts are as follows:-

- Altered species composition due to changes in abiotic conditions.
- Altered species or habitat composition due to increased edge effects (a consequence of habitat fragmentation, for example).
- Reduced breeding success (e.g., due to disturbance, habitat loss, fragmentation, pollution) possibly resulting in reduced population viability.
- Air quality and climate change and impacts from greenhouse gas emissions reduction/increase.
- Run off of pollutants during construction and operational phase of development resulting in impacts to surface water and groundwater and the species they support.

The Authority does not foresee any indirect impacts arising out of the Integrated Implementation Plan which are of significance. In some areas, such as Malahide and Rogerstown Estuaries, Rye Water Valley/Cartron and South Dublin Bay, increased numbers of train services may lead to more trains passing through some Natura 2000 sites. This would comprise the increased use of existing built infrastructure and may have a small, negligible impact on the conservation objectives of those sites due to very minor increases in disturbance and some increased pollution from the passing of additional Diesel Multiple Units (DMUs). The Authority regards such impacts as insignificant and is therefore satisfied that the Integrated Implementation Plan will have no significant indirect impacts on the Natura 2000 network.

Associated with these additional rail services, It is anticipated that they will result in a shift away from the use of the private car for trips to work, education and other purposes. This will reduce emissions from transport and lead to enhanced air quality etc. lessening the harmful effects of transport on species and habitats that form part of the Natura 2000 network in the plan area.

4.3 In-Combination Impacts

The Integrated Implementation Plan, by proposing to enhance public transport services through construction of a BRT network and the improvements to services elsewhere, may, in combination with the Development Plans and Local Area Plans of the local authorities in the plan area, impact on the Natura 2000 network.

On examination of the proposed infrastructure, the designated sites, as well as the policies of the local authorities, three locations emerge where possible In-Combination impacts may arise as a result of the plan, at the following locations:

- Baldoyle Bay SAC and SPA;
- Rogerstown Estuary SAC and SPA
- Malahide Estuary SAC and SPA.

In relation to Baldoyle, this impact could potentially arise as a result of the construction of a Bus Rapid Transit to the new development area around Clongriffin and the associated development of this suburb. The protection of these two designated sites is also a matter for the local authority and in this regard the Draft Local Area Plan for this area – Baldoyle-Stapolin –contains the following objectives:

- Objective GI 8 Maintain or restore the favourable conservation condition of Annex 1 habitat(s) and/or the Annex II species for which the Baldoyle cSAC has been selected:
 - [1140] Mudflats and sandflats not covered by seawater at low tide
 - [1310] *Salicornia* and other annuals colonizing mud and sand
 - [1330] Atlantic salt meadows (*Glauco-Puccinellietalia maritimae*)
 - [1410] Mediterranean salt meadows (*Juncetalia maritimi*)
- Objective GI 9 Maintain qualifying interest habitats and species within the Baldoyle Bay SPA and SAC at favourable conservation condition to ensure the ecological integrity of Baldoyle Bay and further ensure that the LAP lands continue to provide supporting function for the Qualifying Interest species.
- Objective GI 10 Ensure that sufficient information is provided as part of development, plan or project proposals to enable Appropriate Assessment screening to be undertaken and to enable a fully informed assessment of impacts on biodiversity to be made.

The Authority is therefore satisfied that no significant In-Combination effects will arise at Baldoyle Bay as a result of the Implementation Plan.

In relation to Rogerstown and Malahide, potential in-combination effects have been identified as a result of the implementation of the Fingal Development plan which provides for a new marina at Rogerstown and a cycleway/walkway across both estuaries, the GDA Cycle Network Plan which similarly may seek to provide for a greenway here and the Draft Transport Strategy's long-term goal of providing additional tracks at these locations. These potential in-combination impacts have been taken forward to Stage 2 Appropriate Assessment.

5. SCREENING CONCLUSIONS

The Authority has screened the Integrated Implementation Plan in accordance with the Habitats Directive and associated national guidance. This process has established that there is potential for significant effects arising out of the plan or in-combination with the implementation of other plans in the area. As such, a Stage 2 Appropriate Assessment is required.