22. Future Development Plans

22.1 Introduction

22.1.1 The growth of Dublin Airport is mandated by government policy, as well as national, regional and local planning policy, as set out in *Chapter 6: Planning & Development Context*. The proposed Relevant Action seeks to amend and replace planning conditions associated with the operation of the runway system and does not seek to lift the 32 mppa Cap on the number of passengers passing through the airport terminals. Nevertheless, if consented, the proposed Relevant Action will influence the way the runway system operates into the future, and this, in turn, will become the framework in which future applications associated with expansion of Dublin Airport will fall to be assessed.

22.1.2 Accordingly, in circumstances where there is a long-term policy to expand Dublin Airport as a whole, it is considered appropriate that the competent authority assessing the proposed Relevant Action would have an overview of those longer term plans, so that the proposed Relevant Action can be viewed and assessed in that wider context, with account being taken of planned future development at Dublin Airport as appropriate and as far as practically possible at this stage.

22.1.3 There are development proposals currently being prepared which will seek planning permission for future airport growth to 40 mppa. These will include proposals for airport infrastructure required to accommodate this growth. These future development proposals will require a grant of planning permission in order to be realised, which in itself will entail planning and environmental impact assessment. The proposed Relevant Action is a standalone proposal and is not reliant on future airport growth in order to be realised.

22.1.4 Equally, future airport growth can occur (subject to planning being granted) in the absence of the proposed Relevant Action. Notwithstanding the independence of the proposed Relevant Action, an awareness of future airport plans is relevant in considering the proposed Relevant Action given the potential for interaction in the future. In this respect, this chapter is intended to give an overview of future development plans so that, consistent with the purpose of the EIA Directive and case law, account be taken of those future plans in the context of the assessment of the environmental effects of the proposed Relevant Action.

22.1.5 The future development plans discussed in this chapter do not form part of the proposed Relevant Action, nor is this chapter intended to undertake an EIA of these future development plans. Such an EIA is neither possible nor required at this stage; the environmental implications of such future projects will be fully assessed in future when consent is sought for them; they will be the subject of planning application(s) with any relevant supporting environmental information.

22.1.6 Since this chapter was originally written in 2021, the Infrastructure Application (IA) which will seek planning permission for future airport growth to 40 mppa has evolved and the infrastructure designs have been advanced in preparation for a planning application in Q4 of 2023. Whilst the EIAR for the IA is still work in progress, it is now possible to provide more certainty around the likely impact of this and other future development plans which have also progressed in the last two years. This chapter has been updated to reflect the more detailed information now available.

22.2 Methodology

22.2.1 The Current State of the Environment has been discussed in preceding chapters. Desk studies and surveys have informed the understanding of current environmental conditions and, insofar as possible, this has been projected forward in those chapters to determine the Future Receiving Environment.

22.2.2 The general approach to the assessment in this chapter is to describe the Future Receiving Environment as it appears from the vantage point of 2023. The Applicant's own planned development is then described, setting out the main aspirations for Dublin Airport and what these would entail.

22.2.3 This chapter only considers expansion of Dublin Airport to 40mppa. While 'DA' Dublin Airport zoned land (as provided for in the Fingal Development Plan 2023, Map Sheet 11) could potentially cater for airport expansion beyond 40mppa to 55mppa, this degree of future growth is not provided for in

government policy and has not been the subject of forward planning policies with appropriate public consultation and environmental review. Further, there is no certainty as to what a 55mppa airport would comprise, with only high-level exercises undertaken to ensure the ability to grow in future is not compromised by infrastructure delivered in the short and medium term. Lastly, given the considerable timeframe required to grow the airport to 55mppa, it is neither practically possible nor feasible to forecast the Future Receiving Environment with any degree of accuracy whatsoever. Therefore, the scope of this chapter has been confined to what is reasonable and practical with the information currently available.

22.3 Future Receiving Environment

22.3.1 The Future Receiving Environment will be shaped by several key drivers. Firstly, population growth: population in the Dublin area is projected to rise significantly over the period addressed in this chapter. Secondly, climate change and the response to it, both in terms of emissions and adaptation, with ambitious plans to reduce emissions. Thirdly, technology is likely to affect society and the environment in ways which are difficult to predict but may be profound.

22.3.2 The Future Receiving Environment in 2025 is likely to be broadly similar to the Current State of the Environment discussed elsewhere in the EIAR. The North Runway will be operational in the Permitted Scenario, with restrictions on night-time flights as outlined in *Chapter 1: Introduction*. Passenger forecasts suggest that the airport will have a passenger throughput of 31.8 mppa in the Permitted Scenario[1] and will have reached the 32 mppa Cap in the Proposed Scenario.

22.3.3 By 2030 it is probable that there will have been some important changes in the Future Receiving Environment should the future development plans be consented and implemented. As in 2025, the airport is assumed to be operating at the 32mppa level in both the Permitted and Proposed Scenarios, however the external environment will likely have evolved.

22.3.4 There will likely be a substantial increase in population in the Dublin area. The Metropolitan Area Strategic Plan (MASP) of the Regional Spatial and Economic Strategy[2] for the Eastern and Midland Region envisages a population of 1.65 million in the metropolitan area by 2031, an increase of 250,000 people or 18% from 2016. Strategic development along key transport such as the DART (Clongriffin, Baldoyle) and the proposed Metrolink will see increased populations in these parts of Dublin City and Fingal.

22.3.5 According to the MASP, the proposed Metrolink to Lissenhall via Dublin Airport and Swords was to be delivered by 2027, however it is understood that the opening date will not commence until 2034[3]. BusConnects is expected to be operational by 2027 and so will be in place in 2030.

22.3.6 The Environmental Protection Agency's (EPA's) Greenhouse Gas Emissions Projections Report 2021-2040[4] forecasts that Carbon dioxide emissions from Agriculture, Transport and Energy Industries, which are key sectors with the largest share of emissions, are projected to decrease by 20.3%, 28% and 48.9% respectively over the period 2020 to 2030, according to the most optimistic of the EPA's projections. However, the implementation of additional measures is required to achieve this reduction. For example, 'With Additional Measures', transport emissions are projected to decrease to 7.4 Mt CO_2 eq. 'With Existing Measures', transport emissions are projected to increase from 10.3 to 10.4 Mt CO_2 eq. Ireland will need to reduce its non-ETS sector greenhouse gas emissions consistent with a 30% reduction by 2030, relative to 2005 levels, in order to reach the statutory target for 2030.

22.3.7 In 2035 it is assumed that the airport will still be operating at the 32mppa cap on the number of passengers passing through the airport. Projected population for the year 2035 for Dublin (county) is estimated at being approximately 1.70 million, which is a 26% increase on the 2016 Census population data.

[1] In the Permitted Scenario, the 32mppa Cap is reached in 2026.
[2] Eastern and Midland Regional Assembly RSES EMRA_RSES_1.4.5web.pdf
[3] Examination of the 2019 and 2020 Appropriation Accounts for Vote 31 – Transport, the 2020 Financial Statements for the National Transport Authority, and the 2020 Financial Statements for Transport Infrastructure Ireland, Committee of Public Accounts, July 2023,
[4] Environmental Protection Agency, Ireland's Greenhouse Gas Emissions Projections 2019-2040 EPA-Ireland's-GHG-Projections-Report-2021-2040v4.pdf

22.3.8 Identifying how the Future Receiving Environment may evolve becomes more difficult after 2030 because development planning horizons do not extend this far and thus there are no programmes or strategies to guide development and inform this summary.

22.3.9 Projected population for the year 2035 for Dublin metropolitan area is estimated at being approximately 1.83 million, an increase of 30% on the 2016 Census population for Dublin, and a 7.6% increase on the 2031 estimate.

22.4 Future Development Overview

Context

22.4.1 There are a number of emerging documents and studies being prepared by the Applicant, which will shape the future development of Dublin Airport. Some of these are in the public domain already, but those which are not are appended to this EIAR where available. These are discussed in this section.

Capital Investment Programme 2020+

22.4.2 Since 2011, Dublin Airport has been a regulated entity, required periodically to submit its proposals for capital investment to the Commission for Aviation Regulation (CAR). In February 2019, the plans for investment to commence the next stage of Dublin Airport's development were submitted to CAR as the Capital Investment Programme (CIP 2020+)[5], with the objective of transforming the airport into a major European airport, welcoming 40 mppa. Following a Dublin Airport led consultation, CAR made a determination for the next price control period, which was published in October 2019. This determination is used as the basis for the identification of future infrastructure investment at the airport, although the timescales for growth set out in the CIP have clearly been impacted by the Covid-19 pandemic.

Drainage Master Plan

22.4.3 In 2018, the Applicant embarked on the Dublin Airport Drainage Masterplan (DMP) as part of its Sustainability Strategy. The DMP is a holistic long-term masterplan for drainage infrastructure at Dublin Airport. It is intended to examine existing and future drainage infrastructure requirements and develop a long-term phased and coherent approach to improvements in drainage infrastructure, including a long-term development horizon.

22.4.4 The overarching objectives of the DMP are:

1. Establish a detailed understanding of the existing airport drainage system, its effect on the surrounding environment and the legislative requirements Dublin Airport must comply with in this context.

2. Monitor and assess the existing drainage network and receiving watercourses on an ongoing basis to enable improvements in systems and practices and ensure compliance.

3. Provide drainage design guidelines and policies for Dublin Airport to ensure consistency of approach to both the development and operation of infrastructure across Dublin Airport, in line with the Applicant's Sustainability Policy.

4. Provide a holistic long-term drainage infrastructure investment plan to guide future development consistent with planning and environmental requirements, which, through a series of incremental improvements phased to align with the Applicant's cyclical funding structure, will deliver the flexibility, resilience and responsiveness required to enhance capacity of the airport's surface water management system and respond appropriately to extreme weather events.

5. Through stakeholder engagement, ensure the DMP is aligned with national, regional and local legislation, development plans and policies.

22.4.5 Work on the DMP was completed in July 2022.

[5] https://www.dublinairport.com/corporate/airport-development/cip-2020

Drainage Management Plan

22.4.6 As part of the DMP, the Applicant has prepared a Drainage Management Plan (DMaP) for Dublin Airport. The DMaP is a best-practice model that involves an inter-agency Technical Working Group setting objectives and targets and monitoring water quality trends on an ongoing basis. The framework proposed in the DMaP represents the Applicant's commitment, through a series of incremental actions in implementing the DMP, to making a positive contribution to achieving the objectives of the Water Framework Directive for each catchment surrounding the airport. A copy of the Draft DMaP document was previously provided to officials of Fingal County Council's Water Pollution Section and the Department of Environment, Climate Action and Water Services in March 2021, and to officers of FCC's Planning Department in June 2021. As part of consultation programme, it has been circulated (July 2021) to other key stakeholders including Inland Fisheries Ireland (IFI), Local Authority Waters Programme (LAWPRO), and the EPA.

Carbon Reduction Strategy

22.4.7 In 2022, the Applicant prepared a Carbon Reduction Strategy (CRS) for Dublin Airport[6] with a view to setting a roadmap to reach a long-term Net Zero Carbon goal. It proposes reducing absolute Scope 1+2 emissions by 51% below a 2019 baseline by 2030, aligned with the government's 2021 Climate Action Plan target to reduce Greenhouse Gas emissions by 51%.

22.4.8 The CRS identifies a range of carbon reduction actions, including integration of energy efficiency measures, use of 100% renewable electricity, electrification of Dublin Airport vehicle fleets, fuel-switching and electrification of onsite thermal energy plant, and circular economy practices.

Reasonably Foreseeable Future Development Plans

22.4.9 In addition to a rolling programme of infrastructure rehabilitation, maintenance and upgrades of existing facilities, much of which is outlined in the CIP 2020+, there are the following reasonably foreseeable major projects planned at Dublin Airport.

Drainage Master Plan

22.4.10 Post-2030, further applications for DMP development would include:

- Additional pollution control infrastructure;
- Additional hydraulic capacity; and
- Further clean surface water attenuation.

Infrastructure Application

22.4.11 The IA consists of a number of project elements comprising infrastructure of varying size and complexity.

North Apron

22.4.12 Pier 1 in the North of the airport principally serves airlines providing access to Europe. Since its development in 2007, demand for this Pier has grown significantly. It is now proposed to expand the pier and associated apron eastwards to accommodate an additional six aircraft stands.

South Apron

22.4.13 The existing South Apron serves Terminal 2, a hub for long-haul and US Customs & Border Protection (CBP) pre-cleared passengers. This area will be expanded to include a new pier (Pier 5) which it is proposed will facilitate four wide body aircraft, a relocated preboarding zone and aircraft parking areas, taxiways and apron space. It is also proposed include development of additional screening lanes within an extended US CBP building.

Terminals

[6] https://www.dublinairport.com/corporate/corporate-social-responsibility/sustainability

22.4.14 The existing security area within Terminal 1 is proposed to be re-located to an enlarged T1 mezzanine area facilitating the provision of increased security screening capacity. This enlarged mezzanine will be achieved through the extension of the existing mezzanine to the full width of the terminal. Moving security to the mezzanine moves security from its current location creating space for an expansion of the Terminal 1 check-in area and passenger services including additional ancillary services such as food, beverage, and commercial offerings.

Airfield

22.4.15 As demand continues to grow there is limited opportunity for development of additional stand capacity around the existing piers and terminals on the Eastern Campus. To meet this demand new stands are proposed on the western side of the airport with associated roads, pavements and ancillary services. No piers or terminal buildings are proposed for this area. These stands will fill an existing gap in the provision of contingency and overnight stands for aircraft parking. Further it will free up space to consolidate passenger operations on the Eastern Campus around our current terminals and piers.

22.4.16 The proposed vehicle Underpass of the Crosswind Runway (16/34) is a critical project for safe and efficient operation of the airfield. The Underpass is required to facilitate ongoing safe and reliable vehicle access between the remote West Aprons and the Eastern Campus. It will allow aircraft handlers and fuel transport to continue to service aircraft operations on the West Apron safely and efficiently. It will also allow support vehicles to access the proposed Apron 7. The Underpass is proposed and will be assessed in the IA because of the functional links with proposed Apron 7 and because it is unlikely that the separate application for the Underpass, which is currently before An Bord Pleanála (and which application is referenced in Appendix 1B: Interactions and Cumulative Assessment Addendum of this EIAR Supplement), will have been granted planning permission by the time the IA application is made.

22.4.17 Comprehensive drainage infrastructure is required to ensure robust environmental protection and to enhance existing management of surface water and wastewater across the airfield. This investment represents a major commitment by Dublin Airport to environmental protection and sustainable growth.

Landside

22.4.18 The Ground Transportation Centre (GTC) is the main public transport area within Dublin Airport, located to the rear of the Terminal 1 multi-story carpark, and inclusive of the future Metrolink station. In line with Climate Action Plan and the Greater Dublin Area Transport Strategy the airport is working to support a shift from car use to public transport among both passengers and staff. It is proposed to improve passengers travel experience by providing improved and safer access to public transportation. The majority of customer facing busing facilities at the airport will be consolidated into a single location in the GTC and in as much as possible separate bus, general traffic, and pedestrian movements, to provide priority access to bus stop facilities. More bay capacity for buses will be provided to support the growth of public transport.

22.4.19 With an increase in passenger volume, demand for access and parking at the airport will also increase. Dublin Airport recognises that there will continue to be a need for certain user groups of Dublin Airport to access the airport by car, particularly in the transition period as increased levels of public transport are rolled out. This need will be accommodated through additional parking spaces at Terminal 2 multi-storey car park, (some of which is replacement of existing parking capacity displaced by MetroLink construction).

22.4.20 A new long-term parking facility is proposed at the south-eastern end of the Eastlands area adjacent to the M1. This aims to increase the overall long-term parking capacity by 2,000 spaces. It is envisaged that these spaces would be used flexibly to meet the differing seasonal needs of both long-term car parking and car hire storage. These spaces will be temporary pending the delivery of MetroLink.

22.4.21 As Dublin Airport has developed, staff parking has been lost to new developments. This displacement will continue as the airport continues to develop the campus. Dublin Airport, working with FCC and the NTA, fully promotes public transport and active travel measures for all staff. It is proposed to relocate the displaced car parking away from the centre of the airport making public transport serving the centre of the campus potentially a more attractive and convenient option than shuttling from a remote location. Staff parking will be proposed to the south of the airport (c. 950 spaces under a separate planning application) and to the north of the airport (c. 700 spaces within the IA).

22.4.22 Importantly, the IA would also seek permission to raise the annual passenger cap, currently 32mppa, to 40mppa. However, the IA does not seek to change the runway operations protocols agreed with the IAA.

22.4.23 The principal operational environmental impact of the IA is likely to be the increase in air and ground traffic movements from Dublin Airport, with associated aircraft / ground noise and greenhouse gas emissions. During construction, there will be construction wastes generated and this would involve additional HGV traffic on the major roads around the airport. It is unclear whether this would lead to significant but temporary air or noise effects in the vicinity of the airport during the construction period but mitigation of any such impacts is a key focus for the environmental assessment work currently being undertaken for the IA.

Other Projects

22.4.24 Other 'business as usual' projects are planned by the Applicant to ensure that Dublin Airport remains a safe and efficient airport. These include many projects set out in the CIP 2020+, concerning maintenance of runways and taxiways, ongoing upgrade and replacement of aging infrastructure in the airfield, the terminals, and other parts of the airport.

22.5 Assessment of Future Development Plans

Infrastructure Application

22.5.1 The Applicant intends to seek permission for construction of the IA and hopes (if permission is granted) to have completed construction of the IA, providing the infrastructure necessary to allow the airport to operate at 40mppa whilst maintaining service levels, by 2030.

22.5.2 An EIAR discussing the likely significant environmental effects of an airport operating at 40mppa, including any interactions with the proposed Relevant Action, and appropriate mitigation, will be submitted with the application for permission when a planning application for the IA is made to FCC (currently planned for Q4 2023). Table 22-1 summarises the emerging assessment of impacts and how this might inform the environmental effects assessed in this EIAR.

Other Projects

22.5.3 It is unlikely that any of the 'business as usual' projects will lead to significant environmental effects, although they may generate noise and some traffic on the surrounding roads during construction. However, as these projects are 'business as usual', it is reasonable to conclude that the effects arising from their construction would not differ markedly from those arising from similar ongoing upgrade and maintenance projects being undertaken at present. In other words, their effects on noise and traffic are already part of the Current State of the Environment.

22.5.4 Table 22-2 lists these projects and gives a brief description of what they comprise, highlighting any potential environmental effects beyond those discussed below in the comments section

Table 22-1 Potential Environmental Effects of the Infrastructure Application

Environmental Factor	Potential Demolition Effect	Potential Construction Effect	Potential Operational Effect	Comments
Population and Human Health	Unlikely to be significant	Likely to be beneficial employment effects	Not yet known	There is the potential for the future airport developments including the IA to have beneficial effects from airport operations, construction and supply chain jobs created due to increased spending in the local area by employees. There is also potential for loss of amenity associated with traffic, noise, dust and vibration during construction, however this would be minimised through the introduction of construction environmental management and construction traffic management measures. Effects upon the actual and perceived physical and mental health and well-being of local residents are possible, owing to additional air traffic movements associated with an increase to 40mppa. This is not easy to quantify at this stage; although the number of passengers passing through the airport would be 25% higher than in 2018 this would not necessarily translate into 25% more flights, and aircraft in future are likely to be quieter than at present. Noise impact predictions for the proposed Relevant Action show that in general the overall noise exposure numbers reduce in 2035 compared to 2025 due to this modernisation effect.
Traffic and Transport	Unlikely to be significant	Likely to be adverse effects from construction traffic	Unlikely to be significant	Traffic around the airport is likely to increase as a result of construction traffic and operation of a 40mppa airport, however the intention, agreed with stakeholders, is to reduce the impact through the introduction of more sustainable transport options such as BusConnects and Metrolink and implementation of the campus Mobility Management Plan. A traffic impact assessment is being undertaken to determine the effect and will be included in the documents submitted with the Infrastructure Application.
Major Accidents and Disasters	Probably none	Probably none	Not yet known	A modelling exercise has been undertaken to determine the effect of changes to the number of operational air traffic movements.
Air Quality	Unlikely to be significant	Unlikely to be significant	Unlikely to be significant	There is potential for increase in public exposure to short-term concentrations of small particles and pollutants most commonly associated with road traffic emissions during construction. Dust from vehicle track-out may also occur. Construction impacts would be managed by a CEMP. There is potential for increase in public exposure to pollutants most commonly associated with combustion during operation of the IA, but the likelihood is that there would be little change in assessed air quality if the airport was operating at 40mppa. However, the data to undertake the modelling is not currently available. An air quality model will be prepared for the IA in due course.
Noise	Unlikely to be significant	Unlikely to be significant	Not yet known	Noise from the airport operating at 40mppa would be expected to increase given the growth in air traffic movements and changes in aircraft movements on the ground, taxiing and engine testing. Overall noise effects are likely to reduce over time as the fleet is modernised and remain within the quota count defined by Aircraft Noise Competent Authority (ANCA) in their Regulatory Decision (or an Bord Pleanála on appeal). There is likely to be a point between 2025 and 2034 where aviation noise would reach a peak (within the quota count) owing to the increase in ATMs towards 40mppa; however fleet modernisation will offset this impact and will eventually reverse the trend. The exact year where this will occur is not yet known.
Climate and Carbon	Not yet known	Not yet known	Not yet known	Scope 1+2 carbon emissions from the airport operating at 40mppa would tend to increase, however this would be offset by measures in the Applicant's CRS and incorporated in the IA. The exact balance between these effects is not clear at present but could be expected to represent an improvement overall in the medium term, in line with the CRS and government policy.
Landscape and Visual	Unlikely to be significant	Unlikely to be significant	Unlikely to be significant	Unlikely that there would be significant landscape or visual effects as development would be primarily confined to the airport campus.

Environmental Factor	Potential Demolition Effect	Potential Construction Effect	Potential Operational Effect	Comments
Cultural Heritage	Not significant	Not significant	Not significant	There is potential for physical and setting impacts on known cultural heritage assets, and possible physical impacts on unknown archaeological assets. However, the assessment carried out for the EIAR states that these would not be significant. Archaeological testing will be carried out at the pre-construction phase in all Project Elements assessed to have potential to impact previously unrecorded archaeological assets. These Project Elements are identified as PE1 Apron 7, PE7a South Apron Expansion, PE8 Airfield Drainage Project, PE9b Staff Car Park North, PE10 Long Term Car Park (Red) and PE11 Construction Compounds. The detail and scope of all archaeological works will be agreed with the National Monuments Service (NMS).
Land and Soils	Not significant	Not significant	Not significant	There is potential for the mobilisation of contaminants via numerous pathways to subsurface during construction, but such impacts are capable of mitigation through the application of a CEMP. Also potential for loss of soil cover, soil erosion and compaction during construction, but again this can be mitigated through application of a CEMP.
Biodiversity, Flora and Fauna	Not significant	Not significant	Not significant	Some loss of hedgerows and trees habitat will occur, but habitat compensation will be provided to offset this and provide net gain. There is potential for increased disturbance of wintering birds using functional land at the airport by increased noise / visual disturbance from increased aircraft flights and possible increase in bird strikes. Effects on European Sites are also possible with an increase in flights over such locations but based on work carried out for the proposed Relevant Action this seems unlikely. An Appropriate Assessment is being undertaken for the IA to confirm this.
Water	None	None	None	There is potential for the mobilisation of contaminants via numerous pathways to surface waters and groundwater during construction, but such impacts are likely to be capable of mitigation through the application of a CEMP.
Material Assets	Not significant	Not significant	Not significant	There is potential for additional waste to be generated in particular during demolition, but also construction and operation, as well as the use of materials during the construction process. Details to assess the extent of such impacts are not yet known but the construction and operational phase impact is unlikely to be significant.

Table 22-2 Other Projects

Project	Description	Comments
Apron Rehabilitation Programme	Annual apron rehabilitation programme that addresses aprons with a remaining life of between 1 & 5 years. The apron areas included in this category are primarily the South Apron, stands associated with Pier 2 & Pier 3, and Apron Taxiway 1 and Apron Taxiway 3 & Apron Taxiway 6.	none
Airfield Maintenance Base Improvement Programme	Upgrade facility to improve the efficiency scope also includes moving the potassium acetate tanks into a new purpose build bunded area that is not congested and allows for the larger delivery and distribution equipment.	none
Airport Water and Foul Sewer Upgrade	This project entails the replacement, upgrade and refurbishment of critical airport campus utility mains and foul water service. Installation of underground pipework to complete the mains water Ring Main. Installation of a reservoir mains bypass to allow mains direct feeding of the mains water Ring Main and installation of a mains water interconnection from the T2 domestic water storage to the T1 domestic water storage tanks to increase the T1 water storage capacity and replacement of end of life and defective sluice valves, fire hydrants and sections of underground water mains.	Likely to lead to an improvement in water efficiency at the airport however the effect is unlikely to be significant.

Project	Description	Comments
Hydrant enablement - Pier 2 & 3	The project proposes the installation of a fuel hydrant system to service aircraft parked on Pier 2 and Pier 3. This proposed Pier 2 & 3 fuel hydrant system consists of a network of underground piping that transports fuel from tanks in the fuel farm to aircraft while managing fuel intake.	Likely to marginally reduce the risk of accidents in fuel deliveries to aircraft. Unlikely to be significant as the current procedure is governed by strict safety protocols.
South Runway (R10R/28L) delethalisation programme	This project proposes to plan and execute the residual works of the South Runway (Runway 10/28) delethalisation programme.	none
Airfield Taxiway Rehabilitation Programme	Annual airfield taxiway rehabilitation programme and address taxiways with a remaining life of between 1 and 5 years. The main focus of this project will be Taxiway F1, Taxiway F-Outer, Taxiway B1, Taxiway E1 and Taxiway M2.	none
De-icing pad at South Runway (Runway 10R)	It is proposed to build a purpose-built de-icing facility as an enhancement to the previously approved PACE South Runway Line Up Points (LUP) project. This pad will allow the de-icing of a single code E or code C aircraft. The optimised layout of the pad allows for full circulation of de-icing trucks around the aircraft. The design includes a reserved area for de-icing trucks and ancillary equipment.	none
Airfield southern perimeter road upgrade programme	This project proposes to rehabilitate and upgrade the southern perimeter maintenance road. This will involve upgrade and partial widening of the perimeter & access roadways associated with the South Runway to make them suitable for their current use and the increased traffic on them (minor airfield security fence improvements are also captured as part of this project).	none
Advance visual docking guidance system (5G, Pier 1 & Pier 2) - CIP	This project entails the installation of Advanced Visual Docking Guidance System (A-VDGS) technology to aircraft parking stands on Apron 5H and stands 102-104.	none
AGL fibre optic communication network improvement programme	This project proposes to provide a ring configuration for the airfield fibre optic network (complete ring around South Runway). Scope includes pit and duct system, installation of fibre network and reconfiguring of fibre network.	none
Second Medium Voltage (MV) connection point	This project proposes that a second electrical supply point be provided at Dublin Airport to protect the entire airport campus from the risk of a single-point failure at the current electrical connection point at Dardistown Substation.	none
Critical taxiways	Several the airfield taxiways are in a relatively poor condition and will need to be rehabilitated within the next few years as part of ongoing maintenance.	none
South Apron taxiway widening	Widening of a portion of the South Runway (Runway 10/28) Taxiway.	none
Runway 10 Line-up Points (LUP)	Comprises an additional South Runway (Runway 10/28) line-up point, bypass taxiway and associated infrastructure.	none
Office consolidation and refurbishment	This project will fund the refurbishment of levels 4 and 5 located in Terminal 1. It will increase the capacity allowance for staff in that location by 100%, which will allow the Applicant to vacate staff from Cloghran House and Cargo 6 buildings.	none
Skybridge rehabilitation	Full structural survey and assessment of the current condition of the structural cables and floor joints, remedial works to all identified structural defects in suspension cables, replace/upgrade joints and replace Terrazzo flooring where defective.	none

Project	Description	Comments
Campus buildings critical maintenance	This project entails delivery of several essential improvement works to the structure and roofs of existing campus properties and supplementary safety works.	none
Airport roads critical maintenance - Phase 1 gate 11 corner	6km of pavement have been identified as having very low skid resistance which will need immediate re-surfacing. A further 3km of pavement require re-strengthening works.	none
Staff car parks critical maintenance	Essential improvement and rehabilitation and upgrade works to staff car park spine roads at Dublin Airport.	none
Public carpark critical maintenance	Essential upgrade and improvement works to public car park spine roads at Dublin Airport. Project will also implement structural and waterproofing improvement works required at both multi-storey carparks.	none
Electric charger network facilities	This project proposes to install publicly accessible electrical vehicle charging facilities. Works include: feasibility study, provision of underground ducting network and futureproofing, associated civil works and electric charger network facilities	Will have beneficial effects on carbon emissions but these will be negligible in the context of global emissions.
Small energy projects	This project proposes using new energy efficient and sustainable equipment and control systems for the purposes of improving energy consumption, reducing energy cost, reducing carbon emissions, improving air quality and reducing noise	Will have beneficial effects on carbon emissions but these will be negligible in the context of global emissions.
Terminal 1 kerbs	This project proposes to build the following components as a first phase to developing the Ground Transportation Centre to become the new gateway to the airport: Relocation and increase in the Terminal kerbs drop off to the other side of the multi-storey carpark where bussing services are currently located; Refurbished multi-storey carpark atrium space with passenger segregation to become the new entrance to Terminal1; and Reconfiguration of vehicle access and pedestrian routes to and from the Ground Transportation Centre and the main road network around the airport.	May have non-significant, temporary adverse effects in terms of noise and air quality in the area of the Ground Transportation Centre.
Early bag store	The proposed project will construct an early bag store on the mezzanine of Terminal 2. The lane-based system will have the capacity of 950 bags.	none

22.6 Summary

22.6.1 An overview and broad assessment of the possible environmental impacts of reasonably foreseeable future development plans has been provided, insofar as this is practically possible at this stage given the information available on these plans at time of writing. Other influencing factors include budgetary constraints, safety and security reviews, and the need to ensure proposals meet the constantly evolving needs of passengers and airlines.

22.6.2 The future development plans discussed in this chapter do not form part of the proposed Relevant Action and would all require further consents (and environmental assessments as required) before they can be implemented.

22.6.3 The overview above does not give rise to any concern about the likely environmental effects of the proposed Relevant Action when viewed in the context of policy and plans for the future expansion of Dublin Airport.