

**Dublin Airport
Environmental Impact
Statement
Northern Parallel Runway**

**Part 1
Non-Technical Summary**

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Ordnance Survey Ireland Licence No. EN 0027804

0.0 NON-TECHNICAL SUMMARY

- 0.1.1.1 Dublin Airport Authority proposes to construct a Northern Parallel Runway at Dublin Airport. By virtue of its nature and scale, an environmental impact assessment of the proposal is required. This document is a non-technical summary of the environmental impact study prepared on behalf of Dublin Airport Authority to support the planning application to Fingal County Council.
- 0.1.1.2 The Northern Parallel Runway is required to provide additional runway capacity to facilitate forecast demand in passenger numbers and associated aircraft movements at Dublin Airport.
- 0.1.1.3 In 1994 Dublin Airport handled 6.98 million passengers with some 130,000 aircraft movements. Since then passenger numbers have grown by, on average, one million passengers per year. In 2003 Dublin Airport handled some 15.8 million passengers with some 178,000 aircraft movements.
- 0.1.1.4 Average traffic growth projections in passenger numbers indicate that by 2025 Dublin Airport will handle some 38 million passengers. In order to support this growth the number of aircraft movements will increase from current levels of some 178,000 movements per annum to some 310,000 movements per annum.
- 0.1.1.5 High growth projections in passenger numbers indicate that by 2020 Dublin Airport will handle some 43 million passengers. In order to support this growth the number of aircraft movements will increase from current levels of some 178,000 movements per annum to some 348,000 movements per annum.
- 0.1.1.6 High Growth traffic projections are utilised for the purpose of impact assessment.
- 0.1.1.7 Dublin Airport Authority has carried out a number of studies into alternative approaches for runway capacity. As part of the process of preparing the Environmental Statement, these alternatives have been reviewed and updated. It has been found that the development of a northern parallel runway best meets with the projected air traffic needs of the future.
- 0.1.1.8 The new runway would be located to the north and parallel to the existing main runway in a development area of 261 hectares, wholly owned by Dublin Airport Authority. It would have a paved length of 3,110 m. The runway would extend in a westerly direction from a location adjacent to the existing maintenance hangars onto land presently outside the operational area of the airport and would cross the existing Huntstown to Naul Road.
- 0.1.1.9 A length of the Forrest Little Road adjacent to the eastern end of the new runway would fall within the runway strip and would be moved to a more northerly alignment avoiding the runway strip. The Huntstown to Forrest Little Road would be cut by the new runway at a location immediately to the north of Huntstown. A new road linking Huntstown to the St. Margaret's Bypass to the west would be provided. This will run to the south of the new runway. Both the new and realigned roads will be accommodated on lands within the ownership of the airport and would consist of single 7.3 m wide carriageways.

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- 0.1.1.10 At each end of the runway, an approach lighting system would extend beyond the perimeter security fence. Approach lighting masts would generally increase in height away from the runway ends with maximum height expected to be approximately 14 m.
- 0.1.1.11 It is envisaged that the scheme would be constructed over a period of approximately three years (between January 2007 and January 2010).
- 0.1.1.12 Two separate areas on Dublin Airport Authority land have been identified as construction site compounds for use by contractors. Compound No. 1 would be located on Dublin Airport Authority land outside the permanent works area, along the southern boundary of the Western Zone. This compound would service construction in the Western Zone and the Central Zone. Compound No. 2 would be located at the eastern end of the site, at the junction of the Castlemoate Road and Forrest Little Road. This compound would service construction in the Eastern Zone.
- 0.1.1.13 Compound No. 1 will be the main site compound providing office and welfare accommodation and storage for materials and plant, and would be retained throughout the duration of the contract. Compound No. 2 would be a satellite of the main compound, also providing some office and welfare accommodation, and storage for materials and plant.
- 0.1.1.14 Access to Compound No. 1 would be from the west with the Naul Road diversion serving as its main access. Construction traffic would access the main site from the M50 via the South Parallel Road and St Margaret's Bypass. Access to Compound No. 2 would be from the west using St Margaret's Bypass and the Northern Diversion and Forrest Little Roads.
- 0.1.1.15 The impact of the proposed new runway in 2025 would be around 30% more local, regional and national employment and annual income. This translates into around 3,900 jobs and €145 million of income (at 2001 prices) locally, 7,200 jobs and €451 million of income regionally, and 11,900 jobs and €741 million of income nationally.
- 0.1.1.16 Given that the development of the northern parallel runway has significantly influenced land use policy since 1970, the proposed runway will not result in any long term, significant, negative, direct impact on the pattern of land uses in the vicinity of the airport. The continued implementation of the comprehensive land use policy as set out in the current and Draft Fingal County Development Plans will assist in managing land use in a manner which protects the operation of the airport and its positive direct and indirect impacts, and which protects and provides for the management of established land uses.
- 0.1.1.17 While the proposed development will not directly impact upon any known archaeological material there is a risk of uncovering previously unrecorded archaeological material, based on an assessment of the known archaeology of the area in general. A programme of archaeological site investigation works will be carried out well in advance of the construction in order to allow sufficient time to take ameliorative action in the event of archaeological remains being identified. All cultural heritage sites affected by the development (five sites and two potential sites) will be archaeologically resolved either through testing, excavation and/or survey. All townland boundaries affected by the

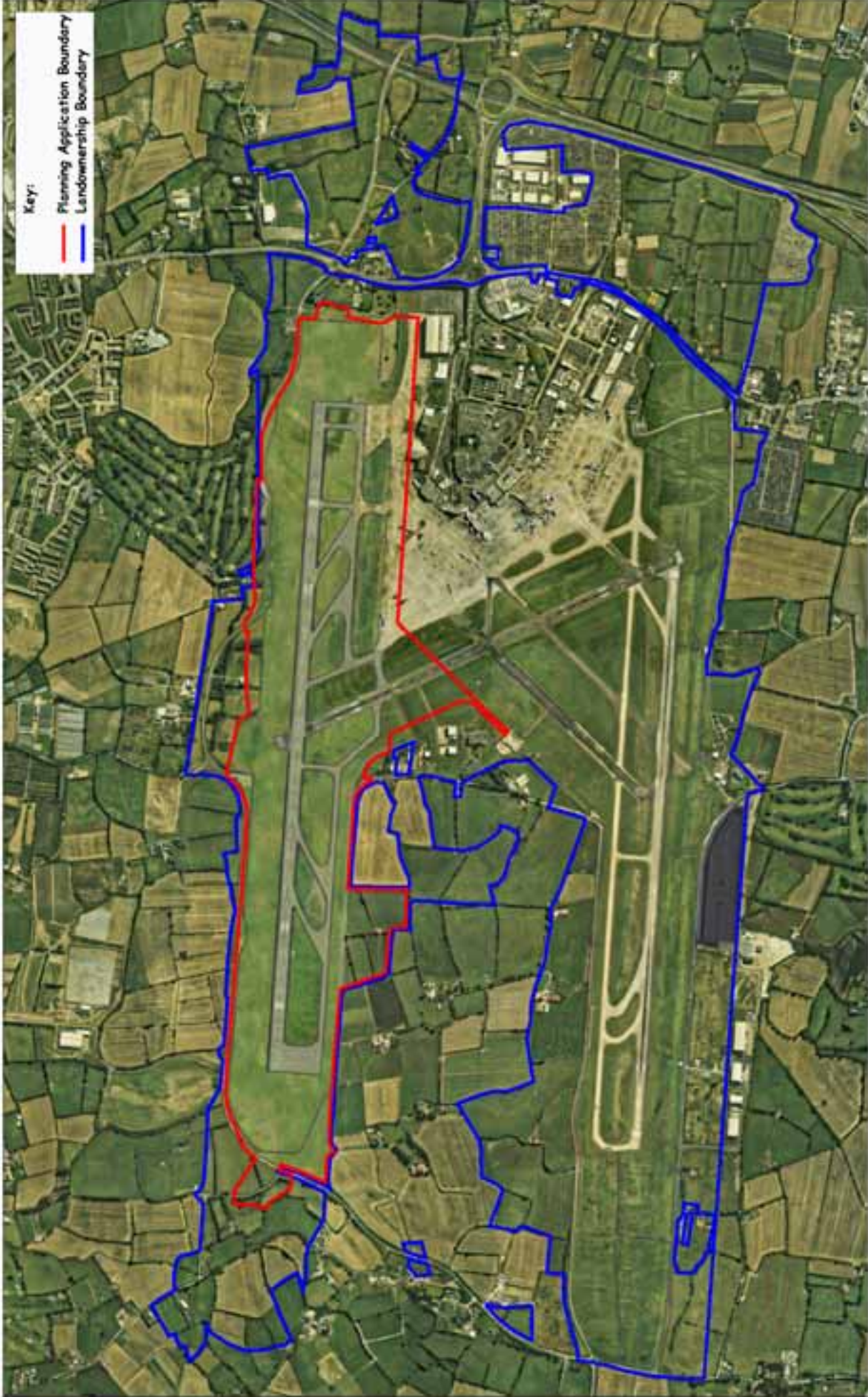
development will be archaeologically tested in the advance of construction. The development will have no effect upon Castlemoate House. The partial remains of the old Forrest Tavern will be relocated to ensure continued public access.

- 0.1.1.18 The site is not subject to any ecological conservation designation, proposed, candidate or otherwise under current legislation; it does not impinge on any designated area and is not adjacent to any such area.
- 0.1.1.19 The predominant land-use of the site of the proposed new runway is agricultural, with a mix of pasture and tillage. Most of the field boundaries comprise hedgerows or tree lines of varying density and diversity. The habitats present are common throughout the wider locality and the country as a whole. The range of species of flora and fauna are typical of, and reflect the habitat types in which they occur.
- 0.1.1.20 Mitigation, remedial, and compensation measures are recommended to ameliorate any negative impacts on species which will result from habitat loss.
- 0.1.1.21 The most significant landscape impacts are the loss of local hedges and hedgerow trees, and the change in views from a number of roads.
- 0.1.1.22 Mitigation measures have been built into the scheme to reduce these impacts and offset the loss of local landscape features. The scheme would build on the retained landscape framework to ensure the best possible integration of the runway and its associated components into the landscape. The principal means of reducing visual impact would be through the establishment of managed hedges and hedgerow trees with the occasional group of indigenous tree planting.
- 0.1.1.23 Further mitigation proposals would seek to compensate for the loss of hedgerows and trees through sponsoring a study into the coverage and condition of hedgerows within Fingal, the acquisition of land for public amenity and recreation, and contributions to the restoration of historic formal gardens in the Ward River Regional Park.
- 0.1.1.24 The impact upon surface water will be negligible and temporary provided mitigation measures are put in place in a timely fashion and rigorously managed and monitored. At most some minor and temporary siltation of the small streams draining the construction can be expected.
- 0.1.1.25 The impact of the proposed development on the waters of the Ward River and the Forrest Little stream will be neutral or negligible with no deterioration in their current status, and fish will not be adversely impacted provided the treatment mitigations are systematically monitored and regularly maintained and optimised. There will be no adverse impact on any of the designated nature conservation areas within the catchments of either the Ward or Forrest Little watercourses.
- 0.1.1.26 Protection of groundwater will be achieved through practical measures, which ensure that potential contamination sources are kept away from open excavations, particularly where limestone is exposed or where boulder clay cover is thin.

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- 0.1.1.27 An Environmental Emergency Plan will be developed before construction and will incorporate measures to protect the groundwater in the event of accidental spillage, flooding or other emergency, during construction and operation.
- 0.1.1.28 The traffic assessment has shown that existing junctions can be improved to provide sufficient capacity for the expected traffic volumes in 2010 with the opening of the Northern parallel runway. In the longer term, there is a degree of uncertainty in relation to the phasing of land-use developments and strategic transport improvements such as Metro and an Outer Ring Road. Therefore, it is suggested that Dublin Airport Authority liaise with the key Transport and Planning Authorities to develop appropriate longer-term solutions taking account of wider, strategic transport improvements.
- 0.1.1.29 Preliminary assessments indicate that if Metro were to be built, and extended from the airport to Swords, there would be a significant beneficial impact in terms of removing car trips from the road network. This would ensure that the road network would continue to provide an adequate level of service up to 2025 and beyond.
- 0.1.1.30 The assessment of Construction Traffic shows that the expected heavy goods vehicle flows can be accommodated on the road network without any material impact. The R108/R122 north of the M50 Ballymun junction is the preferred route for use by heavy construction traffic. The appointed contractor will be required to prepare a Traffic Management Plan which will be agreed with Dublin Airport Authority and Fingal County Council.
- 0.1.1.31 Assessment of the potential air quality effects of the development suggests that emissions would not exceed 1%-2% of the National Air Quality Standards by 2025. Dust mitigation measures are proposed for the construction activities. The additional aircraft activity will have an imperceptible impact upon the total atmospheric emissions on the Dublin area, and on greenhouse gases from all sources including road traffic. The impact upon human health of the development will be minimal. Climate would not be affected.
- 0.1.1.32 Operation of the new runway would help improve air traffic management at the airport and reduce delays on the ground to flights. This would contribute to lower emissions from aircraft on the ground, which would compensate for any slight increase in emissions from the airport area due to higher aircraft movements. It is also expected that recent international strategies with regard to aircraft and climate change policies, such as improvements in aircraft engine design, higher fuel efficiency, would also contribute to lower greenhouse gas emissions at the airport over the next 20 years.
- 0.1.1.33 The risks from aircraft accidents to people living and working in the vicinity of the airport have been calculated for the current situation and for various future options. The overall impact of the proposed runway is to increase the size of the higher risk areas due to the increased overall airport traffic. However, generally the higher risk areas are lightly populated and contained within the Public Safety Zones proposed by the Department of Transport and Department of the Environment & Local Government. Risk impacts can be mitigated by: ensuring that Public Safety Zone dimensions are increased in the few cases where the risk analysis indicates this is necessary; by segregating air traffic

movements, if reasonably practicable, to reduce the risks to Portmarnock; and by ensuring that routes are designed to not overfly populations on the ground where reasonably practicable.

- 0.1.1.34 The design of the runway, its construction and eventual operation all have the potential to increase the bird hazard at Dublin Airport, however Dublin Airport Authority has the capacity to adequately manage these issues, within the context of its bird hazard management program.
- 0.1.1.35 The proposed northern parallel runway will lead to some increase in the area exposed to nuisance from aircraft noise. Research has shown that the impact on human health of these changes will be minimal. This is partly due to the low population in the area due to planning controls in the vicinity of the airport for many years. This is further contributed to by the relative lack of vulnerable populations in the area. There are no hospitals, new schools or mental health institutions located in the immediate area which would be affected by the proposed development and which are not already in a comparable noise area. Whilst several health effects have been postulated as being related to environmental noise the evidence supporting these varies. From the information available it is likely that the health effects of noise related to this proposed development would be minimal.
- 0.1.1.36 Noise mitigation measures are proposed for construction activities. It is also proposed to extend the existing residential noise insulation scheme, and to carry out a feasibility study into the practicalities of insulating existing primary and secondary schools which may be affected by noise nuisance.
- 0.1.1.37 Opportunities also exist to segregate the air traffic movements at the airport to ensure that noise nuisance is minimised, particularly in the vicinity of Portmarnock.



Key:
 Planning Application Boundary
 Landownership Boundary

DUBLIN AIRPORT AUTHORITY plc
AN AIRPORT AUTHORITY REGULATED BY THE AIRPORTS ACT 2005

Northern Parallel Runway

Location - Aerial Photo with Proposed Runway (02/03)

Scale 1:5000

Author AR MOS

Drawn by NTS

Project Name **Figure 02**

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