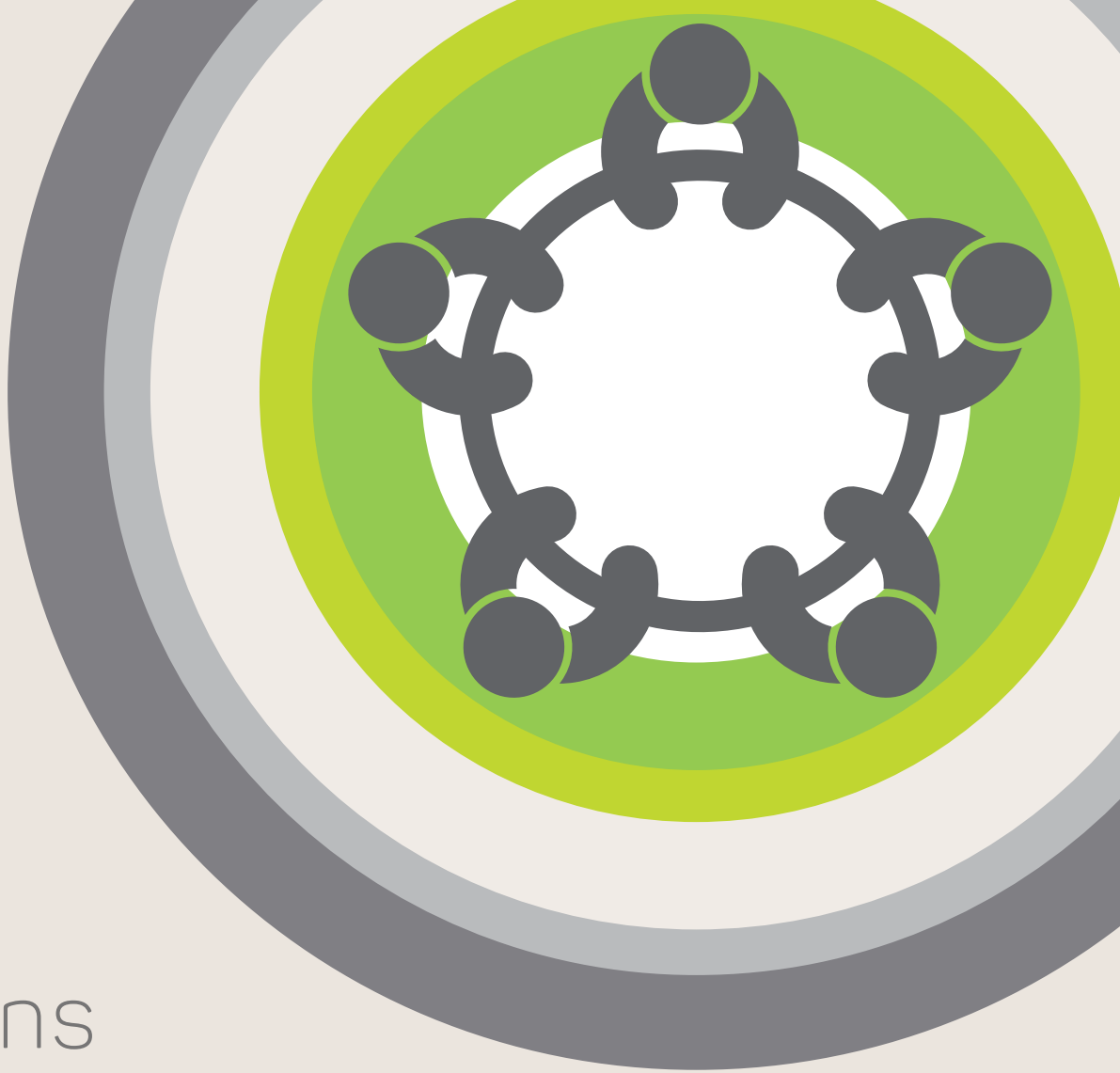
North Runway



daa Consultation on Flight Paths and Change to Permitted Operations

Information Booklet

October 2016

DublinAirport

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Background to Consultation

As a small, open, island economy without a land link to other countries, Ireland is critically dependent on air transport.

- The recent economic recovery has seen rapid growth in passenger numbers at Dublin Airport, with the airport serving a record 25 million passengers in 2015. This is due to a combination of almost 50 new routes and services, significant additional capacity on a number of existing routes and nine new airlines operating at Dublin.

- Traffic forecasts indicate that this growth will continue, with potential for passenger throughput figures of up to 36 million by 2022 and up to 50 million by 2037.

- To facilitate this growth and to enable Ireland to reap the economic and societal benefits of greater connectivity, daa is delivering its new North Runway.

Dublin Airport is a key economic driver, both for Dublin and the whole country. Dublin Airport currently contributes approximately €6.9bn per annum to the Irish economy (c. 4% of national GDP) and activity at the airport currently supports approximately 97,400 jobs.

Planning Conditions 3(d) and 5 for North Runway will damage Dublin Airport's connectivity and limit the future potential of the Airport.

- Planning permission for North Runway has been granted, however, two of the 31 conditions are onerous and we believe unwarranted given the level of growth forecast and the importance of the airport to the economy of Ireland. These onerous conditions limit the potential of the airport to operate, grow and deliver the maximum economic and societal benefits for Fingal, for Dublin and for Ireland as a whole.

Condition 3(d) would prohibit the use of North Runway for landings and take-offs between the hours of 11 pm to 7 am.

Condition 5 states that, on completion of construction of the new runway, the average number of night time aircraft movements at the airport shall not exceed 65 per night (between 11 pm to 7 am).

- In 2016, Dublin Airport will be the number five airport in Europe for flights to North America with growth in connectivity of over 65% since the opening of Terminal 2 in 2010. The proposed restrictions in the 11 pm to 7 am period have the potential to limit the scope for developing those long-haul services to North America.

- At 3,110 metres, North Runway can accommodate larger aircraft which would facilitate direct flights to the Far East, Asia and South America. Attracting new long-haul services ahead of other European airports could be jeopardised by restrictions which impede operational flexibility.

- Connecting passenger numbers increased by 89% from 2013 to 2015. An increasing proportion of long-haul passengers are seeking to connect onto early-morning UK and European flights. The proposed restrictions would negatively impact opportunities for flight connections. This reduces the likelihood of new routes being established.

- Changing travel patterns mean that people now want to make same-day business trips, requiring more capacity in the early-morning and late-evening peaks.

- The main source of growth at Dublin Airport continues to be from based and network carriers. Based operators have a particular requirement for capacity in the early morning and late evening to get the most efficient use from their aircraft. The one-hour time difference between Ireland and continental Europe adds to the need for based aircraft to depart early.

daa's objective is to develop North Runway in a manner which delivers the best possible outcome for the Irish economy, while also balancing the needs of local communities. This consultation is the latest stage in that process.

A change to Permitted Operations is required to maintain operational flexibility

- In light of the challenges outlined, daa will be seeking a change to the operations permitted under Conditions 3(d) and 5 in order to retain the operational flexibility that currently exists at Dublin Airport.

- That process will involve the preparation of an Environmental Impact Statement (EIS) to assess any potential impacts arising from the changes proposed

- The EIS will make an assessment of the implications of the proposed change in permitted operations, and this requires a decision around future flights paths at Dublin Airport.

This consultation is about helping to determine the new flight paths for North Runway.

- Since announcing our plans for North Runway, daa has met with a large number of community groups and individuals as part of our ongoing communications.

- We are passionate about engaging in open, honest and genuine conversation with our neighbouring communities, and about ensuring that all interested individuals and groups are fully informed of the facts regarding this significant piece of strategic infrastructure for Fingal and Ireland.

- A full report on feedback from the first round of public consultations which were held in June and July is available on our project website at www.northrunway.ie. This round of consultations also resulted in additional research underpinning the EIS process, including:
  - In addition to our permanent noise monitoring terminals, further monitoring for aircraft noise has been carried out at a number of locations.
  - The potential impact of vibration on dwellings caused by aircraft noise will be considered.
  - The potential effects of odours from aircraft fuel will be considered.
  - In addition to our permanent air quality monitoring terminals, further monitoring is currently being undertaken.
  - An assessment will be undertaken of Dublin Airport's accessibility in the context of planned public transport infrastructure such as Metro North, Luas, Cross City and Swiftway Bus Rapid Transit.

- As part of our current community engagement, daa is consulting on emerging options for future flight paths for Dublin Airport.

- The purpose of this document is to provide an overview of the key issues associated with this consultation.

Current Operation of the Runway System at Dublin Airport

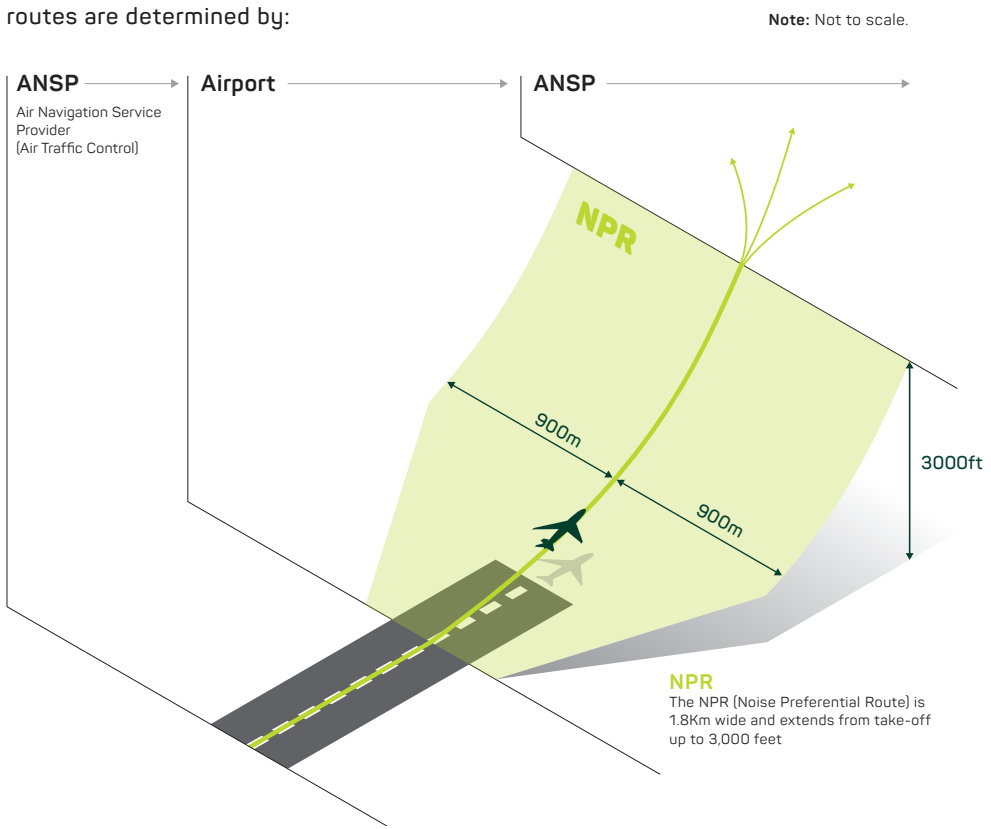
Flight Paths

- Flight paths are the designated routes aircraft follow under the direction of Air Traffic Control (ATC).
- While flight paths are often shown as single lines on a map, it is not always possible for aircraft to fly exactly along that line. In practice, flight paths will vary either side of the route within a designated flight corridor.
- ATC manages aircraft for landing or take-off along specific flight paths, as well as keeping aircraft at safe distances from each other in the air and on the ground.
- Safe movement of aircraft is a vital consideration in the development of flight paths.
- The way in which an airport's runway system is used depends on a variety of factors such as weather conditions (especially wind direction, speed and visibility) and the number of take-offs and landings.

Noise Preferential Routes

- Unless directed otherwise by ATC, all aircraft taking off from Dublin Airport are required to follow specific flight paths called Noise Preferential Routes (NPRs). To minimise disruption, NPRs are designed to avoid the overflight of built-up areas, where possible.
- An NPR is a path or corridor (1.8km at its widest point) that aircraft follow from take-off until being directed by ATC onto their main air traffic routes, typically at 3,000 feet altitude above mean sea level.
- Aircraft normally travel in the middle of this corridor. However, the precise path followed within the corridor may vary depending on factors including navigational equipment, the type and weight of aircraft and weather conditions (particularly winds that may cause drifting). Aircraft flying inside this corridor are considered to be flying on-track.
- Once an aircraft reaches the end of the NPR, normally at an altitude of 3,000 feet, ATC will turn it onto a more direct heading to its destination.
- ATC can turn aircraft off NPRs below 3,000 feet for safety reasons, for example to avoid storms.

Subject to final safety assessment, routes are determined by:



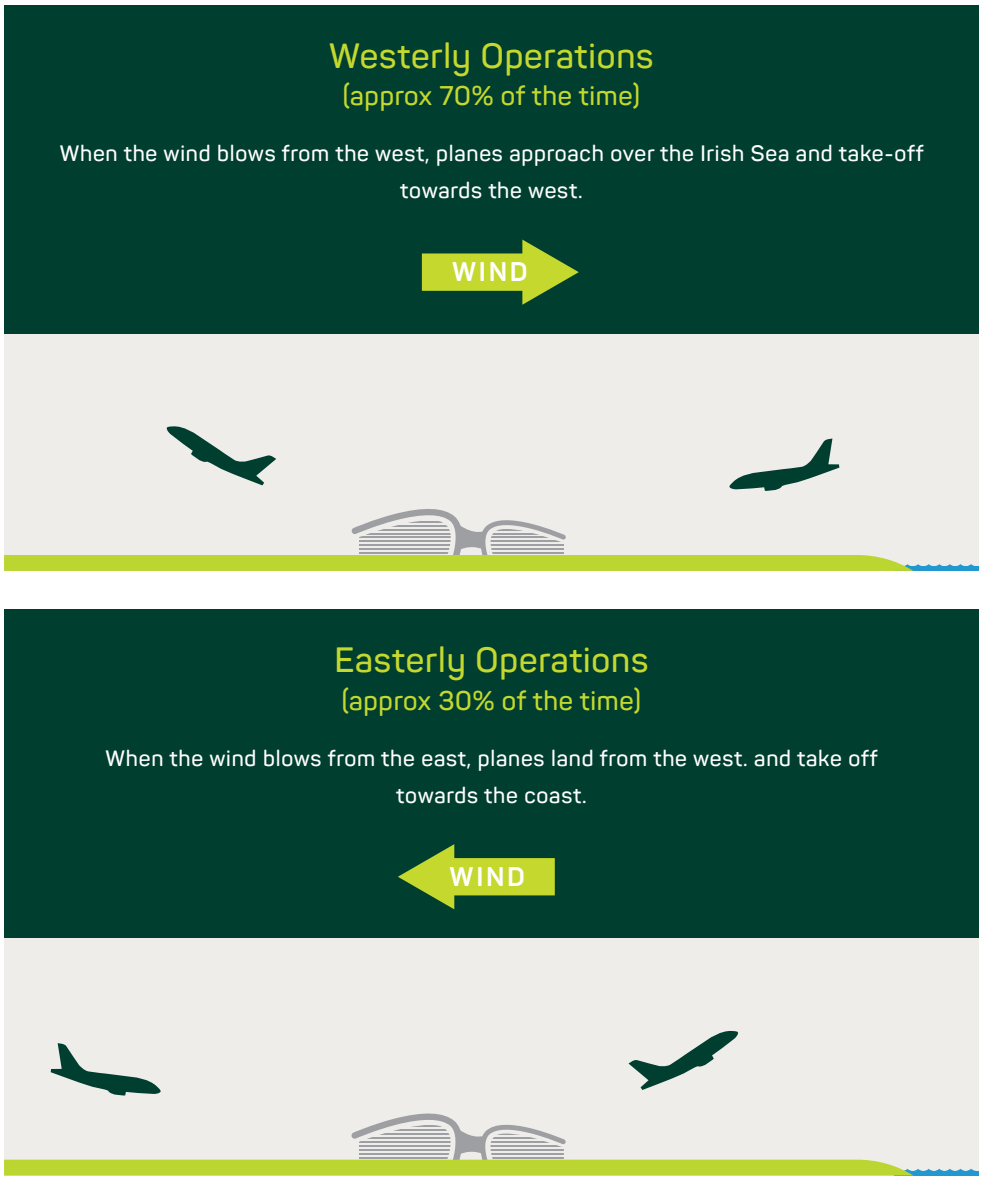
Existing Flight Paths

- Existing flight paths at Dublin Airport follow a straight line from the end of the runway for both arrivals and departures.

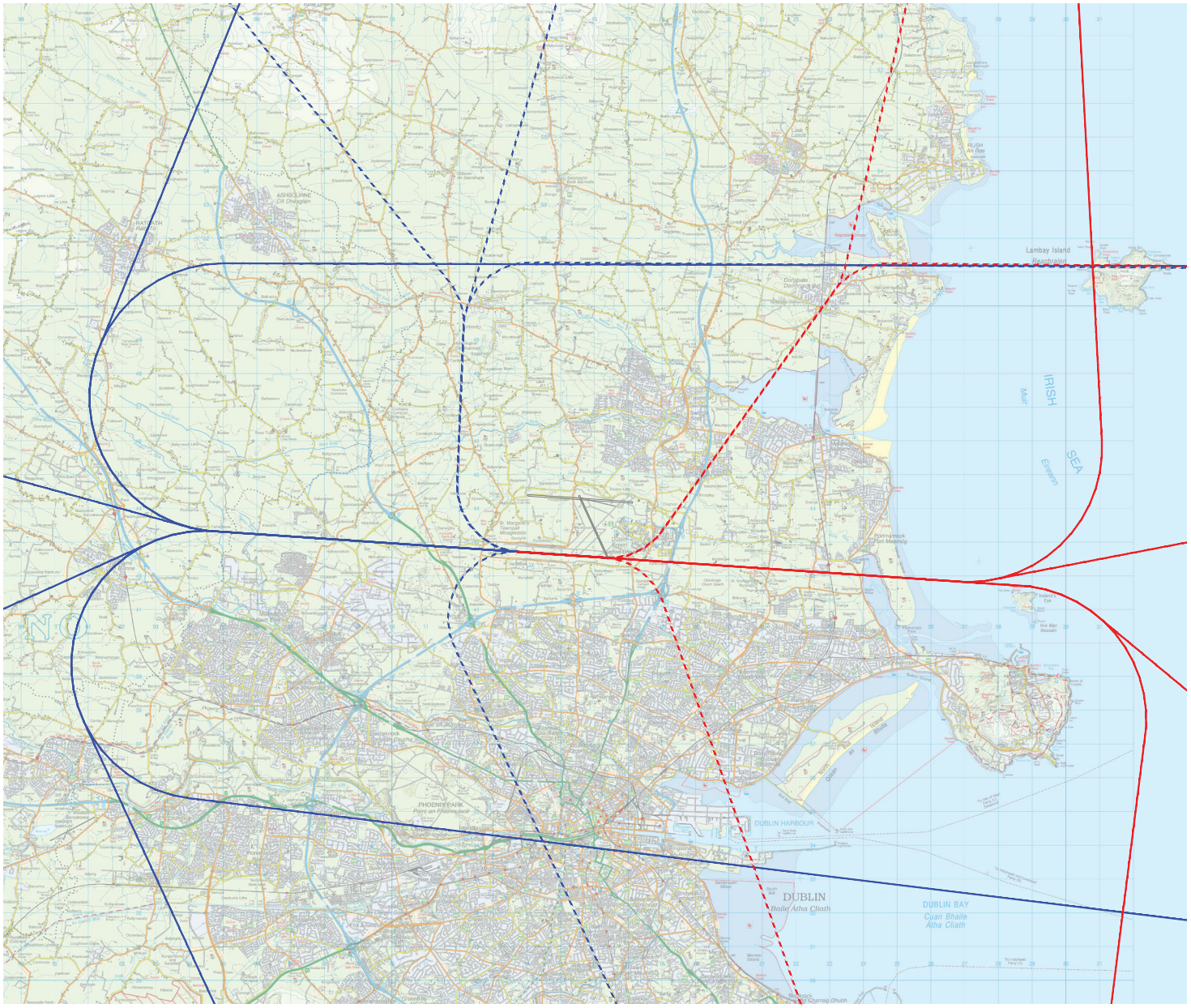
- For most aircraft operating from Dublin Airport:
  - Departures from all runways (except easterly departures on the existing southern runway) must maintain course straight out for five nautical miles after take-off before commencing a turn, unless otherwise cleared by Air Traffic Control. (One nautical mile = 1,852 metres).
  - Easterly departures on the existing southern runway must maintain course straight out for five nautical miles before commencing a turn to the north, or for six nautical miles before commencing a turn to the south.

Note: Turboprop aircraft are generally turned earlier for reasons of efficiency.

Current Runway Operations



Current Departure Flight Paths



Key

Category A&B (Turboprop) aircraft westerly departure routes

Category A&B aircraft easterly departure routes

Category C&D (JET) aircraft westerly departure routes

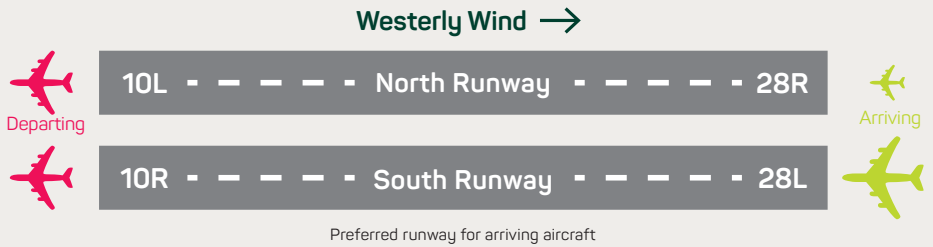
Category C&D aircraft easterly departure routes

Future Noise Preferential Routes

Once North Runway comes into operation, new routes to and from the Airport will be introduced. Condition 3 of An Bord Pleanála's grant of permission for North Runway introduces a preferred runway concept – Option 7b – to lessen the impact of aircraft noise on local communities.

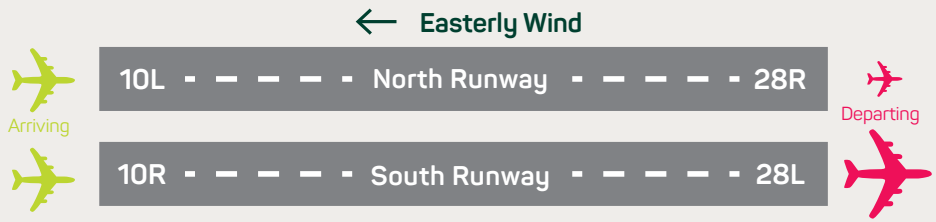
- Most of the time the runways will operate in segregated mode, i.e. one runway for all arrivals, the other for all departures.
- However, there will be occasions during peak hours when runways will need to operate in mixed mode, i.e. both runways used simultaneously for arrivals and departures.
- For safety, and aircraft separation, international standards for mixed mode operations require that aircraft courses diverge by at least 15° approximately one nautical mile after take-off.
- Before any proposed flight path procedure and/or mode of operation can be finalised and for North Runway, a comprehensive safety case and assessment will have to be completed by the Air Navigation Service Provider (Air Traffic Control). This will occur before the opening of North Runway.
- The EIS will make an assessment of the implications of the proposed change in permitted operations and this requires a decision about the NPRs that will be used.
- This consultation is about helping to determine the new NPRs for North Runway.
- The findings and recommendations arising from this process will be published as part of the ongoing EIS consultation and public information process and will be shared with the Air Navigation Service Provider (ANSP) which has overall responsibility for airspace design.

Option 7b: Westerly Operations (approx. 70% of the time)



Preferred runway for arriving aircraft

Option 7b: Easterly Operations (approx. 30% of the time)



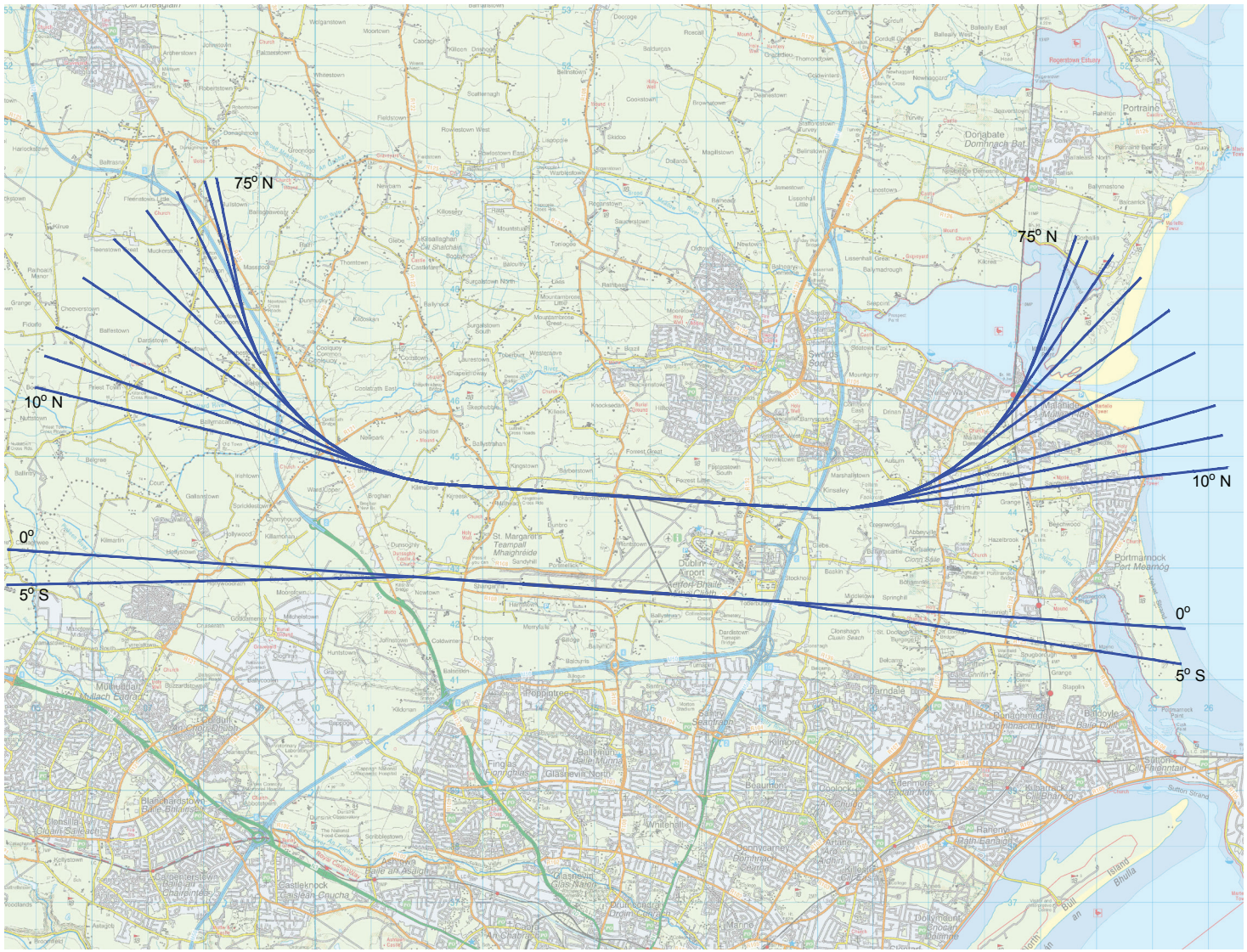
Preferred runway for departing aircraft

Size of plane = volume of movement

Departure Noise Preferential Routes

For safety reasons, a divergence of at least 15˚ will be required to allow independent departures on both runways.

Several options within the range 75˚N to 5˚S were considered by daa, as outlined below.



NPR Divergence Scenarios

In developing the departure NPRs, we have shortlisted two scenarios to avoid areas of dense population and to minimise the number of dwellings significantly affected by noise.

Note: NPRs will be subject to assessment based on criteria finalised post-consultation. A comprehensive safety case and assessment will also be completed by the ANSP before North Runway opens.

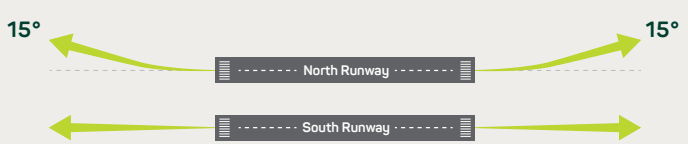
The remainder of this document will focus on detailed information relating to:

- An explanation of aircraft noise.
- Maps showing altitudes of aircraft for easterly and westerly operations.
- Altitudes of aircraft with flight movements for:
  - current operations;
  - 2022 with existing planning conditions and difference versus proposed operations; and
  - 2037 with existing planning conditions and difference versus proposed operations; all for easterly and westerly operations.
- For Scenario A, 2022 Average (LAeq) Day and Night contours with existing conditions and proposed operations.
- For Scenario B, 2022 Average (LAeq) Day and Night contours with existing conditions and proposed operations.

Towards the end of this document, you will find information on existing and potential mitigation measures, in addition to details of how you can provide feedback.

Scenario A

Straight out on South Runway;
15°N divergence for easterly and westerly departures on North Runway



Scenario B

Straight out on South Runway;
15°N divergence for easterly departures on North Runway;
split divergence of 15°N and 75°N for westerly departures on North Runway, depending on ultimate destination of aircraft.

Aircraft Noise Explained

Noise is subjective and personal to each individual. Aircraft generate noise both on the ground and in the air. The amount of noise generated depends on the type of aircraft and how it is operated. Aircraft noise is measured in decibels (dB). Aircraft entering the market today are 20dB quieter than aircraft of 40 years ago, and this trend for quieter aircraft is expected to continue into the future.

The standard method for assessing noise from airborne aircraft involves the production of noise contours which illustrate the spread of noise around the airport. The contours join together locations that are exposed to the same levels of noise. There are a number of different parameters than can be used to describe the effects of noise, many of which determine an 'average' level of noise across a given period.

The choice of parameter depends on the purpose of the assessment. The most commonly used unit to rate airborne aircraft noise is the LAeq unit, known as the equivalent continuous sound level, which describes the average noise received at a point over a given time.

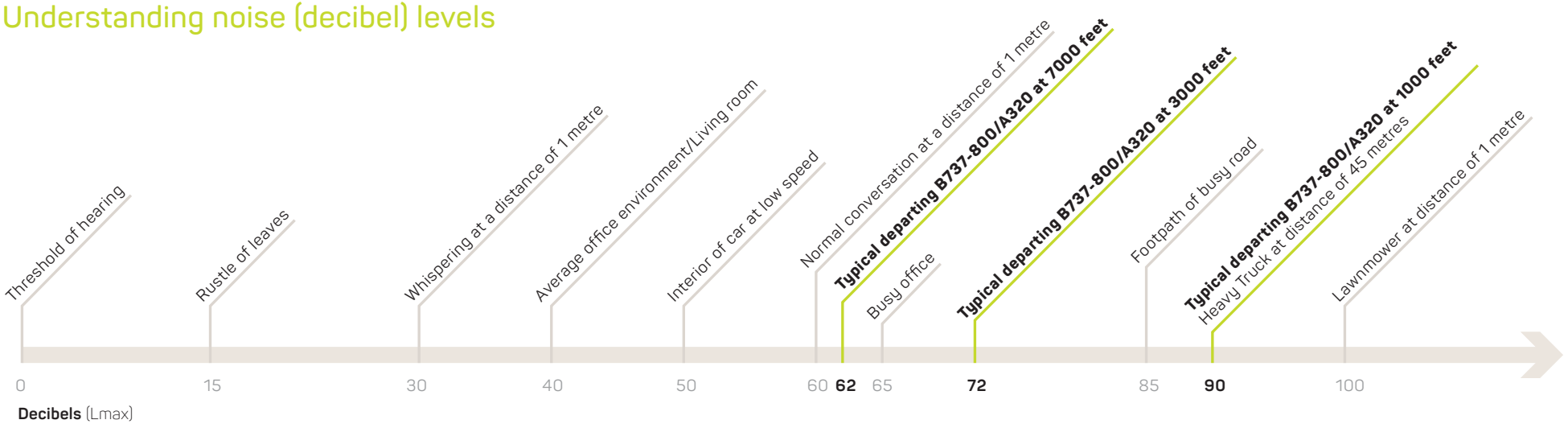
A common pair of parameters used for this purpose are the daytime level (LAeq,16h) and the night-time level (LAeq,8h) for an average summer day period. These illustrate the average level, as on a daily basis there will be some variation. The summer period is used as it is usually the busiest period for an airport. The contours can be prepared at a range of values which have different levels of significance, based on aircraft movements, types and associated noise emission levels for the given period. This approach is in line with international best practice and is used at a number of airports worldwide.

For North Runway:

- LAeq day noise contours cover a 16-hour period (7 am to 11 pm) over 92 days during the airport's busiest summer months.
- LAeq night noise contours cover an 8-hour period (11 pm to 7 am) over 92 days during the airport's busiest summer months.

A comparison of noise from various sources is shown in the diagram below. These values are maximum sound levels that occur for each example (Lmax).

Understanding noise (decibel) levels



Flight Movements

The following are the aircraft altitudes and number of flight movements anticipated for each runway in 2022 and 2037. These numbers are based on high growth forecasts and may be subject to change.

We have illustrated using a 15^{0}N divergence for easterly and westerly departures on North Runway as this is the minimum requirement. Regardless of the degree of divergence chosen, the number of movements will be the same.

Current operations reflect aircraft movements at Dublin Airport today.

- Existing planning conditions relate to the number of aircraft movements which would occur as a result of the implementation of An Bord Pleanála's 2007 grant of planning permission for North Runway. These would come into effect on both runways when North Runway is operational.

- Proposed operations relate to the removal of Condition 3(d) and Condition 5. These figures show the difference in the number of movements if a change in existing planning conditions was agreed.

Aircraft Altitudes and Flight Movements in Easterly Operations (approx. 30% of the time) on a Representative Summer's Day

Legend

Aircraft Altitudes (above airport level)

0-1000 ft | 1000-2000 ft | 2000-3000 ft | 3000-4000 ft | 5000-10000 ft | >10000 ft

1. NORTH RUNWAY ARRIVALS

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	N/A	0	0	0	0
0500–0600	N/A	0	0	0	0
0600–0700	N/A	0	0	0	0
0700–2200	N/A	299	+19	362	-20
2200–2300	N/A	29	-9	33	-5
2300–0000	N/A	0	0	0	+6
0000–0400	N/A	0	0	0	0

2. NORTH RUNWAY DEPARTURES

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	N/A	0	0	0	0
0500–0600	N/A	0	0	0	0
0600–0700	N/A	0	+16	0	+19
0700–2200	N/A	30	-14	55	+49
2200–2300	N/A	0	0	0	0
2300–0000	N/A	0	0	0	0
0000–0400	N/A	0	0	0	0

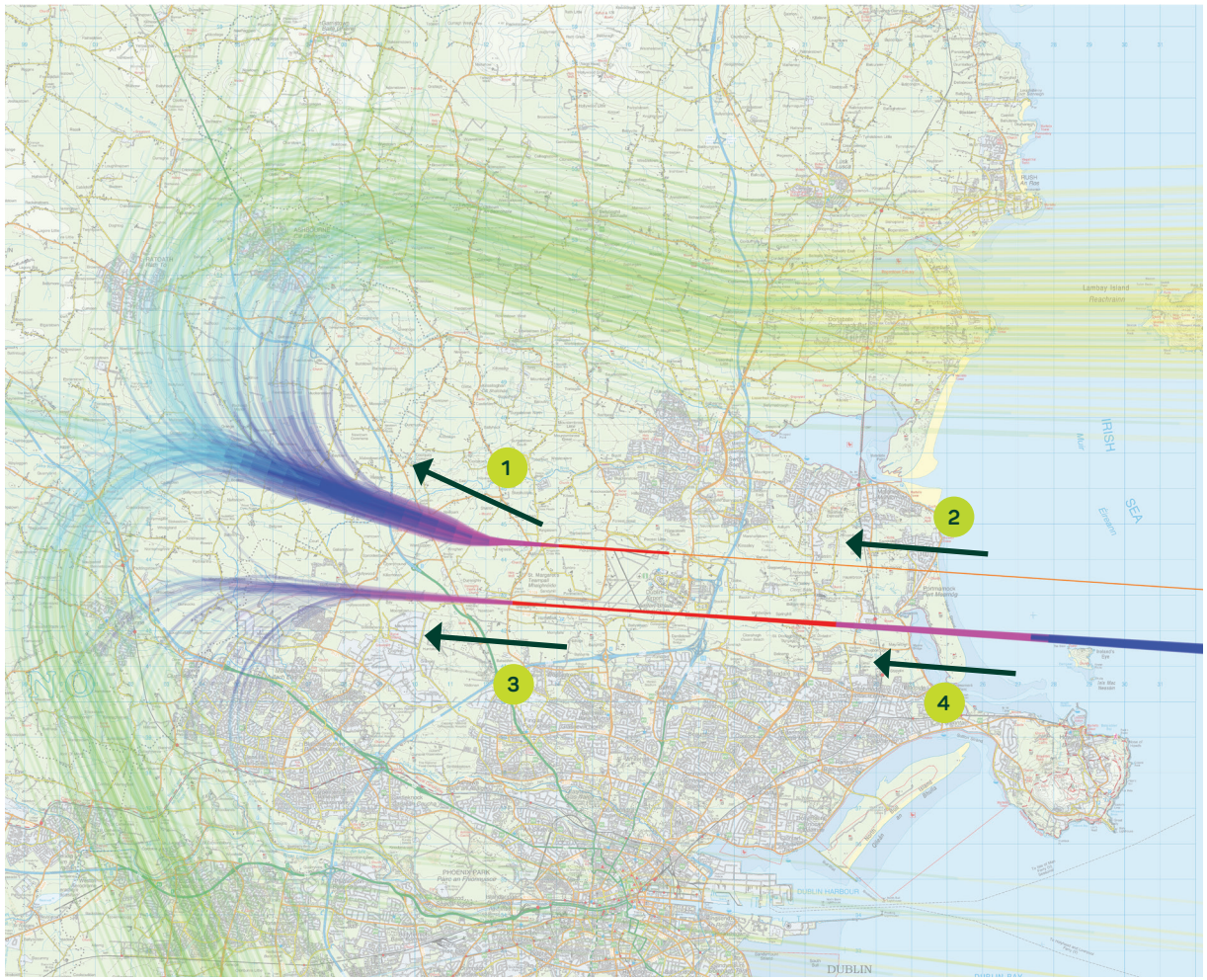
3. SOUTH RUNWAY ARRIVALS

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	4	3	+2	3	+6
0500–0600	6	7	+5	7	+8
0600–0700	3	4	+3	4	+5
0700–2200	265	23	-15	42	+43
2200–2300	16	0	0	0	0
2300–0000	22	12	+15	13	+20
0000–0400	18	10	+1	9	+3

4. SOUTH RUNWAY DEPARTURES

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	0	0	0	0	0
0500–0600	6	3	+2	3	+2
0600–0700	37	25	-1	25	+8
0700–2200	284	321	+21	378	-12
2200–2300	4	6	0	12	-3
2300–0000	1	0	0	0	+2
0000–0400	2	1	0	1	+2

Aircraft Altitudes and Flight Movements in Westerly Operations (approx. 70% of the time) on a Representative Summer's Day



Legend

Aircraft Altitudes (above airport level)

0-1000 ft | 1000-2000 ft | 2000-3000 ft | 3000-4000 ft | 5000-10000 ft | >10000 ft

1. NORTH RUNWAY DEPARTURES

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	N/A	0	0	0	0
0500–0600	N/A	0	0	0	0
0600–0700	N/A	0	+16	0	+19
0700–2200	N/A	311	+22	378	+11
2200–2300	N/A	6	0	12	-3
2300–0000	N/A	0	0	0	0
0000–0400	N/A	0	0	0	0

2. NORTH RUNWAY ARRIVALS

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	N/A	0	0	0	0
0500–0600	N/A	0	0	0	0
0600–0700	N/A	0	0	0	0
0700–2200	N/A	12	-12	25	+6
2200–2300	N/A	0	0	0	0
2300–0000	N/A	0	0	0	+6
0000–0400	N/A	0	0	0	0

3. SOUTH RUNWAY DEPARTURES

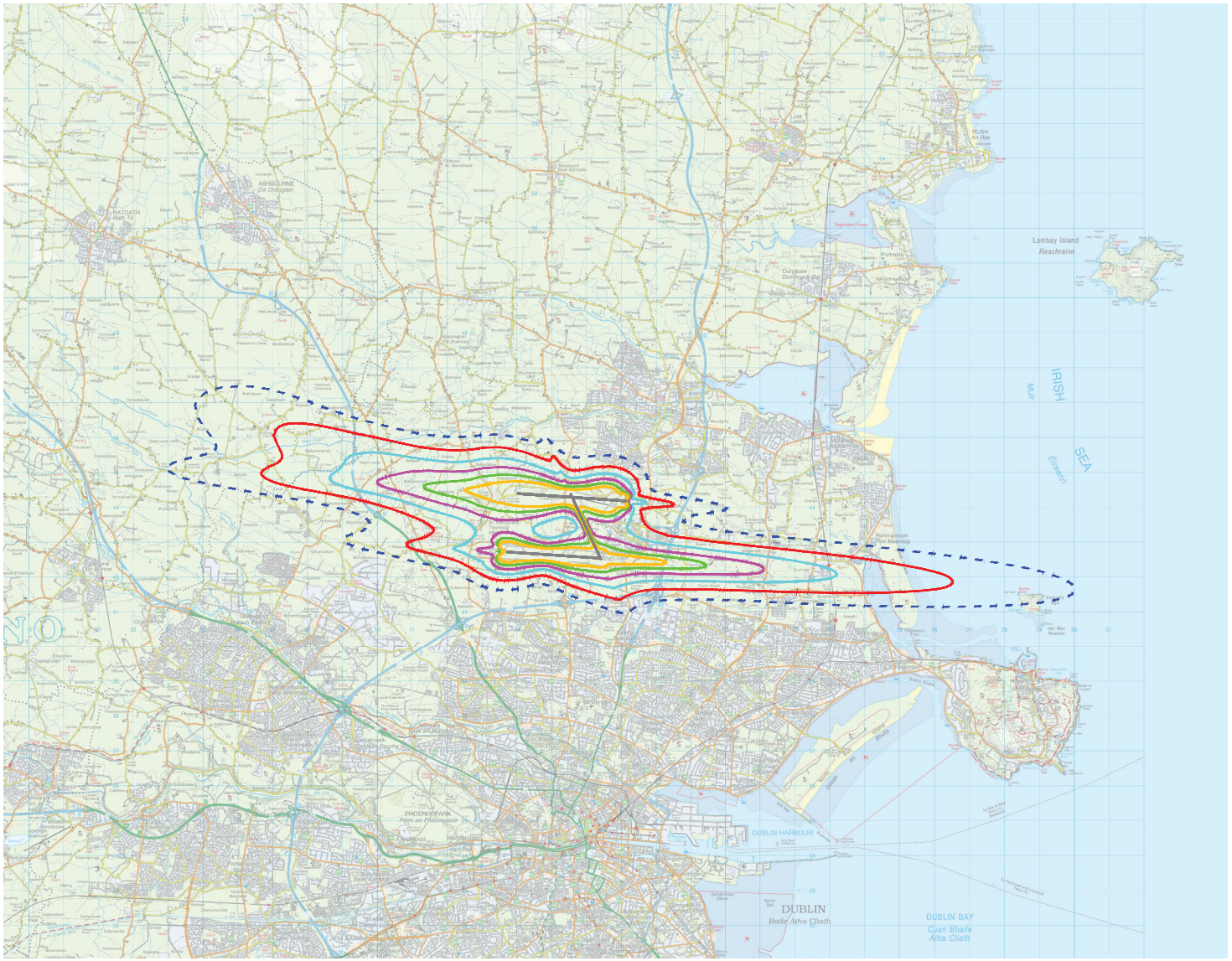
Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	0	0	0	0	0
0500–0600	6	3	+2	3	+2
0600–0700	37	25	-1	25	+8
0700–2200	284	39	-15	55	+26
2200–2300	4	0	0	0	0
2300–0000	1	0	0	0	+2
0000–0400	2	1	0	1	+2

4. SOUTH RUNWAY ARRIVALS

Time	2016	2022		2037	
	Current Operations	With Existing Planning Conditions	With Proposed Operations	With Existing Planning Conditions	With Proposed Operations
	No. Flights	No. Flights	+/- No. Flights	No. Flights	+/- No. Flights
0400–0500	4	3	+2	3	+6
0500–0600	6	7	+5	7	+8
0600–0700	3	4	+3	4	+5
0700–2200	265	310	+15	379	+17
2200–2300	16	29	-9	33	-5
2300–0000	22	12	+15	13	+20
0000–0400	18	10	+1	9	+3

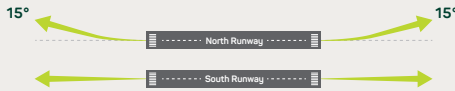
Scenario A: 2022 Average (LAeq) Day Noise Contours

Average Noise Contours on a Representative Summer's Day, with Existing Conditions



Scenario A

Straight out on South Runway;
15°N divergence for easterly and
westerly departures on North Runway



Legend

54 dB LAeq,16h

57 dB LAeq,16h

60 dB LAeq,16h

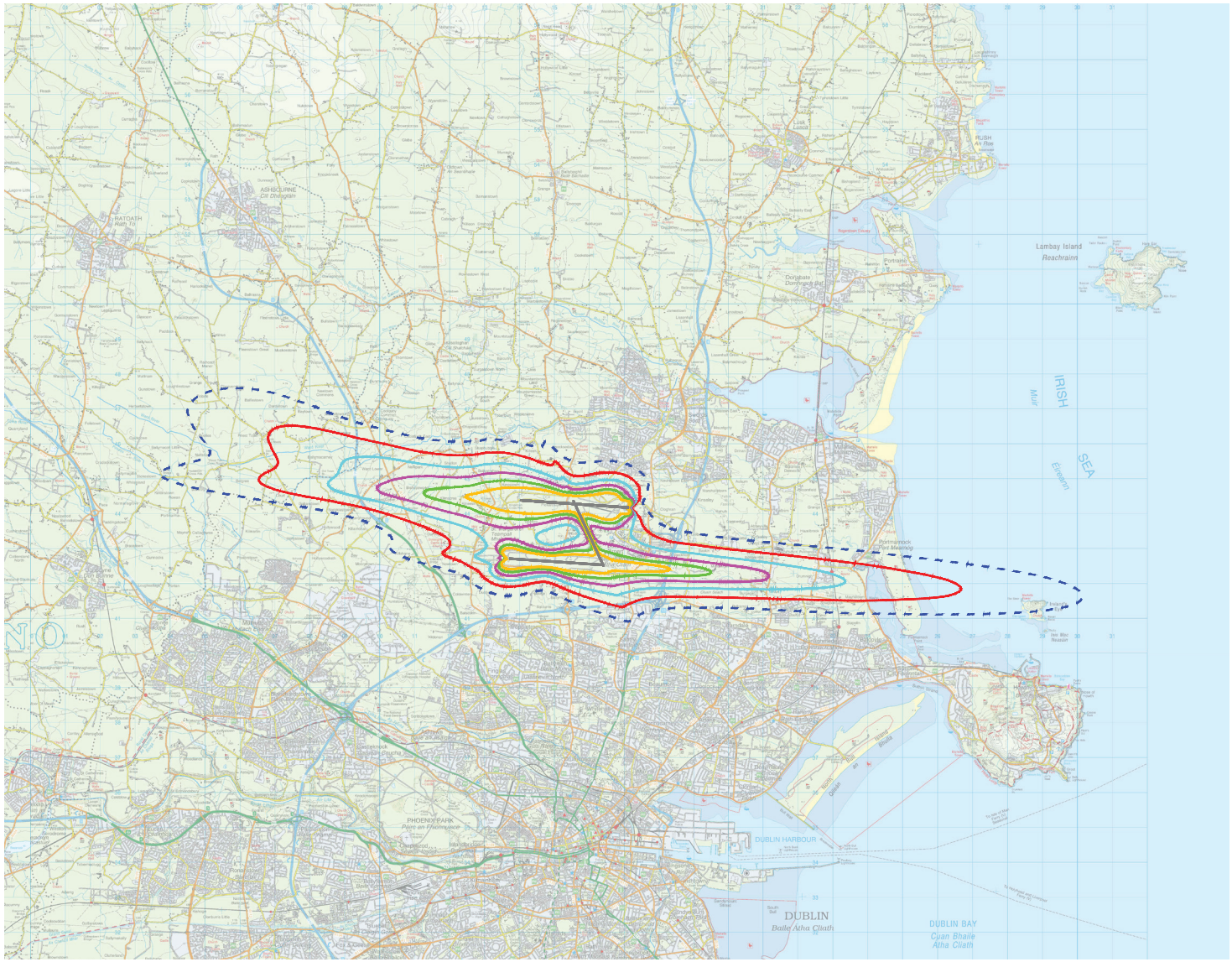
63 dB LAeq,16h

66 dB LAeq,16h

69 dB LAeq,16h

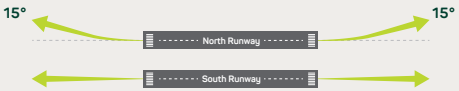
Scenario A: 2022 Average (LAeq) Day Noise Contours

Average Noise Contours on a Representative Summer's Day, with Proposed Operations



Scenario A

Straight out on South Runway;
15°N divergence for easterly and
westerly departures on North Runway

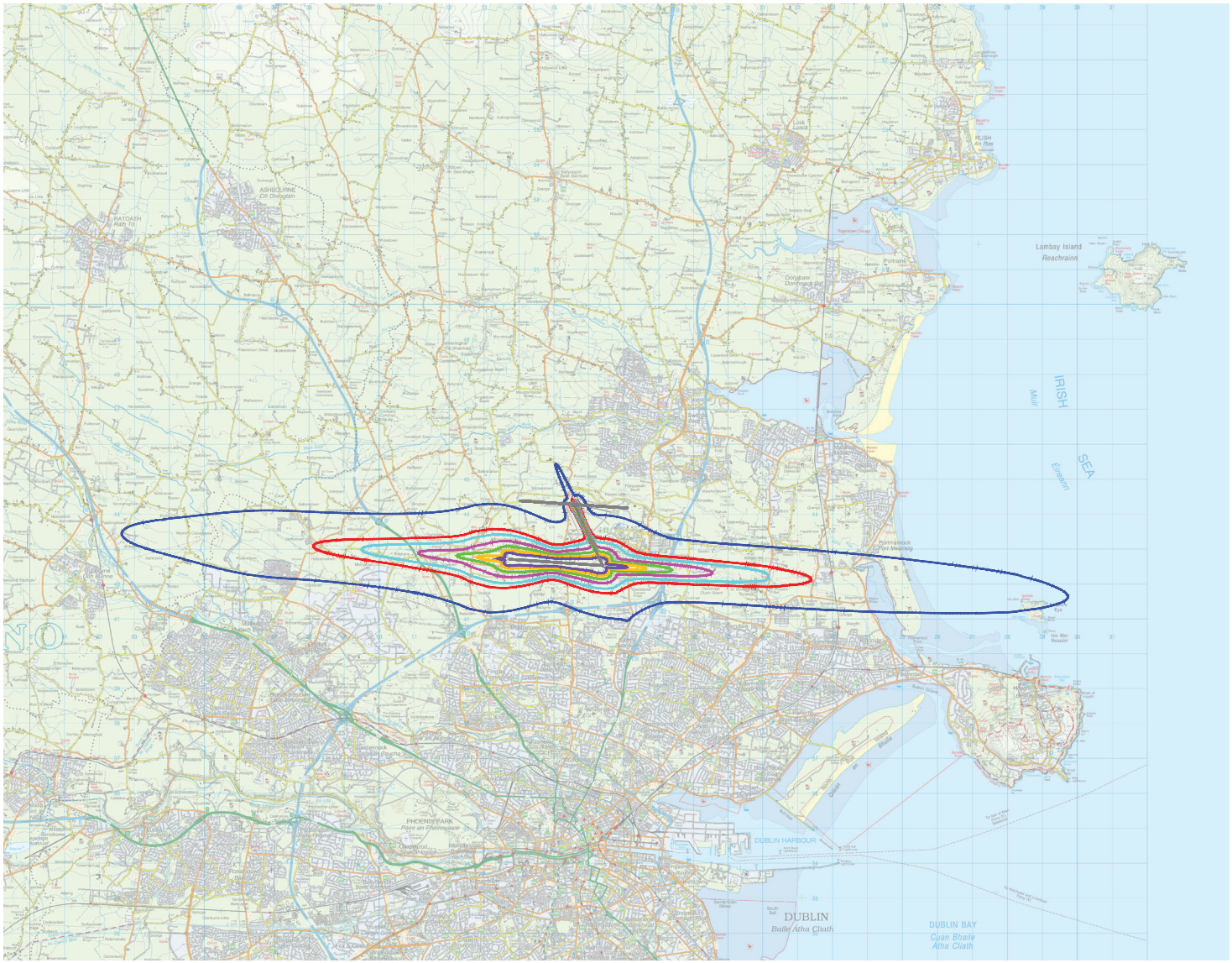


Legend

- 54 dB LAeq,16h
- 57 dB LAeq,16h
- 60 dB LAeq,16h
- 63 dB LAeq,16h
- 66 dB LAeq,16h
- 69 dB LAeq,16h

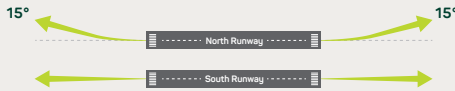
Scenario A: 2022 Average (LAeq) Night Noise Contours

Average Noise Contours on a Representative Summer's Night, with Existing Conditions



Scenario A

Straight out on South Runway; 15°N divergence for easterly and westerly departures on North Runway

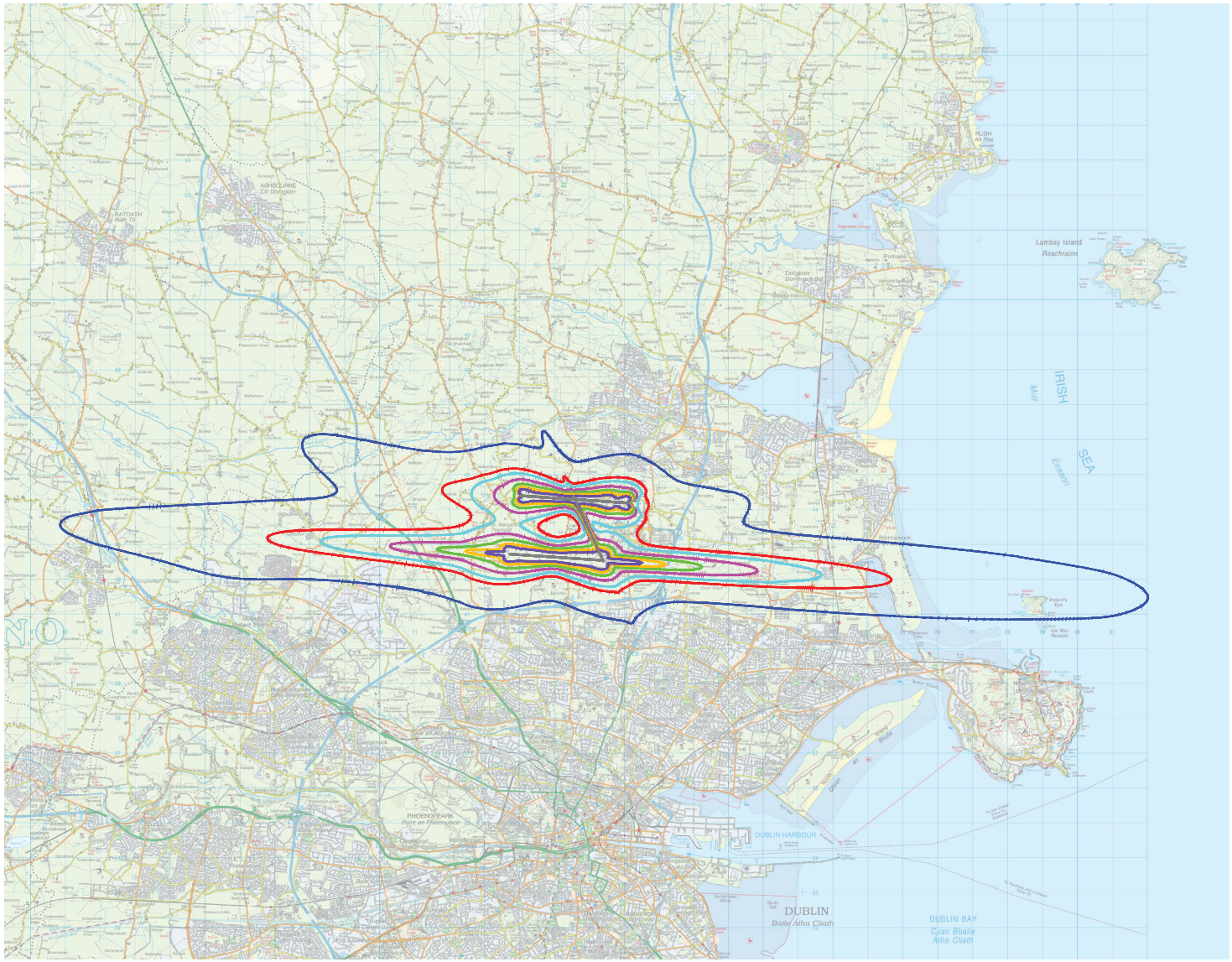


Legend

- 48 dB LAeq,8h
- 55 dB LAeq,8h
- 57 dB LAeq,8h
- 60 dB LAeq,8h
- 63 dB LAeq,8h
- 66 dB LAeq,8h
- 69 dB LAeq,8h

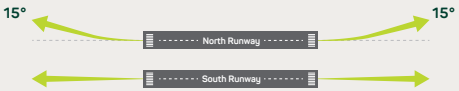
Scenario A: 2022 Average (LAeq) Night Noise Contours

Average Noise Contours on a Representative Summer's Night, with Proposed Operations



Scenario A

Straight out on South Runway;
15°N divergence for easterly and westerly departures on North Runway



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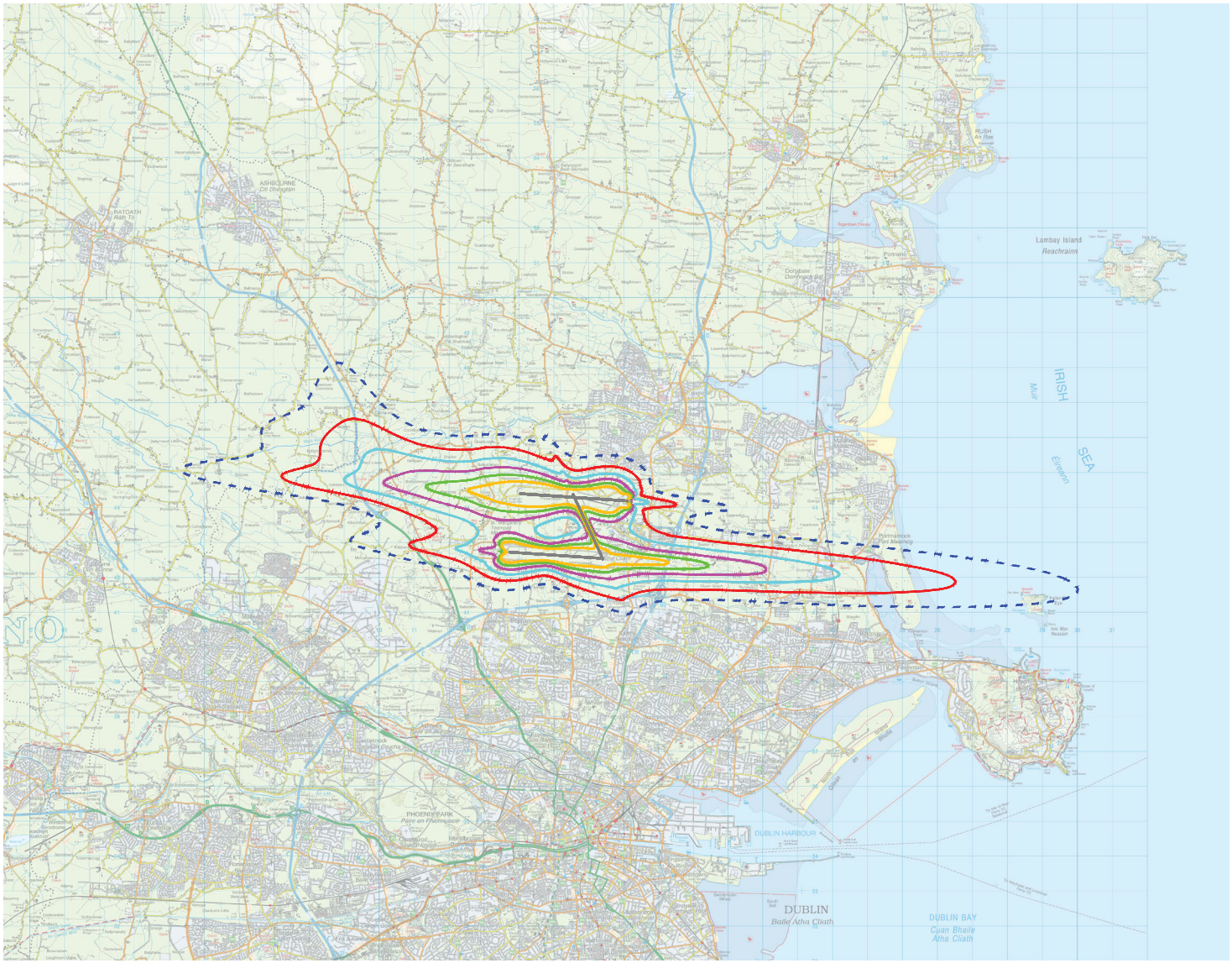
- 66 dB LAeq,8h
- 69 dB LAeq,8h

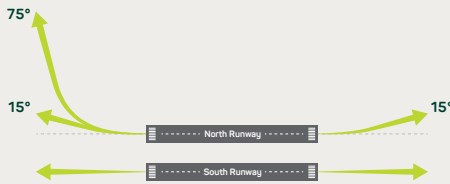
Scenario B: 2022 Average (LAeq) Day Noise Contours

Average Noise Contours on a Representative Summer's Day, with Existing Conditions



Scenario B

Straight out on South Runway; 15°N divergence for easterly departures on North Runway; split divergence of 15°N and 75°N for westerly departures on North Runway, depending on ultimate destination of aircraft.

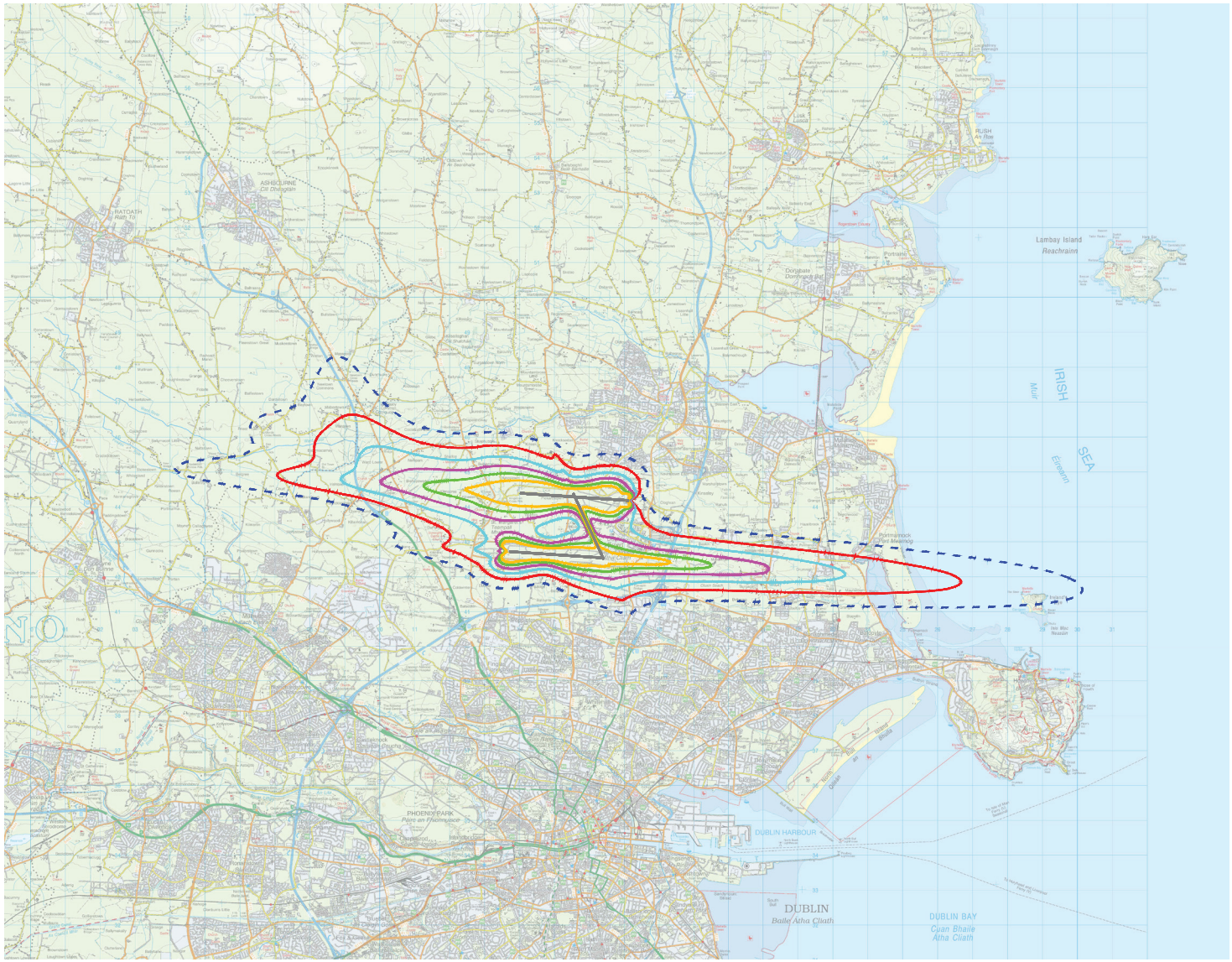


Legend

- 54 dB LAeq,8h
- 57 dB LAeq,8h
- 60 dB LAeq,8h
- 63 dB LAeq,8h
- 66 dB LAeq,8h
- 69 dB LAeq,8h

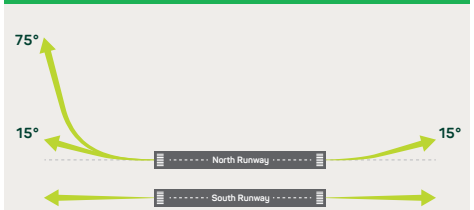
Scenario B: 2022 Average (LAeq) Day Noise Contours

Average Noise Contours on a Representative Summer's Day, with Proposed Operations



Scenario B

Straight out on South Runway; 15°N divergence for easterly departures on North Runway; split divergence of 15°N and 75°N for westerly departures on North Runway, depending on ultimate destination of aircraft.

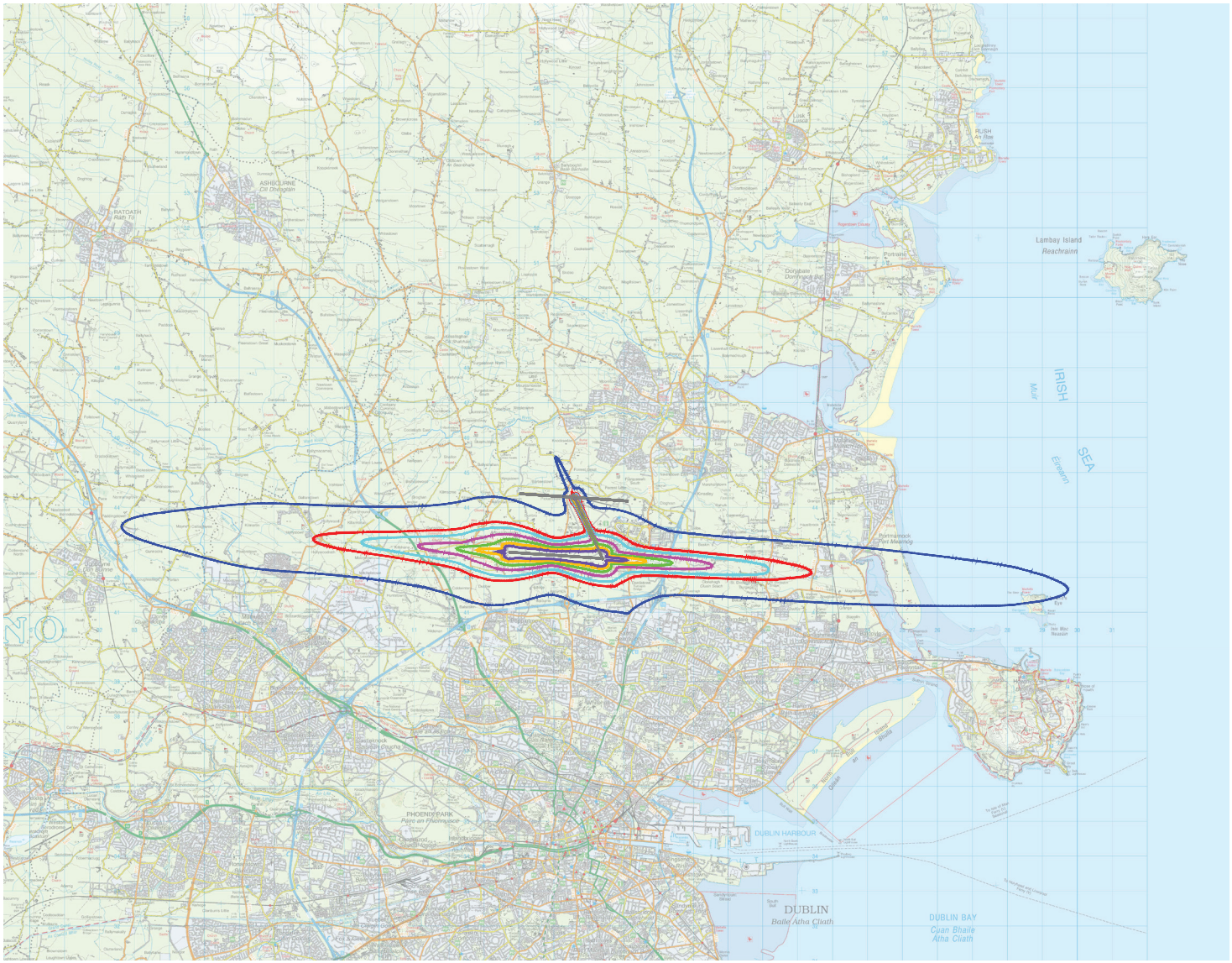


Legend

- 54 dB LAeq,8h
- 57 dB LAeq,8h
- 60 dB LAeq,8h
- 63 dB LAeq,8h
- 66 dB LAeq,8h
- 69 dB LAeq,8h

Scenario B: 2022 Average (LAeq) Night Noise Contours

Average Noise Contours on a Representative Summer's Night, with Existing Conditions



Scenario B

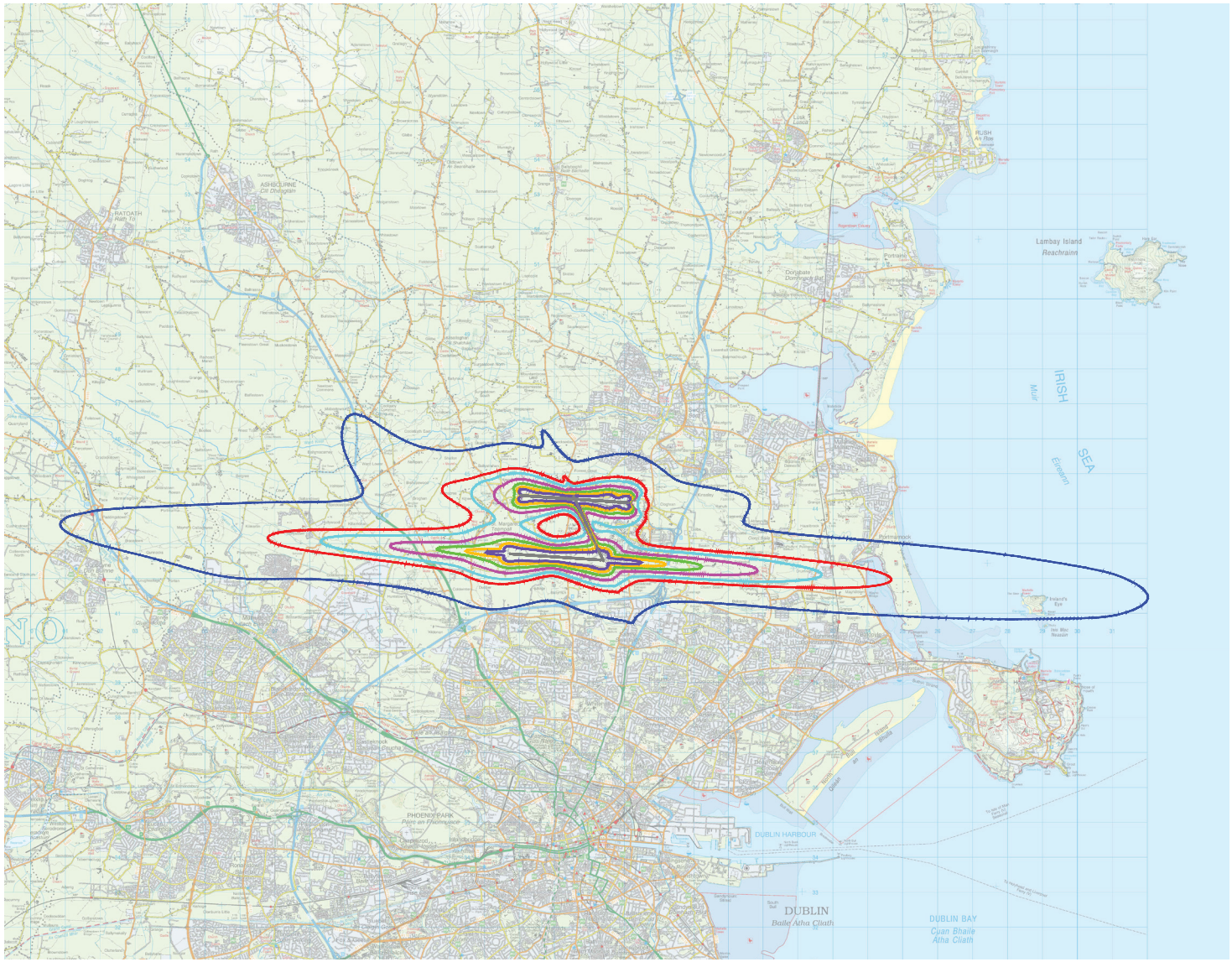
Straight out on South Runway; 15°N divergence for easterly departures on North Runway; split divergence of 15°N and 75°N for westerly departures on North Runway, depending on ultimate destination of aircraft.

Legend

- 48 dB LAeq,8h
- 55 dB LAeq,8h
- 57 dB LAeq,8h
- 60 dB LAeq,8h
- 63 dB LAeq,8h
- 66 dB LAeq,8h
- 69 dB LAeq,8h

Scenario B: 2022 Average (LAeq) Night Noise Contours

Average Noise Contours on a Representative Summer's Night, with Proposed Operations



Scenario B

Straight out on South Runway; 15°N divergence for easterly departures on North Runway; split divergence of 15°N and 75°N for westerly departures on North Runway, depending on ultimate destination of aircraft.

Legend

- 48 dB LAeq,8h
- 55 dB LAeq,8h
- 57 dB LAeq,8h
- 60 dB LAeq,8h
- 63 dB LAeq,8h
- 66 dB LAeq,8h
- 69 dB LAeq,8h

Mitigation Measures

Mitigation measures are actions which daa may undertake to reduce any assessed impact of the proposed change of operations (particularly noise) on the local community.

The Balanced Approach

International best practice on noise management at airports focuses on the Balanced Approach. The four pillars of the Balanced Approach are;

Land-use planning

Dublin Airport has benefitted from a far-sighted planning process that has kept the approaches to the runways largely clear of development. Unlike many other international airports, we have very few people living under our flight paths, which means that land-use planning has been effective to date.

Operational procedures

Along with our airport stakeholders, we have implemented a wide range of operational procedures to minimise noise. These include flight Noise Abatement procedures for take-off and landing such as selection and compliance with Environmental Corridors, continuous descent and restrictions on reverse thrust and ground run-up. North Runway will be operated according to Option 7b, which introduces the concept of a preferred runway to lessen the impact of aircraft noise on local communities.

Quieter aircraft

At Dublin Airport we are fortunate to have a large proportion of aircraft that meet the most stringent noise class (Chapter 4). In 2015, almost 95% of aircraft operating here were Chapter 4, the quietest models. There is a ban on the use of the noisiest aircraft (Chapter 2) at the airport.

Operating restrictions

To be applied only as a last resort when other pillars have been exhausted

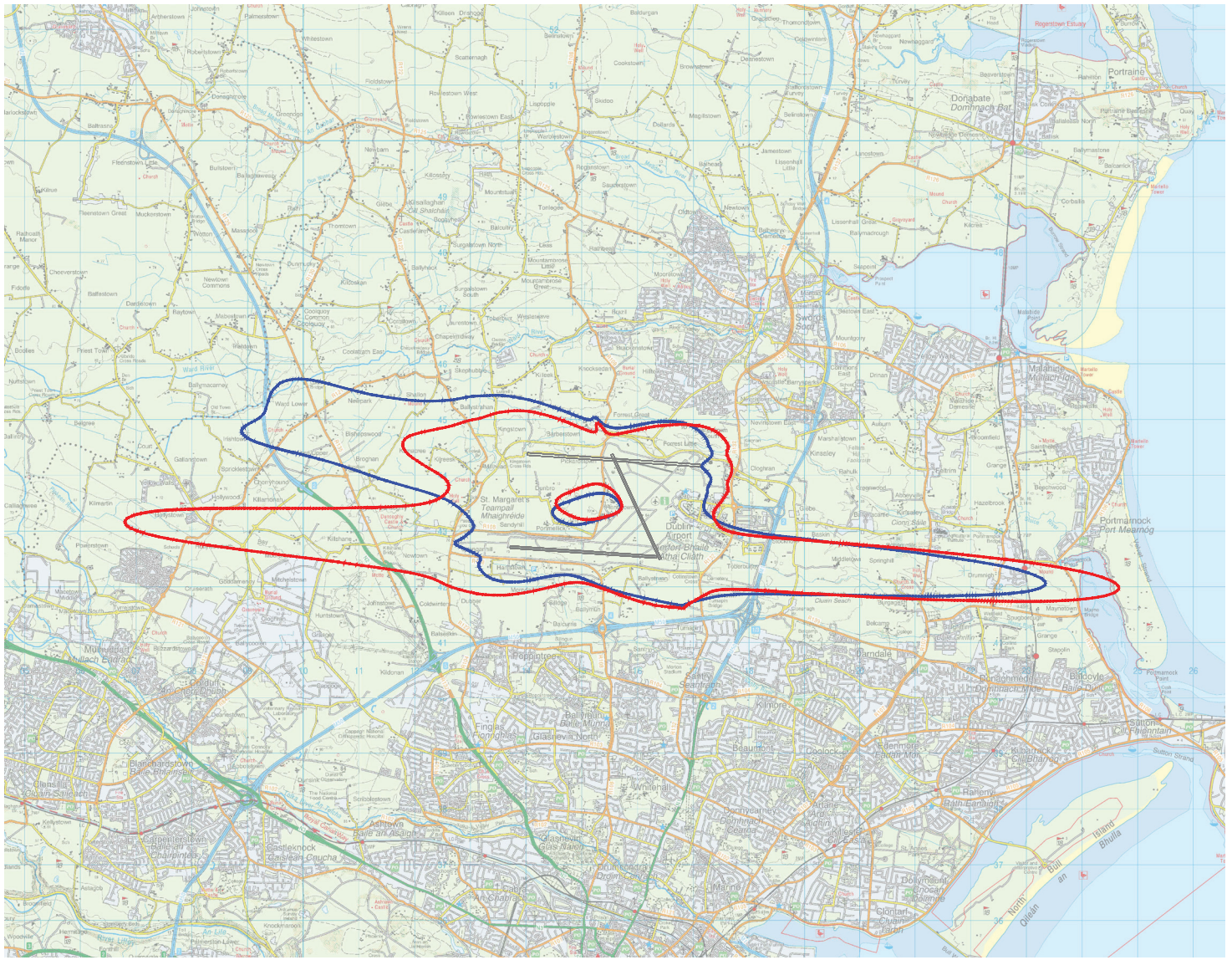
Current Mitigation Measures

Under Conditions 6 and 7 of the planning permission associated with North Runway, daa will develop insulation schemes for schools and residential dwellings located in the 60dB and 63dB contours, respectively. This work is at an advanced stage and full details will be made available to all eligible residents and schools when approved by Fingal County Council. daa is also offering a Voluntary Dwelling Purchase Scheme to eligible residents.

Further potential mitigation

daa will consider mitigations it could put in place to address issues which may be identified in the EIS as a result of a change of permitted operations, should this be implemented. These may include insulation measures for dwellings located in 55dB LAeq 8 hours night and 60dB LAeq 16 hours day contours.

2022 60dB day and 55dB night LAeq contours



Legend

60dB LAeq 16 hours day

55dB LAeq 8 hours night

Issues for Consultation & Next Steps

We wish to ensure that the flight paths chosen have as little impact as possible on our local communities.
With that in mind we are seeking feedback on:

NPR Scenarios

Scenario 1: Straight out on South Runway; 15° divergence for easterly and westerly departures on North Runway.

Scenario 2: Straight out on South Runway; 15° divergence for easterly departures on North Runway; split divergence of 15° and 75° for westerly departures on North Runway, depending on ultimate destination of aircraft.

Criteria for Selecting NPRs

Based on stakeholder feedback to date, the number of dwellings exposed to noise is the major concern for communities surrounding the airport; therefore, daa proposes to select NPRs which minimise the number of dwellings (and other sensitive buildings e.g. schools, hospitals) that are impacted.

Mitigation Measures

To address potential noise impact in the delivery of the change in permitted operations, daa is considering additional mitigation which may include insulation measures for dwellings located in 55dB LAeq 8 hours night and 60dB LAeq 16 hours day contours.

How to Make a Submission

Your views are important and we would appreciate your feedback on these and other issues related to North Runway, through our consultation feedback form.

You can access and complete the form online via our website: www.northrunway.ie, submit your feedback by email to northrunway@daa.ie, or by post to the following address: North Runway Consultation, RED C Limited., East Point Business Park, Clontarf, Dublin 3.

Closing date for submission of all feedback is **FRIDAY, 2ND DECEMBER 2016**.

Next Steps

- Publish feedback from public consultation.
- Publish preferred route based on application of selection criteria adopted.
- Carry out impact assessment of the proposed change of permitted operations using the chosen NPRs.
- Prepare an EIS which will include a suite of mitigation measures to address North Runway environmental impacts.
- Use the EIS in the review of the noise situation at Dublin Airport which the IAA (Irish Aviation Authority) will undertake once appointed as the Competent Authority in charge of airport noise management, as per announcement by the Department of Transport, Tourism and Sport dated 22nd September 2016.