North Runway

Gerry Duggan

Purpose of Presentation

 To advise on developments that have taken place since planning permission was granted for the development of the North Runway by ABP in 2007

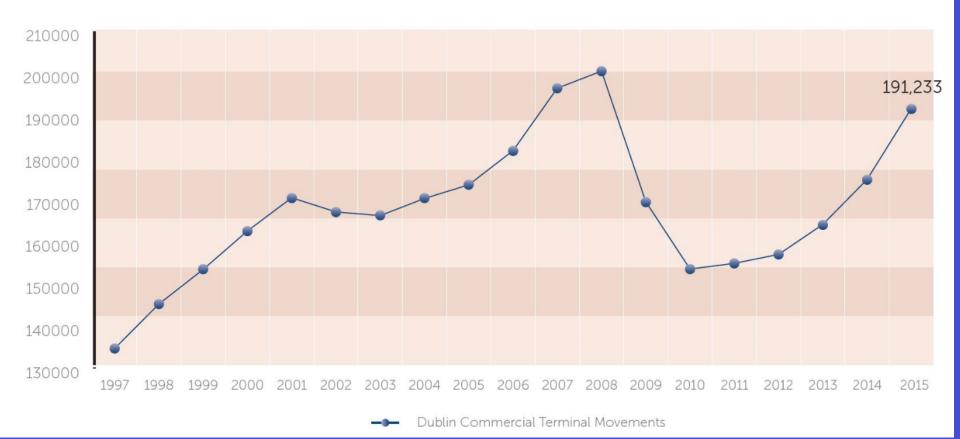
Dublin Airport with North Runway



- Runway Requirements are determined by
- Aircraft movements rather than Passenger nos.

IAA Annual Report 2015

Dublin Airport Commercial Terminal Movements (1997 to 2015)

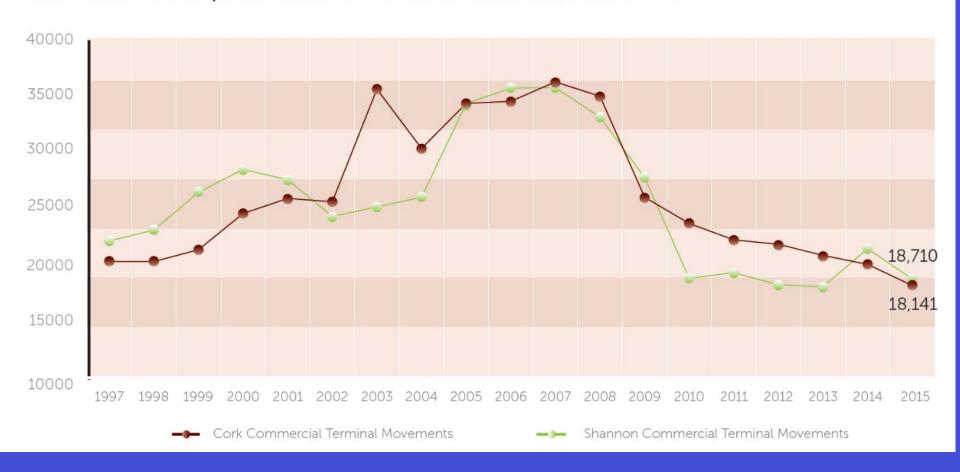


RUNWAY CANNOT ACCOMMODATE GROWTH

- Main runway at Dublin Airport used for both departures and arrivals
- → At peak efficiency the absolute max, capacity for such a runway is between 44 and 48 aircraft per hour, depending on aircraft types, traffic demand etc.
- → Several daily periods where demand already exceeds capacity → congestion on the ground → extra fuel being used while taxiing → departure and arrival delays → aircraft holding
- → Dublin ATC has implemented several innovative efficiency measures to improve infrastructure use but the single runway cannot accommodate more traffic

IAA Annual Report 2015

Shannon and Cork Airport Commercial Terminal Movements (1997 to 2015)



Airport Capacity Constraints

- Problem is not a shortage of runway or terminal capacity
- Rather it is the sub-optimal and non cost effective utilisation of existing capacity
- With completion of motorways to Galway, Limerick, Cork & Waterford Dublin is sucking the life out of other airports
- If North Runway and Terminal 3 are built, at a total cost of €500m+ the trends indicate that Dublin will end up as the only airport in the country
- We need much greater national debate on this issue and its impact on Balanced Regional Development

2007 Planning Permission Conditions

- 3d North Runway shall not be used for take-off or landing between 2300 and 0700
- 5 On completion of North Runway the avg. no. of night time movements shall not exceed 65/night, between 2300 and 0700

The conditions were proposed to ABP enquiry by DAA

"These conditions are particularly onerous and would restrict the usage of the airport to a degree that would largely obviate the purpose of the new runway"

- Chairman Designate of DAA's statement to the Oireachtas Select Committee on TT&S. July 20th 2016

EU Regulation No 598/14 on the establishment of rules and procedures with regard to the introduction of noise related operating restrictions

- Noise restrictions should be based on objective & measurable criteria
- Such information should be reliable, obtained in a transparent manner and available to Competent Authorities and Stakeholders
- Competent Authorities should put in place the necessary monitoring tools
- Competent Authorities should be independent of any organisation involved in airport operation, air transport or air navigation services

New Regulatory Regime

 IAA designated as Competent Authority, required to Collaborate with ABP, FCC & the EPA
 Consult with local residents and business interests Adhere to ICAO Balanced Approach
 Establish an appropriate and robust appeal mechanism

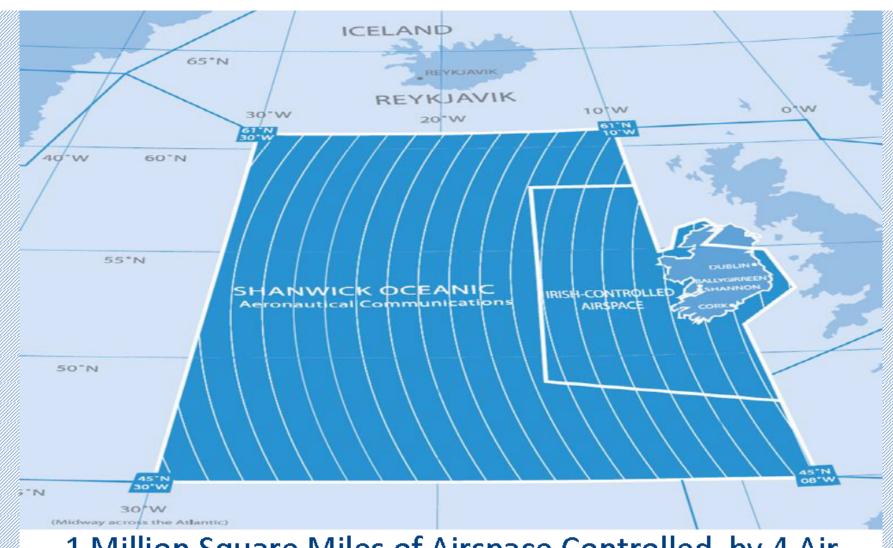
but

 IAA will not be bound by operating restrictions foreseen in planning permission granted in 2007 for new runway

OVERVIEW

- →IAA is functionally separated
 - → Safety and Security Regulation → Operations
- →IAA ATM Operations and Strategy Air Navigation Service Provider (ANSP)
 - → IAA SRD Safety Regulation Division





1 Million Square Miles of Airspace Controlled by 4 Air Traffic Control Centres and Ballygireen HF Radio (NAC)

IAA is Financially Independent of Government

2015 Financial Highlights

	€m
Turnover	183.4
Operating Profit	33.6
Profit after tax	24.8
Dividend paid	6.5

IAA is Financially Independent of DAA

• IAA Turnover 2015

Activity	€m	%
En route	116.4	63.5
Terminal	21.4	11.7
North Atlantic communications	20.0	10.9
Safety Regulation	20.2	11.0
Exempt air traffic	1.7	0.9
Commercial	<u>3.7</u>	<u>2.0</u>
Total	183.4	100.0

IAA presently lacks noise measurement, modelling & impact assessment skills

But it can readily acquire the required expertise

IAA Staff Costs 2015		
Wages & Salaries Pension Contributions etc. Total	€m €m	60.0 <u>26.0</u> 86.0
No of Employees Average Cost / Employee		655
Wages & Salaries Pension Contributions etc.	€000 €000	91.6 39.6

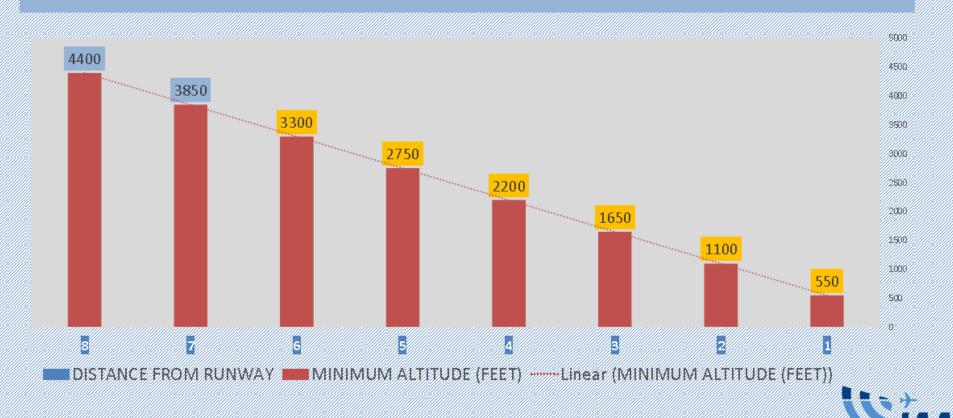
DEPARTURE ROUTE RESPONSIBILITIES

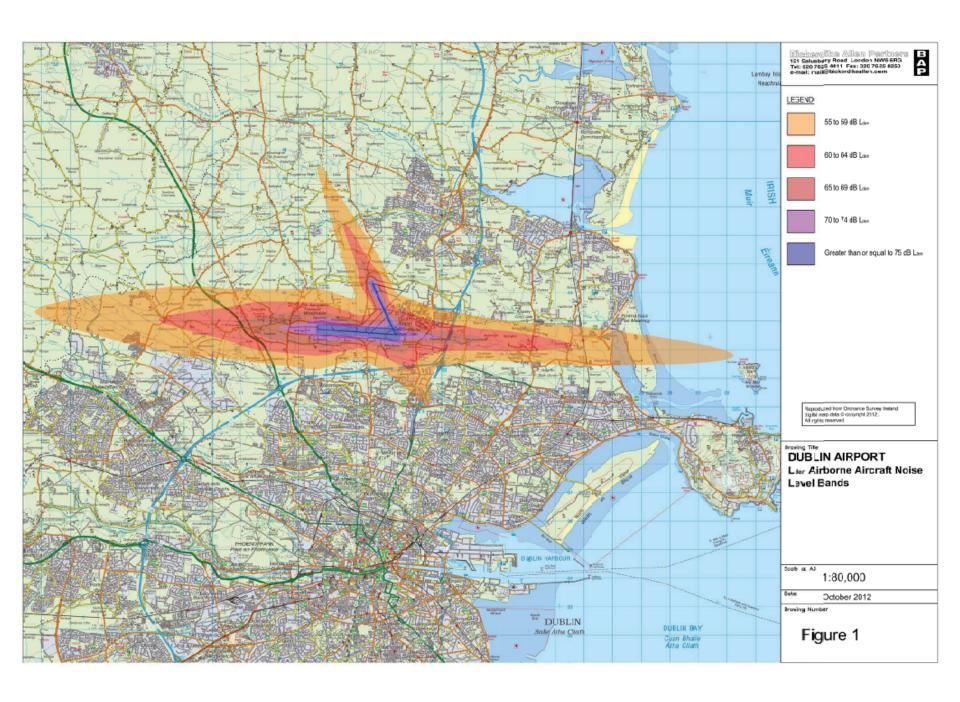
> INITIAL DEPARTURE ROUTE

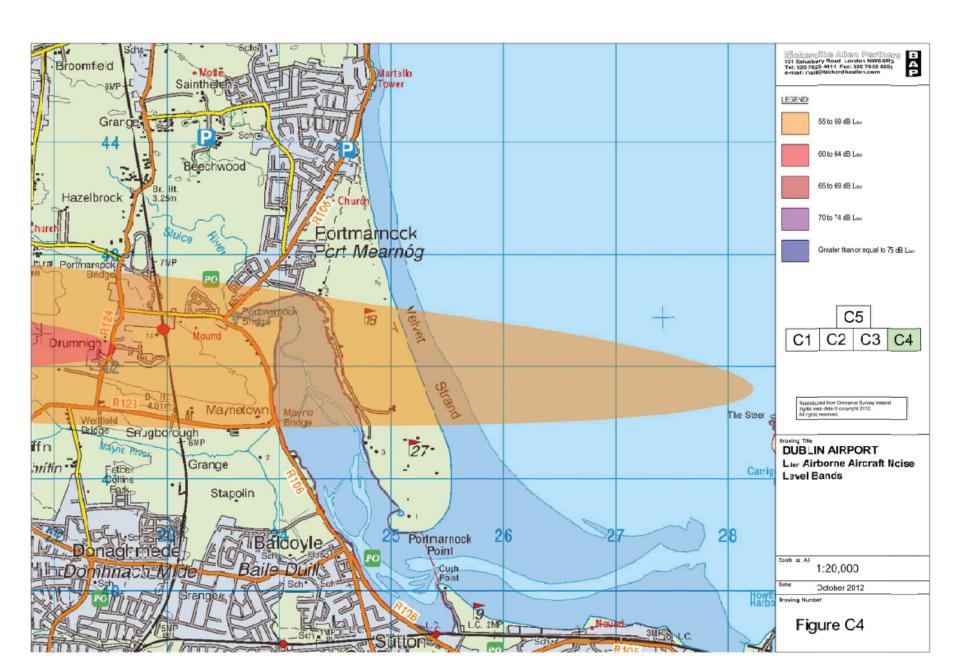
- DAA responsibility
- +Corridor up to 3000ft after take-off
- Volume defined by Airport Authority



DUBLIN MINIMUM DEPARTURE CLIMB REQUIREMENTS







Aircraft Noise and Population Affected

- UK CAA states that noise levels are perceived as annoying if noise level exceeds 57 dB(A)Leq Aircraft noise is recognised as being more annoying than noise from other sources, at same noise level
- DAA & FCC in their contribution to the 2012 report on noise in Dublin Agglomeration reported that just 500 persons in Dublin are exposed to aircraft noise levels in excess of 55 dB(A)Lden
- In Britain the CAA's latest annual report on the number affected by aircraft noise is

Manchester 32,100

Gatwick 3,200

Stanstead 1,700

Impact of North Runway on Noise Problems

- DAA in its submission to 2007 planning enquiry contended that the additional runway would not increase the numbers significantly affected by noise
- This contention was effectively dismissed by ABP
- Now DAA have stated that "Securing the optimum use of runway system will require the examination of a divergence in departure flight paths from "straight out" for North Runway"
- This mode of operation was never considered at the runway planning hearings, nor is it provided for in FCC's Co. Development Plan, or its current Draft Development Plan

Independent Departure Rules

- ICAO requirement is that departing flights diverge at a minimum of 15 degrees following take off
- IAA advised that this could be achieve by the divergence of either or both runway departure paths
- IAA also advised that, if adopted, this mode of operation would apply throughout the day & night
- This proposal very substantially widens the range of households potentially affected by significant aircraft noise

Possible Divergent Flight Paths for Departing Aircraft



Noise Restrictions at large European Airports

rioise restrictions at large European Amports										
Airport	DUB	BCN	BRU	СРН	DUS	FRA	MAN	MAD	PMI	ZRH
PX nos m	25.2	39.7	23.5	26.6	22.4	61.0	23.1	46.8	23.7	26.2
City Center km	13.1	13.4	13.7	13.2	10.3	15.3	15.5	16	9.7	10.3
Restrictions										
APU	X	$\sqrt{}$		$\sqrt{}$	X	X	$\sqrt{}$		$\sqrt{}$	$\sqrt{}$
Night Curfew	X	V	V	V	9-5	11-5	$\sqrt{}$	$\sqrt{}$	X	9-5
Noise Budget	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	X	X	$\sqrt{}$	X	X	X
Noise Limits	X	V	V	$\sqrt{}$	X	$\sqrt{}$	$\sqrt{}$	X	X	X
Noise Surcharge	X	V	V	X	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$	$\sqrt{}$

X

X

Operating

Quota

X

Ground Transportation Issues

- Dublin Airport is now the largest traffic generator in the State
- M50 will reach saturation levels at peak times by next year, and TII have no plans to upgrade northern section
- Dublin is only airport of its size in Europe without direct rail link
- No provision for such a link in Capital Programme 2016-2022
- Much of the local road network serving the airport is substandard
- Solving these problems will cost in excess of €3 Bn