





Dublin Airport Operating Restrictions

Quantification of Impacts on Future Growth

Addendum to the Analysis of June 2021 (Report version 1.3.1)

daa

4089451

September 2023 – Addendum v1.0

MOTT MACDONALD

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Revision	Date	Originator	Checker	Approver
1.0	07/09/2021	JC	NR	JR

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Introduction

Summary of Changes

This Addendum is an update to the report *Dublin Airport Operating Restrictions - Quantification of Impacts on Future Growth* (version 1.3.1, 30 June 2021).

It updates previous Mott MacDonald analysis to reflect the latest information on schedules and traffic forecasts at Dublin Airport. The key differences from the June 2021 study are:

- **New annual air traffic forecast inputs** – the June 2021 study was based on daa's demand forecasts from May 2021, developed in the middle of the COVID-19 pandemic when travel restrictions were still in place and the trajectory for recovery was uncertain.

  This September 2023 Addendum is based on updated (May 2023) daa forecasts which take account of actual traffic recovery and known schedules for the Summer 2023 season.

- **Updated airline fleet renewal information and forecasts** – the COVID-19 pandemic resulted in many airlines grounding aircraft temporarily as well as retiring older types, while the aircraft manufacturers (eg, Airbus and Boeing) reduced aircraft deliveries.

  At the time of the June 2021 study, the Boeing 737MAX had just re-entered service after a 2-year grounding following fatal accidents in 2018/19. Ryanair had yet to take delivery of any B737MAX aircraft and there was uncertainty around how quickly the new aircraft would be rolled out.

  This Addendum updates the airline fleet modernisation assumptions in light of up-to-date information. In general, newer, quieter aircraft are entering service at Dublin Airport (DUB) more quickly than was assumed in 2021.

- **Changes in the Baseline schedule** – the June 2021 study was based on a busy day schedule from Summer 2019, before the COVID-19 pandemic. This Addendum is based on a Summer 2023 busy day schedule, reflecting changes that occurred during the pandemic and its recovery. In particular, there was growth in the number of night period freighter services during the pandemic, which are reflected in this latest analysis..

Annual Traffic Forecasts

Traffic Recovery and Long Term Unconstrained Demand

- The table opposite compares the latest daa Centreline case unconstrained demand forecast (May 2023) used for this Addendum with the previous (May 2021) forecasts used in the June 2021 study.
- As can be seen, the difference in the demand forecasts is a more rapid post-pandemic recovery trajectory during the 2022 to 2026 period. The latest forecasts show unconstrained demand exceeding the 32 mppa level from 2024, compared with 2025 in the previous forecasts.
- The long term forecasts from 2027 onwards are unchanged, however.

Comparison of Unconstrained Annual Forecasts

	2021 Forecast	2023 Forecast	Difference
2015	25.0		
2016	27.9		
2017	29.6		
2018	31.5		
2019	32.9	32.9	-
2020	7.4	7.4	-
2021	7.9	7.9	-
2022	21.0	28.1	+7.1
2023	26.7	31.9	+5.2
2024	31.2	33.0	+1.8
2025	32.3	33.8	+1.5
2026	34.0	35.0	+1.0
2027	35.6	35.6	-
2028	37.0	37.0	-
2029	38.4	38.4	-
2030	39.6	39.6	-
2031	40.5	40.5	-
2032	41.3	41.3	-
2033	42.1	42.1	-
2034	42.7	42.7	-
2035	43.4	43.4	-
2036	44.0	44.0	-
2037	44.7	44.7	-
2038	45.3	45.3	-
2039	46.0	46.0	-
2040	46.6	46.6	-

Source: daa Centreline *forecast scenarios from May 2021 versus May 2023*

Annual Traffic Impacts

Impact of Operating Restrictions

- The tables below summarise the difference in the assessment of the impacts of the operating restrictions between the 2021 study and this 2023 Addendum.
- Scenario D applies only the 32 mppa limit, while Scenario E also applies Conditions 3d (65/night limit) and Condition 5 (23:00-07:00 single runway operations).
- The initial impact of the operating restrictions in similar (a loss of 1.8 to 1.9 mppa) between the 2021 study and this addendum, but the overall impact is less in the 2023 Addendum as the 32 mppa limit takes effect earlier (from 2024).

2021 Study – Annual Traffic Impact Summary (millions of passengers)

	2022	2023	2024	2025	2022-2025 Total
Scenario D – 32m cap only	21.0	26.7	30.8	32.0	110.5
Scenario E – Conditions 3d/5	19.6	24.9	29.3	30.4	104.2
Difference	-1.4	-1.8	-1.6	-1.6	-6.3

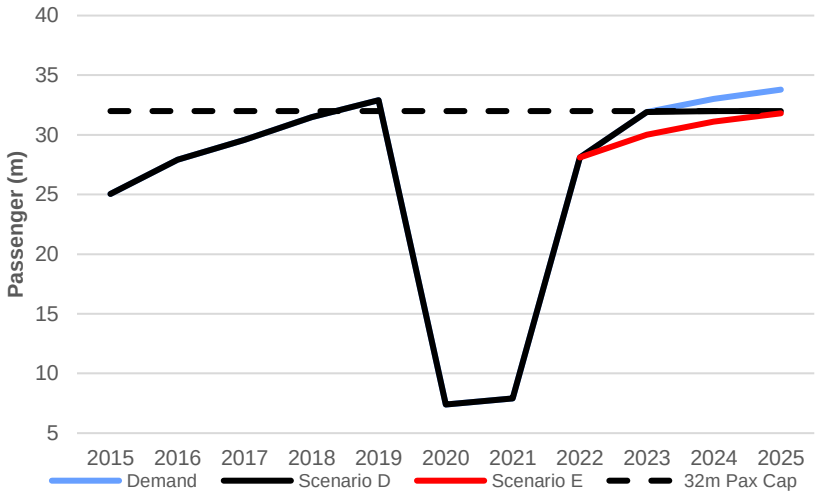
2023 Addendum – Annual Traffic Impact Summary – (millions of passengers)

	2022	2023	2024	2025	2022-2025 Total
Scenario D – 32m cap only	28.1	31.9	32	32	124.0
Scenario E – Conditions 3d/5	28.1	30.0	31.1	31.8	121.0
Difference	-	-1.9	-0.9	-0.2	-3.0

Source: Mott MacDonald analysis

Note:
*Scenario D – without Conditions 3d and 5 in place and with 32m annual passenger cap **(Proposed scenario)**;*
*Scenario E – with Condition 3d and 5 in place and the 32m annual passenger cap **(Permitted scenario)**, as referred to in the planning application and Environmental Impact Assessment Report (EIAR)*

DUB Annual Passenger Forecasts – 2023 Addendum



Night Movement Demand (23:00 – 07:00 period)

Current Night Movements

In Summer 2019, there were 113 regularly scheduled flights during the 23:00-07:00 night period(1). Short haul scheduled services make up the bulk of these night flights, with departures between 06:00-07:00 and arrivals after 23:00. There were 17 long haul night arrivals in the early morning.

The night cargo operations are primarily flights by the package integrators such as DHL, FedEx, TNT and UPS operating to their main sortation hubs. These operations are very time-critical in order to connect at these hubs and to achieve an overnight package delivery service.

Night cargo flights grew significantly during the pandemic, from 9 on a typical night in 2019 to 24 in the baseline schedule for 2025.

Future Night Movement Demand

As overall DUB traffic recovers to 2019 pre-pandemic levels, demand for night flights is expected to be higher at 133 movements by 2025 (+15%). This is due mainly to growth in night cargo flights.

The table opposite also shows the degree of reduction in daily night movements that would be required to meet the 65/night operating restriction (23:00 – 07:00 period) contained in the North Runway's original planning permission.

It should be noted that there is no established process to confiscate night slots from airlines, so the mechanism to achieve such reductions in night flights is unclear and untested.

Dublin Forecast Night Movement Demand 23:00 – 07:00 (based on busy day schedules)

Flight Type	2019	2025	Constrained
Pax Scheduled	101	103	59
Short haul	*84*	*87*	*50*
Long haul	*17*	*16*	*9*
Pax Charter	3	2	0
Cargo	9	24	6
Scheduled sub-total	**113**	**129**	**65**
Other	3	4	0
Total	**116**	**133**	**65**

Capacity Constraints

Runway Capacities

- The table opposite details the runway capacities assumed for this addendum.
- The hourly capacities are based on:
  - Single runway mixed mode operations at night
  - Segregated mode (separate arrival and departure runways) during non-peak daytime hours
  - Semi mixed mode at peak times, with one runway operating in mixed mode (both arrivals and departures) and the other runway handling either arrivals or departures depending on the demand peak.
- The operating hours for each mode depends on the constraint scenario.
  - Adopting the ANCA night flying conditions, where single runway operations apply 00:00 to 05:59, the departures peak occurs 06:00-06:59 and the arrivals peak occurs 22:00-23:59.
  - Adopting the original 2007 planning condition night restrictions, single runway operations apply 23:00 to 07:00, the departures peak shifts later to 07:00-07:59 and the arrivals peak shifts earlier to 22:00-22:59 (due to the need to retime flights out of the 23:00-07:00 night period).
- In addition to hourly limits, a 10 minute scheduling constraint is applied to smooth demand within each hour.

Assumed Runway Capacities

	Arrivals	Departures	2-way
Single Runway – Night			
60 minute	27	27	45
10 minute	6	6	9
Segregated Mode – Daytime except peaks			
60 minute	35	44	79
10 minute	7	8	15
Semi Mixed Mode – Departures Peak			
60 minute	27	71	89
10 minute	5	12	15
Semi Mixed Mode – Arrivals Peak			
60 minute	62	27	80
10 minute	11	5	15

Note: The unconstrained schedule (if there were no 23:00-07:00 night limits) departures peak hour is 06:00-06:59. With a 65/night limit during the period 23:00-07:00, the constrained departures peak hour shifts later to the 07:00-07:59 hour.

Assumed Runway Operating Periods

	Constraints (ANCA Conditions)	Constraints (2007 Conditions)
Single Runway – Night		
Period	00:00-05:59	23:00-07:00
Segregated Mode – Daytime except peaks		
Period	07:00-21:59	08:00-21:59
Semi Mixed Mode – Departures Peak		
Period	06:00-06:59	07:00-07:59
Semi Mixed Mode – Arrivals Peak		
Period	22:00-23:59	22:00-22:59

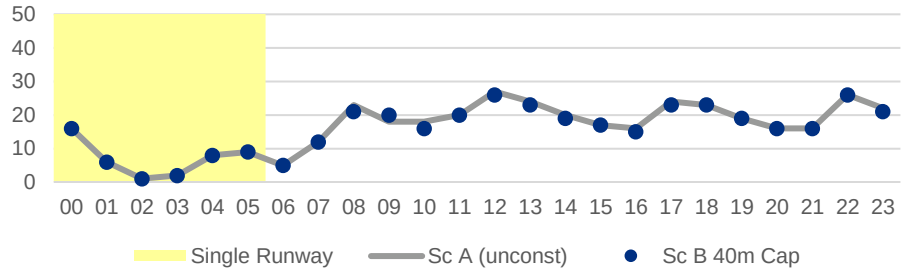
Constrained Case Summary

ANCA Regulatory Decision 2022 Conditions

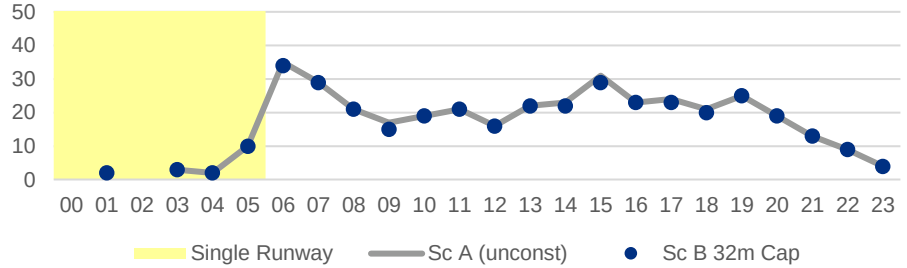
- **Night Quota Scheme with annual limit of 16,290 between 23:00 to 06:59**
- **Single runway operations 00:00 to 05:59**

- The charts opposite show the effect of the slot coordination exercise to produce the constrained schedule based on the ANCA Regulatory Decision 2022 conditions.
- The patterns of demand are shown for 2024, which is the year when a traffic level of 32 mppa traffic level is expected to be reached, returning to 2019 levels.
- With dual runway operations possible during the hours 06:00-23:59 under the ANCA regulatory decision, the runway hourly capacities are sufficient to meet demand. Therefore, there is not a significant difference between unconstrained demand of Scenario A and the runway capacity constrained schedule for Scenarios D.

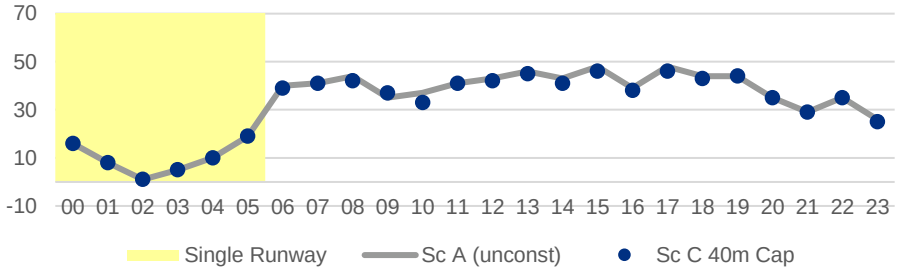
Demand Profile Arrivals - 2024
Scenario A (unconstrained) vs
Scenario D (Single Runway 00:00-05:59)



Demand Profile Departures - 2024
Scenario A (unconstrained) vs
Scenario D (Single Runway 00:00-05:59)



Demand Profile Totals - 2024
Scenario A (unconstrained) vs
Scenario D (Single Runway 00:00-05:59)



Source: Mott MacDonald analysis

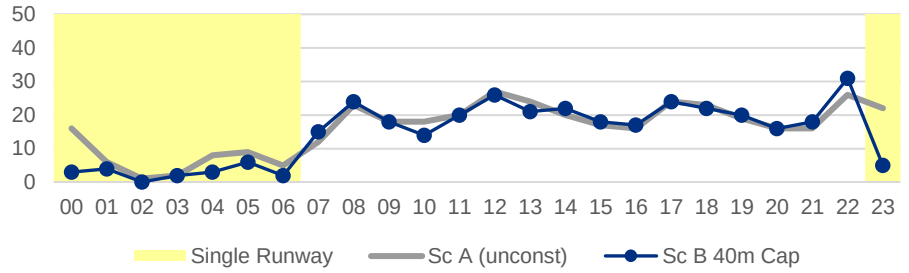
Constrained Case Summary

Original 2007 Planning Conditions

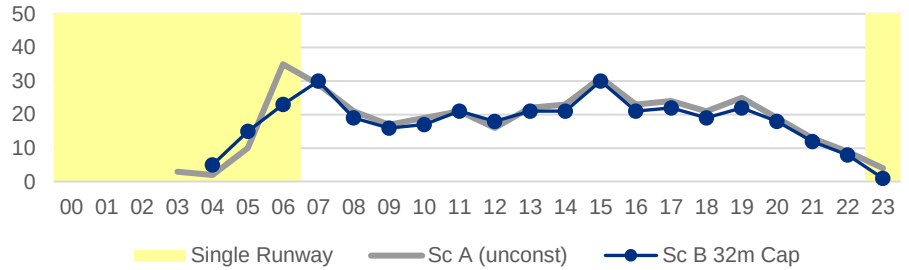
- **Night movement limit of 65/night between 23:00 to 07:00**
- **Single runway operations 23:00 to 07:00**

- The charts opposite show the effect of the slot coordination exercise to produce the constrained schedule based on the original 2007 planning conditions.
- The patterns of demand are shown for 2024, which is the year when a traffic level of 32 mppa traffic level is expected to be reached, returning to 2019 levels, in the unconstrained case.
- The 65/night operating restriction forces flights to be retimed outside the 23:00 – 07:00 night period, creating new peaks in movements in the 07:00 hour and, to a lesser extent, the 22:00 hour.

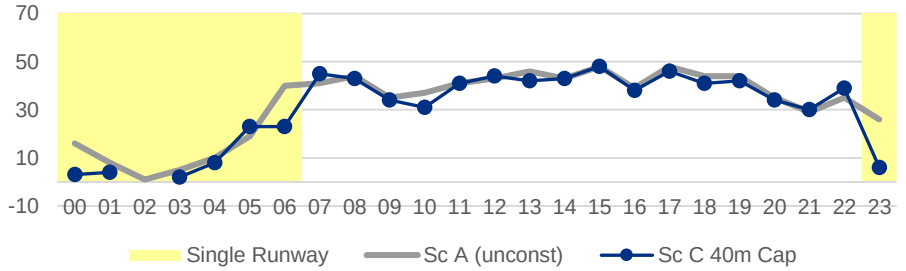
Demand Profile Arrivals - 2024
Scenario A (unconstrained) vs
Scenario E (65/night, Single Runway 23:00-06:59)



Demand Profile Departures - 2024
Scenario A (unconstrained) vs
Scenario E (65/night, Single Runway 23:00-06:59)



Demand Profile Totals - 2024
Scenario A (unconstrained) vs
Scenario E (65/night, Single Runway 23:00-06:59)



Source: Mott MacDonald analysis

Fleet Modernisation

1. Summary
2. **Fleet Modernisation**
3. Annual Traffic Impact

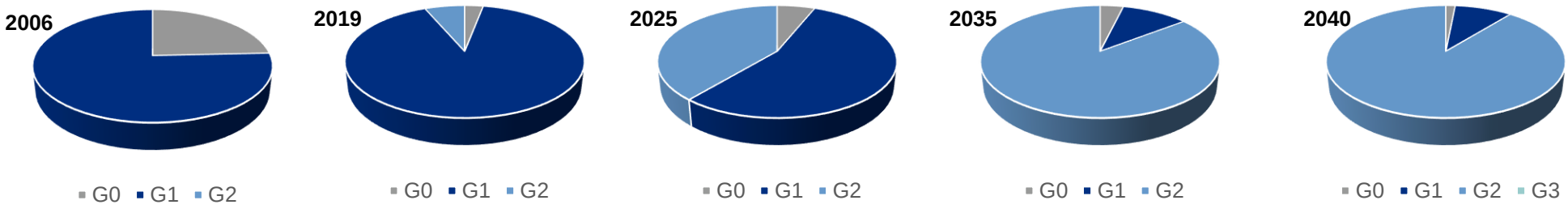
Fleet Modernisation

Introduction

In 2019, around 91% of DUB operations use the current generation (G1) aircraft types, with 3% of movements operated by older aircraft (G0) and 6% of movements operated by the most modern (G2) types.

Our study predicts that the current G1 aircraft types will be largely replaced on a phased basis by next generation G2 types by the mid 2030's. New next generation aircraft types (G3) are expected to enter service potentially from the late 2030s to replace G2 types, but no G3 types are assumed by 2040 at DUB.

DUB Fleet Evolution 2006 - 2040



Source: Mott MacDonald analysis of daa data and schedules (2006, 2019), Mott MacDonald projections (2025-2040)

Note on Aircraft Generation Categorisation
For the purposes of these analyses, aircraft have been categorised into generations of aircraft technology:

- **Generation 0 (G0) –** Older aircraft types, typically developed in the 1970s or 1980s and now generally out of production, eg, B737 Classic (300/400/500), B757, B767, A300, A310
- **Generation 1 (G1)** – Current aircraft types, typically developed in the 1990s or 2000s and still in production, eg, B737NG (700/800/900), B777, A320 series, A330, A340, A380, Bombardier CRJ, Embraer EJets, Avro RJ, Bombardier Q400, ATR42/72
- **Generation 2 (G2)** – Latest aircraft types recently entering production or under development, eg, B737MAX, B787, B777X, A320neo, A330neo, A350, Bombardier Cseries/Airbus A220, Embraer Ejet-E2, Sukoi Superjet
- **Generation 3 (G3)** – Further new-generation aircraft types not yet in development (see aircraft development cycle on the following page)

Aircraft Manufacturers' Development and Production Cycle

Aircraft development cycle

The development of commercial transport aircraft represents large capital investments for the aircraft manufacturers, typically following a 20 to 30 year cycle between generations.

The pace of aircraft development depends on the rate of improvement in technology (eg, engine efficiency), with new types typically seeking to achieve a 20% improvement in seat-kilometre costs over previous generation competitors, improved fuel efficiency and reduced noise.

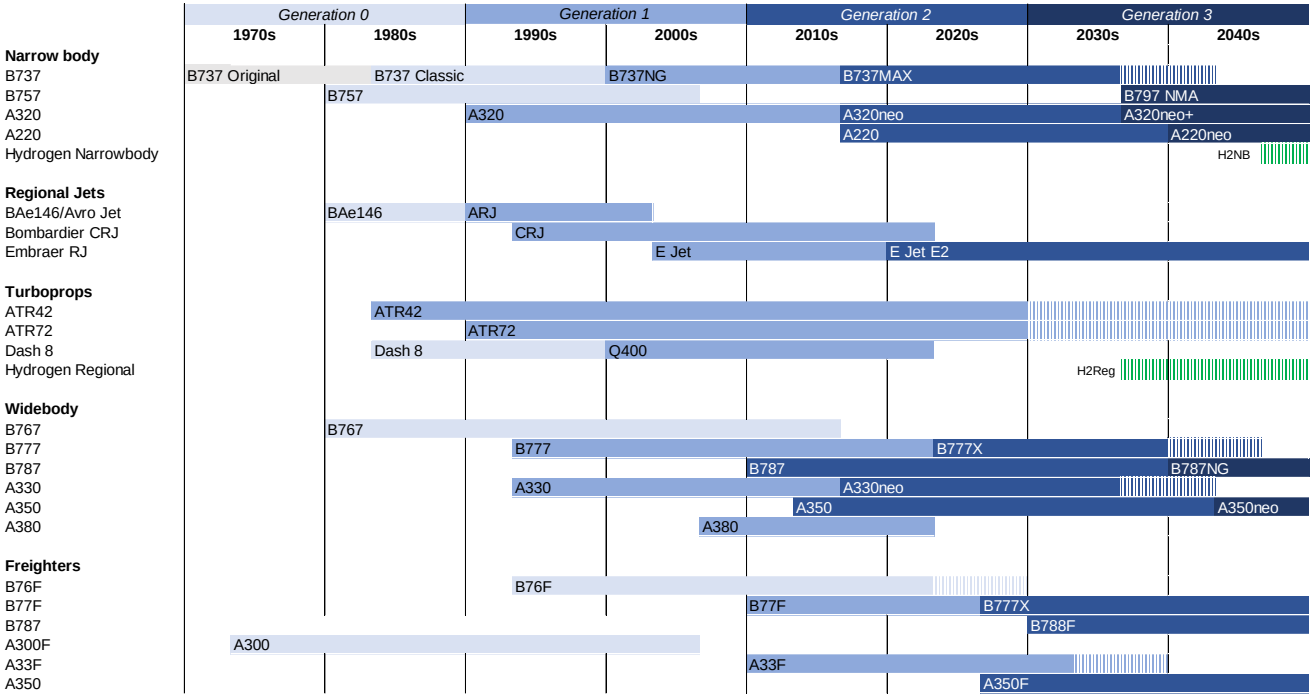
Another factor which influences manufactures' commitment to new aircraft development is competition between OEMs. For example, Airbus developed the A350 as a response to the sales success of Boeing's B787. Similarly, Boeing launched the B737MAX as a response to Airbus' A320neo programme.

Once in service, aircraft have an operational lifespan of around 25 years in mainline service, and longer as freighter conversions and as niche charter aircraft. As a consequence, an aircraft type may be in active service over 50 years after its initial development. For example, the A320 first went into service in 1988, and was in production until 2020. A newly-manufactured A320 entering airline service in 2020 is likely to still be flying until the mid 2040s.

Manufacturers are currently investigating the possible development of new zero-carbon aircraft, and a hydrogen powered aircraft could enter service in the mid 2030s or 2040s. Such radially new technology is still in early stages of development, and remains speculative. Therefore, the fleet assumptions for this study assume only latest generation conventional aircraft using Sustainable Aviation Fuels (equivalent to fossil jet fuels).

Commercial Aircraft Production Cycle

Dates of aircraft types in production by generation



Source: Mott MacDonald analysis, select aircraft types relevant to DUB

DUB Fleet renewal

COVID-19 Impacts

The worldwide spread of the COVID-19 in March 2020, and consequent lockdowns and restrictions on air travel, led to a crisis in the aviation industry and economic disruption in the general economy. The DUB recovery scenario for this study expects traffic returns to 2019 levels by 2024.

Global Impacts

The demand/capacity and financial aspects of the COVID-19 crisis is having two types of impact on airline fleets:

- Firstly, some airlines accelerated the retirement of older aircraft, which tend to be less fuel efficient and noisier
- Secondly, some airlines deferred the ordering and delivery of new aircraft types(*), which tend to have better environmental performance

Overall, as traffic recovers, airline fleet renewal is resuming long-term trends. Aircraft are retired and replaced with newer, more fuel efficient and (generally) quieter aircraft types at around 25 years of service.

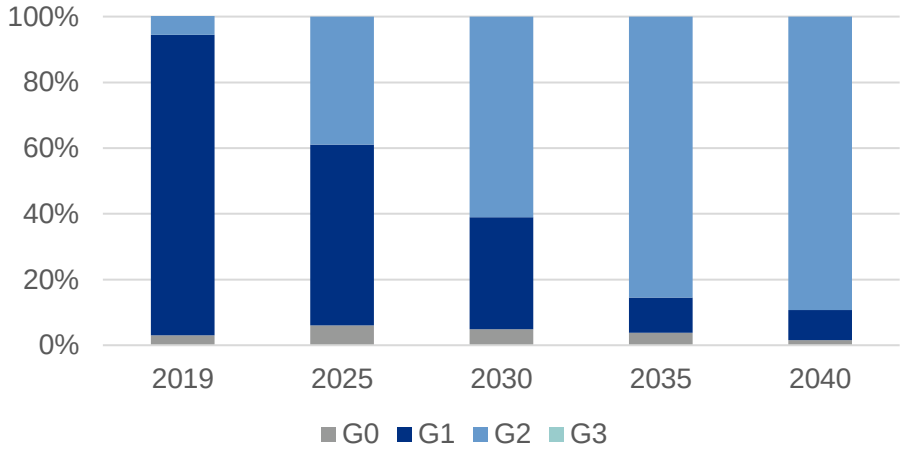
Dublin Airport Fleet Renewal

The chart below shows the evolution of DUB fleet during the period to 2040 considered in this study.

Overall, the airport is undergoing a fleet renewal phase, replacing current G1 generation aircraft types with the latest G2 types. This process had started by 2019 and will be largely complete by 2035.

The pace of DUB's fleet modernisation is sensitive in particular to Ryanair's replacement of B737-800s (G1) with new B737-8 MAX 200s and B737-10 MAX (G2). Ryanair have a Europe-wide fleet of over 500 aircraft, only 33 of which are based in DUB. Therefore the pace of Ryanair's DUB fleet renewal is largely a strategic choice for the airline.

DUB Fleet Evolution 2019 - 2040



Source: Mott MacDonald analysis of daa data and schedules (2019), Mott MacDonald projections (2025 onwards)

Annual Traffic Impact

1. Summary
2. Fleet Modernisation
3. **Annual Traffic Impact**

Annual Traffic – daa Input Forecasts for 2023 Addendum

Centreline case (May 2023) used for busy day forecast schedule analysis

Annual Passengers (m)

DUBF20-01 Passengers (mppa)			
Year	Centreline	Low	High
2011	18.7	18.7	18.7
2012	19.1	19.1	19.1
2013	20.2	20.2	20.2
2014	21.7	21.7	21.7
2015	25.0	25.0	25.0
2016	27.9	27.9	27.9
2017	29.6	29.6	29.6
2018	31.5	31.5	31.5
2019	32.9	32.9	32.9
2020	7.4	7.4	7.4
2021	7.9	6.0	10.0
2022	28.1	26.5	28.0
2023	31.9	27.5	32.0
2024	33.0	28.2	33.3
2025	33.8	30.3	34.8
2026	35.0	32.1	36.1
2027	35.6	29.8	39.9
2028	37.0	30.7	41.1
2029	38.4	31.6	42.4
2030	39.6	32.5	43.7
2031	40.5	33.3	44.7
2032	41.3	34.1	45.7
2033	42.1	34.9	46.7
2034	42.7	35.6	47.6
2035	43.4	36.3	48.4
2036	44.0	37.0	49.3
2037	44.7	37.7	50.1
2038	45.3	38.4	50.9
2039	46.0	39.1	51.6
2040	46.6	39.8	52.3
2041	47.2	40.3	53.0
2042	47.8	40.8	53.7
2043	48.4	41.3	54.4
2044	49.0	41.8	55.0
2045	49.5	42.4	55.7
2046	50.1	42.9	56.4
2047	50.7	43.3	57.0
2048	51.2	43.8	57.7
2049	51.8	44.3	58.3
2050	52.3	44.7	58.9

Annual ATMs (000s)

DUBF20-01 Movements (000's)			
Year	Centreline	Low	High
2011	162	162	162
2012	164	164	164
2013	170	170	170
2014	180	180	180
2015	198	198	198
2016	215	215	215
2017	223	223	223
2018	233	233	233
2019	239	239	248
2020	93	91	95
2021	133	112	182
2022	212	201	211
2023	239	207	239
2024	245	225	243
2025	248	230	246
2026	255	246	253
2027	256	224	278
2028	263	230	285
2029	270	236	293
2030	276	242	300
2031	282	246	306
2032	286	250	313
2033	291	253	318
2034	295	257	324
2035	299	260	330
2036	302	264	335
2037	306	267	340
2038	310	270	345
2039	314	273	349
2040	318	277	354
2041	322	280	358
2042	325	283	362
2043	329	286	366
2044	333	289	370
2045	336	292	375
2046	340	295	379
2047	344	298	383
2048	347	301	387
2049	350	304	390
2050	354	307	394

Source: daa

Annual Traffic Impact – Constrained Scenarios

Scenario	Condition 3d (single runway)	Condition 5 (night limits)	32m cap	Description
A	na	None	No	*daa input schedule*
B	2300-0700	65/night	No	*Night limit constraints*
C	2300-0600	None	No	*Unconstrained (runway capacity only)*
D	2300-0600	None	Yes	*32m cap only*
E	2300-0700	65/night	Yes	*Night limits + 32m cap*
F	2300-0700	None	No	*Single runway 2300-0700 only*

2021 Study - Annual Passengers (m)

Scenarios	A	B	C	D	E	F
2015	25.0					
2016	27.9					
2017	29.6					
2018	31.5					
2019	32.9	32.9	32.9	32.9	32.9	32.9
2020	7.4	7.4	7.4	7.4	7.4	7.4
2021	7.9	7.9	7.9	7.9	7.9	7.9
2022	21.0	19.6	21.0	21.0	19.6	20.6
2023	26.7	24.9	26.7	26.7	24.9	26.2
2024	31.2	29.3	31.2	30.8	29.3	30.8
2025	32.3	30.4	32.3	32	30.4	31.9
2026	34.0	31.6	34.0	32	31.2	33.3
2027	35.6	32.8	35.6	32	32	34.7
2028	37.0	33.9	37.0	32	32	36.2
2029	38.4	35.1	38.4	32	32	37.6
2030	39.6	36.3	39.6	32	32	39.0
2031	40.5	37.0	40.5	32	32	39.7
2032	41.3	37.6	41.3	32	32	40.4
2033	42.1	38.2	42.1	32	32	41.0
2034	42.7	38.9	42.7	32	32	41.7
2035	43.4	39.5	43.4	32	32	42.4
2036	44.0	40.0	44.0	32	32	43.0
2037	44.7	40.5	44.7	32	32	43.6
2038	45.3	41.0	45.3	32	32	44.2
2039	46.0	41.5	46.0	32	32	44.7
2040	46.6	42.0	46.6	32	32	45.3
Traffic Impact						
2022-2025	-	-7.0	0.0	-0.7	-7.0	-1.7

2023 Addendum - Annual Passengers (m)

Scenarios	A	B	C	D	E	F
2015	25.0					
2016	27.9					
2017	29.6					
2018	31.5					
2019	32.9	32.9	32.9	32.9	32.9	
2020	7.4	7.4	7.4	7.4	7.4	
2021	7.9	7.9	7.9	7.9	7.9	
2022	28.1	28.1	28.1	28.1	28.1	
2023	31.9	30.0	31.9	31.9	30.0	
2024	33.0	31.1	33.0	32	31.1	
2025	33.8	31.8	33.8	32	31.8	
2026	35.0	32.8	35.0	32	32	
2027	35.6	33.2	35.6	32	32	
2028	37.0	34.5	37.0	32	32	
2029	38.4	35.6	38.4	32	32	
2030	39.6	36.6	39.6	32	32	
2031	40.5	37.4	40.5	32	32	
2032	41.3	38.2	41.3	32	32	
2033	42.1	38.8	42.1	32	32	
2034	42.7	40	42.7	32	32	
2035	43.4		43.4	32	32	
2036	44.0		44.0	32	32	
2037	44.7		44.7	32	32	
2038	45.3		45.3	32	32	
2039	46.0		46.0	32	32	
2040	46.6		46.6	32	32	
Traffic Impact						
2022-2025	-	-5.8	0.0	-2.8	-5.8	

Notes: For the 2023 Addendum, Scenarios C and D apply single runway capacity 00:00-06:00; Scenario B not updated beyond 40 mppa; Scenario F not updated

Annual Traffic Impact – Constrained Scenarios

Scenario	Condition 3d (single runway)	Condition 5 (night limits)	32m cap	Description
A	na	None	No	*daa input schedule*
B	2300-0700	65/night	No	*Night limit constraints*
C	2300-0600	None	No	*Unconstrained (runway capacity only)*
D	2300-0600	None	Yes	*32m cap only*
E	2300-0700	65/night	Yes	*Night limits + 32m cap*
F	2300-0700	None	No	*Single runway 2300-0700 only*

2021 Study - Annual ATMs (000s)

Scenarios	A	B	C	D	E	F
2015	198					
2016	215					
2017	223					
2018	233					
2019	239	239	239	239	239	239
2020	93	93	93	93	93	93
2021	133	133	133	133	133	133
2022	176	166	176	176	166	173
2023	208	195	208	208	195	204
2024	232	219	232	229	219	228
2025	240	227	240	236	227	237
2026	249	232	249	236	233	246
2027	256	238	256	236	236	253
2028	263	244	263	236	236	260
2029	270	249	270	236	236	267
2030	276	255	276	236	236	272
2031	282	259	282	236	236	278
2032	286	262	286	236	236	282
2033	291	266	291	236	236	286
2034	295	270	295	236	236	289
2035	299	273	299	236	236	292
2036	302	276	302	236	236	296
2037	306	279	306	236	236	300
2038	310	282	310	236	236	303
2039	314	285	314	236	236	307
2040	318	289	318	236	236	310
Traffic Impact						
2022-2025	-	-48	0	-6	-48	-13

2023 Addendum - Annual ATMs (000s)

Scenarios	A	B	C	D	E	F
2015	198					
2016	215					
2017	223					
2018	233					
2019	239	239	239	239	239	
2020	93	93	93	93	93	
2021	133	133	133	133	133	
2022	212	212	212	212	212	
2023	239	218	239	239	218	
2024	245	223	245	240	223	
2025	248	227	248	240	227	
2026	255	232	255	240	228	
2027	256	233	256	240	228	
2028	263	238	263	240	228	
2029	270	244	270	240	228	
2030	276	248	276	240	228	
2031	282	253	282	240	228	
2032	286	257	286	240	228	
2033	291	261	291	240	228	
2034	295	269	295	240	228	
2035	299		299	240	228	
2036	302		302	240	228	
2037	306		306	240	228	
2038	310		310	240	228	
2039	314		314	240	228	
2040	318		318	240	228	
Traffic Impact						
2022-2025	-	-64	0	-14	-64	

Notes: For the 2023 Addendum, Scenarios C and D apply single runway capacity 00:00-06:00; Scenario B not updated beyond 2034; Scenario F not updated

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