
DUBLIN AIRPORT
“Response to Draft Decision on Summer 2019 Coordination Parameters at Dublin Airport”
10 September 2018

Executive Summary

Dublin Airport welcomes the opportunity to respond to the Draft Decision on Slot Coordination Parameters for Summer 2019.

The Commission for Aviation Regulation ('the Commission'), by virtue of Section 8(1) of the Aviation Regulation Act, 2001, is the competent authority in Ireland for the purposes of Council Regulation (EEC) No.95/93 (as amended) on common rules for the allocation of slots at Community Airports, other than the function of the coordinator. Article 6 of the Slot Regulations states that, at a coordinated airport, the member state responsible shall ensure the determination of the parameters for slot allocation twice yearly, while taking account of all relevant technical, operational and environmental constraints as well as any changes thereto.

Article 5 of the Slot Regulation sets out the tasks of the Coordination Committee¹ which include making proposals concerning or advising the member state on:

- the possibilities for increasing the capacity of the airport determined in accordance with Article 3 or for improving its usage;
- the coordination parameters to be determined in accordance with Article 6;
- all questions relating to the capacity of the airport.

Dublin Airport proposed several changes to the Coordination Parameters for the Summer 2019 (S19) scheduling season to its Coordination Committee in August 2018. This proposal included increases to runway and terminal capacity limits. The proposal was modelled by Dublin Airport using our own simulation modelling consultants and was subsequently shared with Helios, the capacity consultants appointed by the Commission, to inform their modelling. All modelling results were shared with the Coordination Committee and were used to agree the Committee's advice to the Commission. The Committee agreed to increase Terminal Capacity by majority vote. The Committee agreed to support increases to runway capacity in two hours only, rather than in nine hours as proposed by Dublin Airport.

The Commission has set out its Draft Decision which is:

- Relative to the Summer 2018 runway limits, increase the Total movement cap by 1 in the 0800, 0900, 1700, and 1900 hours and 2 in the 1800 hour.
- Relative to the Summer 2018 runway limits, increase the Arrivals cap by 1 in the 0800, 0900 hours and increase the Departures cap by 2 in the 1800 hour.
- Increase the assumed load factor for assessing compliance with the passenger terminal limits to 95%, for scheduled services. Adjust the terminal limits correspondingly, such that the point at which a proposed operation will hit one of the terminal limits is the same as for Summer 2018.
- Maintain the existing hard parameter on stands, and referral parameters on Terminal 2 Check-in desks and US Preclearance.
- Approve Local Guideline 1, which relates to time critical operations, for implementation from 1 October 2018.

Dublin Airport welcomes and supports this decision to increase runway capacity. We would however, ask the Commission to re-examine the impact of declaring capacity in line with Alternative 2 which was also modelled by Helios. Our proposal for extra capacity continues to be demand led,

¹ Membership of the Coordination Committee comprises Dublin Airport, the Irish Aviation Authority and airlines operating at Dublin Airport. While membership is open to all airlines operating at the airport, the following participated in the Summer 2019 process: Aer Lingus, Air France/KLM, American Airlines, British Airways, CityJet, Delta Air Lines, Hainan, Iberia Express, Lufthansa, Ryanair, Stobart Air, TUI and United Airlines.

with new and existing customers requesting access to infrastructure. This targeted incremental capacity is key to improving access and increasing choice for consumers at desired times. We believe these changes will provide current airlines with an opportunity to optimise their current slot portfolio and furthermore release capacity for new operators and services.

We are mindful of aggressive capacity releases at other airports and we support a targeted and prudent policy of releasing capacity in incremental steps, in response to demand requirements, whilst maintaining service quality. Our view is summarised below:

1. The proposed changes to the runway scheduling limits represent a targeted, incremental release of capacity. The impact of these changes on runway throughput has been modelled by NATS, Dublin Airport's Runway Capacity consultants. The impact on the airfield has been modelled by Arup. The results of both models support the release of extra runway capacity without incurring delays that exceed the relevant criterion assessed. We therefore endorse the proposed runway coordination parameters but would strongly urge that Alternative 2 be re-examined with a view to further increasing the capacity declared in line with that scenario
2. We have canvassed for changes to the assumed load factor for the terminal coordination parameters for several years and we welcome and support the draft decision to change these and adjust the terminal limits accordingly
3. We support retaining the stand parameter as a hard constraint and referring to the airport for detailed assessment where demand exceeds supply
4. We support the Commission's draft decision to retain the T2 check in and US Preclearance referral parameters

Dublin Airport Coordination Parameters Proposal

In developing its coordination parameter proposal, Dublin Airport took several factors into account. These included:

- Market intelligence from airlines regarding their growth plans including preferred slot times to suit their network connectivity and aircraft size;
- Existing levels of slot utilisation and identification of time periods where airlines would experience difficulties obtaining slots;
- Summer 2018 performance including queue times, taxi times and on-time performance (OTP);
- Infrastructural projects that would be delivered in advance of the S19 season;
- Infrastructural projects that would be ongoing during the S19 season.

Recognising that a number of infrastructural projects will be onsite in 2019 we believe it is prudent to maintain the current capacity limits from 0500 – 0755 UTC and therefore have not proposed any changes during this period.

We developed a forecast schedule for Summer 2019 based on our growth projections and market intelligence. This was used to complete our own capacity assessment of the terminal and airfield facilities that would be in place for Summer 2019. It identified where demand could be accommodated within the existing coordination parameters and time periods where incremental increases would be required. This forecast schedule was shared with Helios and used to inform its modelling for S19.

Our forecast schedule indicated a need to adjust the runway scheduling limits as follows:

Time (UTC)	Arrivals	Departures	Totals
0800	+1		+1
0900	+1		+1
1000		+1	+1
1100	+1		+1
1200		+1	+1
1600			+1
1700			+1
1800		+2	+2
1900			+1
Total	+3	+4	+10

The runway scheduling limits were adjusted to match the forecast profile of demand in each hour, rebalancing the preference between arrivals and departures and increasing the total number of movements where necessary.

These changes to the scheduling limits were modelled by NATS. Assessment was made of the delays during single runway mixed mode operations for Runway 28, Runway 10 and a weighted average of the two based on operational performance for Summer 2018. In assessing the changes, the delays for the proposal were evaluated against a maximum 10-minute delay criterion which was not to be exceeded for the peak average arrival or departure delays for Runway 28 operations. The modelling results showed that allowing an extra movement in the 1200 hour would breach the 10-minute runway delay criterion and we withdrew the request for the increase in this hour from our original proposal.

Members of the Coordination Committee have previously expressed a desire for Dublin Airport to complete a full airfield simulation model to aid in the decision-making process for the release of runway capacity. It held the view that this modelling should consider the various complexities associated with the airfield operations such as stand allocation rules, requirements for towing aircraft and remote operations. We completed this modelling and shared the results to the Coordination Committee at its meeting on 8th August 2018. We believe the results from this airfield model supports our proposed changes to the summer runway scheduling limits.

We also modelled the impact of changes in operational procedures including:

- Reduced D-A separation from 2,637m to 2,400m;
- Reduction in ADA separation from 5.5nm to 5.25nm.

Airfield Coordination Parameters

Whilst Dublin Airport has completed its own runway and airfield modelling to support our proposed changes to the coordination parameters, we have also worked closely with Helios, the Capacity Consultants appointed by the Commission as they have developed their airfield simulation model. We note that Helios' analysis of the Alternative 3 proposal has demonstrated that introducing this scenario only marginally increases the departure delay profile in the peak periods and it is negligible across the day.

Scenario	Daily Average	Daily Peak
S18	16:21	25:34
Alternative 2	16:43	27:56
Alternative 3	16:39	27:14

The modelling results indicate minor differences between the daily averages and peak taxi times between alternatives 2 and 3 i.e. 4 seconds (16:39 in alternative 3 vs 16:43 in alternative 2) for the daily average taxi out times and 42 seconds (27:14 in alternative 3 vs 27:56 in alternative 2) for the peak values and for that reason we believe Alternative 2 which would potentially allow for an extra slot to be released in the 1000 hour, should be implemented

Dublin Airport provided the Commission and airlines with data showing actual on-time OTP and taxi-out times for S18. We would highlight that while there was a fall in OTP in Summer 2018 relative to Summer 2017 in the first three months of the season it has continued to improve in both July and August. We welcome the Commission's recognition that OTP is driven by a wide range of factors and that many of these are outside Dublin Airport's control and that OTP in isolation is not a particularly reliable indicator of the ability of the airfield to deliver a schedule

Terminal Coordination Parameters

We used our Summer 2019 forecast schedule to model the journeys of arriving and departing passengers through both terminals to understand the demand at key processors e.g. Security Screening, CBP, Immigration etc. This was to ensure the proposed hourly capacities are achievable and do not represent a material reduction in level of service passengers for passengers.

We conducted extensive data collection to support our simulation modelling capabilities. This data includes:

- show-up profiles to check-in, security screening, gates
- baggage per passenger rates
- transaction times
- queuing times

This data was used to calculate the capacity of each processing facility. Based on the results of this modelling exercise we proposed increasing the Terminal Coordination Parameters. We would emphasise the impact of changes that airline baggage policies have on security screening capacity. For Summer 2018 one airline changed its baggage policy and this resulted in a reduction in capacity at each x-ray machine of approximately 30 passengers per hour. This reduction was due to the increase in the volume of bags per passenger through the screening area (security screening capacity is limited by the number of images/bags per hour processed by each x-ray machine).

We support with the Commission's draft decision to adjust the assumed load factors used to 95% for scheduled flights and to increase the hourly limit for departing passengers to 4,130 in both terminals and the hourly limit for arriving passengers in Terminal 1 to 3,960 and 3,400. We would however, caution against increasing these further especially for the arrivals processors until there is clarity regarding Brexit and its potential impact on Immigration facilities.

Referral Limits

We support the Commission's decision to retain the referral limits for T2 Check-in and US Preclearance (CBP). Referral limits are preferable to hard limits in both these areas because they allow for the discussion of possible solutions including; time-changes, introduction of new technologies, or in the case of CBP post clearing. We believe that this approach leads to a more optimal solution for Dublin Airport, airlines and passengers when compared to the alternative of refusing a slot.

Local Guideline 1 – Time Critical Operations

We have worked with ACL to develop the procedures for time critical operations. This guideline is similar to other local rules which have already been implemented at Heathrow, Gatwick, Stansted, etc. Given that there are now multiple hours across the day that are close to or near capacity we believe this rule will provide carriers with the flexibility they need to recover their operations should a flight experience a technical difficulty.

Conclusion

The Commission has relied on a large body of evidence to reach its draft decision. This includes results from simulation models completed by Helios, Arup and NATS to assess a range of scenarios related to the proposed changes in coordination parameters. Each set of results supports the proposed changes. The Commission has also considered evidence provided by Dublin Airport on current performance metrics of the airfield and terminals and the physical processing capabilities of key processors.

There has been an extensive process of engagement and sharing of information over many months between the Commission, Dublin Airport and other members of the Coordination Committee. The determination of the coordination parameters and the methodology used have been presented to the Coordination Committee and discussed in detail in accordance with Article 6(3) of the Slot Regulation.

Given the above Dublin Airport supports the Commission's Draft Decision on Coordination Parameters for Summer 2019 but would strongly urge the Commission to re-examine the modelling results from Alternative 2 and to release the extra slot in the 1000 hour.