

Draft Decision on Winter 2023 Coordination Parameters at Dublin Airport

Commission Paper 1/2023 14 April 2023

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1. Executive Summary

- 1.1 The Commission for Aviation Regulation is the authority charged with declaring coordination parameters at coordinated Irish Airports. In this consultation paper we set out our Draft Decision on the Dublin Airport parameters for the Winter 2023 ('W23') season, which runs from 29 October 2023 to 31 March 2024.¹ The full set of proposed coordination parameters is set out in the Appendix.
- 1.2 Our Draft Decision on the Winter 2023 parameters is to make the following changes relative the Winter 2022 ('W22') parameters:
 - Implement the 'W23 Wishlist' hourly runway capacity ('R60') limits, which involves a range of increases in the declared runway limits in the day hours.
 - Update the within-hour 10 minute ('R10') runway limits to reflect dual parallel runway operations, in line with the S23 declaration.
 - Stand counts are updated to reflect any expected changes by apron area relative to Winter 2022. Otherwise, the form of this parameter is unchanged from W22.
- 1.3 Other parameters are unchanged relative to W22.
- 1.4 In arriving at our Draft Decision, we have examined and relied on a range of evidence. We commissioned fast time simulation modelling of the airfield to assess a range of scenarios relating to potential increases in the runway limits. This work was carried out by Egis. The assessment of these scenarios takes the form of a comparison of a range of airfield metrics. The results from this assessment were shared with the Coordination Committee, and the final report is published alongside this document.
- 1.5 We have considered other evidence with which we have been presented, or which we sought.

 This evidence includes modelling work conducted by Dublin Airport, and its consultants.
- Our proposed decision follows the advice received from the Coordination Committee, when voting rights are assigned in line with the Coordination Committee constitution. The Coordination Committee comprises Dublin Airport, the Air Navigation Services Provider, and is open to all airlines operating at Dublin Airport.
- 1.7 Alongside this paper we have published the following supporting documents:
 - A letter received from the Coordination Committee.
 - The results of the simulation modelling carried out by Egis.
- 1.8 We invite evidence-based responses to this consultation paper. They should be titled "Response to Draft W23 Declaration of Coordination Parameters" and sent by email to info@aviationreg.ie.²

¹ As per the worldwide slot calendar: https://www.iata.org/contentassets/4ede2aabfcc14a55919e468054d714fe/calendar-coordination-activities.pdf

² Respondents should be aware that we are subject to the provisions of the Freedom of Information legislation. Ordinarily we publish all submissions received on our website. We may include the information contained in submissions in reports and elsewhere as required. If a submission contains confidential material, it should be clearly marked as confidential and a redacted version suitable for publication should also be provided. We do not edit submissions. Any party making a submission

- 1.9 The Commission processes your personal data for the purposes of public consultations, in line with our responsibilities under the General Data Protection Regulation 2018; please view our Privacy Statement for full details.³
- 1.10 The deadline for responses to this consultation is **5pm, Thursday 27 April 2023**.
- 1.11 Part 11 of the Air Navigation and Transport Act, 2022, provides for the dissolution of the Commission for Aviation Regulation and the transfer of it's functions to the Irish Aviation Authority (IAA), on a dissolution day to be determined by the Minister.⁴ In relation to the preparations for this date, the Commission and IAA are both working towards having administrative arrangements completed by 30 April 2023. Should the dissolution day be confirmed as 30 April, the Final Decision on the W23 parameters is likely to be made by the IAA.

has sole responsibility for its contents and indemnifies us in relation to any loss or damage of whatever nature and howsoever arising suffered by us as a result of publishing or disseminating the information contained within the submission.

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2. Background

Legislation

- 2.1 Section 8(1) of the Aviation Regulation Act, 2001, states that the Commission for Aviation Regulation (CAR) is the competent authority in Ireland for the purposes of Council Regulation (EEC) No. 95/93, as amended ("the Slot Regulation"). The Commission is therefore responsible for:
 - The designation of the Coordination status of Irish airports.
 - Appointing a qualified schedules facilitator or coordinator, as appropriate, at airports which have been designated as Schedules Facilitated or Coordinated.
 - The determination of coordination parameters at Coordinated airports in line with Article 6 of the Slot Regulation, taking account of relevant technical, operational and environmental constraints as well as any changes thereto.
 - Deciding whether to approve Local Guidelines proposed by the Coordination Committee.
- 2.2 Dublin Airport is designated as Coordinated by the Commission. Airport Coordination Limited (ACL) is the appointed coordinator.
- 2.3 Under Article 5 of the Slot Regulation, one of the roles of the Coordination Committee is to advise the Commission on the coordination parameters to be determined in accordance with Article 6. The Commission attends Coordination Committee meetings as an observer.
- 2.4 Article 6(1) states that the determination of the parameters 'shall be based on an objective analysis of the possibilities of accommodating the air traffic, taking into account the different types of traffic at the airport, the airspace congestion likely to occur during the coordination period and the capacity situation'. Thus, the determination of the parameters is a forward-looking projection in which we must take account of expected demand, capacity (including airspace capacity), and relevant constraining factors, during the relevant season, in an objective manner. This is primarily assessed through simulations of the operation of a forecast W23 flight schedule at the airport.
- 2.5 Article 6(3) of the Slot Regulation details the required interaction between the Commission and the Coordination Committee:
 - "The determination of the parameters and the methodology used as well as any changes thereto shall be discussed in detail within the coordination committee with a view to increasing the capacity and number of slots available for allocation, before a final decision on the parameters for slot allocation is taken. All relevant documents shall be made available on request to interested parties."
- 2.6 In that regard, we consider that in taking account of relevant constraints when drawing up a capacity declaration, we ought to tend towards a maximal rather than minimal approach as regards declaring the airport capacity parameters. This is because of the requirement that discussion within the coordination committee is "with a view to increasing the capacity and number of slots available for allocation." This framing of the determination of the parameters should be given further weight where a parameter is expected to have a constraining effect on demand, given that Article 6(1) requires the determination to be based on the 'possibilities

- of accommodating the air traffic'.
- 2.7 Subsequent sections of this paper detail how these requirements were met by the Commission.

Coordination Committee Engagement Process

- 2.8 To help inform the Coordination Committee and, ultimately, the Commission's decision on the parameters, we engaged Egis to carry out simulations of the expected flight schedule for W23, using the Fast Time Simulation model of the apron, airfield, and airspace in the Dublin Airport TMA (Terminal Manoeuvring Area). This model was originally developed by Egis for the Commission in 2017 and has been used for various simulation exercises since, both in relation to the determination of coordination parameters and also to assess the likely impact of airfield projects proposed by Dublin Airport as part of the Airport Charges determination process.
- 2.9 Prior to running the simulations, Egis re-validated the model. This involves simulating the flight schedule on a recent day of operations, and comparing the simulated airfield metrics (such as taxi time durations and runway throughput) with actual observed metrics on the same day. If necessary, adjustments are made to the model and the process is repeated until a satisfactory result is obtained whereby the model is replicating the actual operation with a sufficient degree of accuracy.
- 2.10 Airlines were asked to submit growth plans for Summer 2023 to ACL. Analysis carried out by ACL indicated that increases in the runway limits would be required to ensure that these plans could be fully facilitated.
- 2.11 Dublin Airport proposed a number of changes to the hourly runway (R60) limits relative to W22, informed by the analysis carried out by ACL, but reduced in scope.⁵ This set of changes, summarised in Table 2.1, is termed W23 Wishlist. There was no proposal for any changes in runway capacity in the hours not listed in Table 2.1.
- 2.12 Dublin Airport noted the following in relation to its proposal:
 - With the North Runway available, the primary capacity constraint shifts from runway to stands/gates. Proposed additional aircraft movements must fit on available stands, which is also necessary to enable modelling of the flight schedule through the full airfield and thus properly test the impact of potential runway limits.
 - As the North Runway operations continue to bed in, it is prudent not to increase capacity by more than c10% in the busiest hours.

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⁵ All references to times or hours are in UTC 24 hour format, unless stated otherwise. Where a reference is made to a particular hour, such as the 0500z hour, this refers to the time period one hour in length commencing from the stated time. To give an example, the 0500z hour spans from 5 am to 6 am UTC. During the winter season, UTC time aligns with Local time. In each hour, a requested departure slot must not bust the hourly Departures limit or the hourly Totals limit, while a requested arrival slot must not bust the hourly Arrivals limit or the hourly Totals limit.

Table 2.1: Wishlist Proposal for Winter 2023

| UTC Hour* | Departures | Arrivals | Totals |
|-----------|------------|----------|--------|
| 0700 | +4 | | +6 |
| 0800 | +1 | | +1 |
| 1000 | +1 | +2 | +2 |
| 1100 | +2 | | +2 |
| 1200 | | +2 | +3 |
| 1300 | +1 | +1 | +2 |
| 1400 | +1 | +1 | +2 |
| 1700 | +1 | +2 | +2 |
| 1800 | +1 | +2 | +3 |
| 1900 | +1 | +1 | +2 |
| 2200 | | +3 | +3 |
| | | | |
| Total | +13 | +14 | +28 |

Source: Coordination Committee

- 2.13 Information provided by airlines was used to develop an anticipated flight schedule on a busy day in Winter 2023, 'the W23 Schedule'. The operation of the W23 Schedule was simulated by Egis. To isolate the effect of a potential decision to adjust the R60 parameters as proposed above, we asked Egis to coordinate the W23 Schedule according to both the proposed Winter 2023 Wishlist limits, and alternatively the current Winter 2022 runway limits. Comparisons were provided between simulated taxi times, ground delay and runway holding delay. Further detail and results of this analysis is set out in Section 3, and the results of the Egis simulations are published alongside this document.
- 2.14 In relation to the passenger terminal (PTB) parameters, Dublin Airport proposed to make no changes relative to W22 in respect of either the departures or arrivals limits. It noted that, as the current C3 security screening equipment trial is ongoing, the departure parameters should not be modified until the true benefits of this new technology can be identified. It did not identify any material changes in respect of arrivals capacity. In both cases, it identified that the Wishlist demand can be accommodated within the existing W22 limits, i.e. the PTB limits are not expected to be a constraining factor on the allocation of slots.
- 2.15 No other changes were proposed relative to the Winter 2022 limits, except updating the stand count to reflect expected changes in the count relative to Winter 2022.
- 2.16 The pre-meeting of the Coordination Committee took place on 15 March 2023. Ahead of the initial meeting, the Egis simulation modelling results were circulated. Dublin Airport also provided various pieces of analysis and modelling results to Committee members ahead of the initial meeting, namely:
 - An update on actual airfield and security queue performance during Winter 2022 compared to Winter 2019 (November to February), prospective projects expected to be delivered for Winter 2023, projects that are expected to be under construction in Summer 2023, and potential operational changes which may be in place for Winter 2023.
 - Simulation modelling carried out by Dublin Airport, and for Dublin Airport by ARUP.

- An update from ACL.
- Proposed coordination parameters for Winter 2023.
- 2.17 The Coordination Committee met again on 27 March to arrive at its advice for the Commission.

Coordination Committee Vote

- 2.18 Coordination Committee members voted on the proposed parameters. Voting rights for Committee members are set out in the Coordination Committee constitution. A set number of votes are allocated to Dublin Airport and the IAA ANSP, with the rest allocated to airlines based on the number of movements flown at Dublin Airport in the preceding year. Only those present (online or in person) can vote.
- 2.19 It is important to note that we consider the voting process to be an indicative part of the Coordination Committee's advice to CAR, rather than corresponding to an "election" of the parameters. As part of the process, we have sought to take into account all positions set out by Coordination Committee members as well as any associated comments or evidence relevant to the parameter declaration.
- 2.20 The votes on the proposed R60 limits are set out in Table 2.3 below. There was unanimous support for the proposals for the hours 1000 to 1800. There were mixed views on the appropriate runway parameters for the hours 0700, 0800, 1900, and 2200, with Dublin Airport, IAA ANSP, and a number of airlines supporting the proposals and others not supporting them. Among those who do not support the proposals, Aer Lingus stated that the North Runway is still operating reduced hours from 0900 to 1800, rather than 0700 to 2300 as previously planned. Aer Lingus considers that, while it is planned to extend the hours from June this year, the risk of further delay to that timeline means that it is not appropriate to add capacity in hours outside the current operational period. British Airways and United Airlines identified concerns around capacity in the 0700 and 0800 hours, including stand occupancy.
- 2.21 No changes were proposed within the Committee in relation to any hour other than those listed below.
- 2.22 The R10 limits were proposed to be updated in line with S23 to reflect dual runway operations. No other changes to airfield limits were proposed, other than updating the stand counts within the stand parameter to reflect changes in these counts, as usual.

Table 2.3: Coordination Committee votes on proposed changes to hourly runway limits

| Member | Votes | 0700 | 0800 | 1000 | 1100 | 1200 | 1300 | 1400 | 1700 | 1800 | 1900 | 2200 |
|--------------------|-------|------|------|------|------|------|------|------|------|------|------|------|
| Aer Lingus | 280 | N | N | Υ | Υ | Υ | Υ | Υ | Υ | Υ | N | N |
| IAA ANSP | 20 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| British Airways | 37 | N | Υ | Υ | Υ | Υ | Y | Y | Y | Y | Υ | N |
| Dublin Airport | 40 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| DHL | 6 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| Emerald | 64 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| FedEx | 5 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| KLM | 17 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| Lufthansa | 22 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| Ryanair | 475 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| Swiss | 10 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| TUI | 8 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| UPS | 5 | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| United | 11 | N | N | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ |
| | | | | | | | | | | | | |
| Total in Favour | | 672 | 709 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 1000 | 720 | 683 |
| % in Favour | | 67% | 71% | 100% | 100% | 100% | 100% | 100% | 100% | 100% | 72% | 68% |

Source: Coordination Committee.

2.23 The Committee then voted on Dublin Airport's proposal to roll forward the terminal building parameters. The results are set out in Table 2.4.

Table 2.4: Coordination Committee votes on proposed Terminal limits

| Member | Votes | Yes | No |
|-----------------|-------|-----|-----|
| Aer Lingus | 280 | ✓ | |
| IAA ANSP | 20 | ✓ | |
| British Airways | 37 | ✓ | |
| Dublin Airport | 40 | ✓ | |
| DHL | 6 | ✓ | |
| Emerald | 64 | ✓ | |
| FedEx | 5 | ✓ | |
| KLM | 17 | ✓ | |
| Lufthansa | 22 | ✓ | |
| Ryanair | 475 | | ✓ |
| Swiss | 10 | ✓ | |
| TUI | 8 | ✓ | |
| UPS | 5 | ✓ | |
| United | 11 | ✓ | |
| | | | |
| Total | | 525 | 475 |

Source: Coordination Committee

- 2.24 The advice from the Coordination Committee is therefore to make no changes to the terminal parameters, with Ryanair opposed to this proposal on the ground that T1 winter parameters should be in line with summer, and that the winter parameters are being artificially constrained.
- 2.25 Thus, overall, the advice of the Coordination Committee is to implement the W23 Wishlist changes to the R60 limits, update the stand counts, and otherwise make no changes to the parameters.

3. Airfield Coordination Parameters

- 3.1 This section addresses, in turn:
 - Runway parameters
 - Stand parameters
- 3.2 In line with the majority advice from the Coordination Committee, the Commission's Draft Decision is to implement the Wishlist adjustments to the W22 hourly runway limits ('R60'), as set out in Table 3.1.

Table 3.1: Draft changes to runway limits from Winter 2022

| UTC Hour* | Departures | Arrivals | Totals |
|-----------|------------|----------|--------|
| 0700 | +4 | | +6 |
| 0800 | +1 | | +1 |
| 1000 | +1 | +2 | +2 |
| 1100 | +2 | | +2 |
| 1200 | | +2 | +3 |
| 1300 | +1 | +1 | +2 |
| 1400 | +1 | +1 | +2 |
| 1700 | +1 | +2 | +2 |
| 1800 | +1 | +2 | +3 |
| 1900 | +1 | +1 | +2 |
| 2200 | | +3 | +3 |
| | | | |
| Total | +13 | +14 | +28 |

Source: CAR

- 3.3 We also propose to adjust the 10 minute runway limits ('R10') in line with the proposal of Dublin Airport and IAA ANSP, to which there were no objections.
- 3.4 We propose to retain the stand parameter as a hard constraint. Where demand for stands exceeds supply as per the count in the appendix, movements are referred to Dublin Airport for detailed assessment. If the issue cannot be resolved, a slot will not be allocated.

Runway Capacity

3.5 In this subsection, we consider runway capacity limits.

Egis Airfield Modelling

- 3.6 As described above, Egis first validated the airfield model and then simulated the W23 flight schedule under the following two scenarios:
 - Rolling forward the W22 R60 limits, i.e. making no changes to the limits compared to those in place for W22.
 - Implementing the Wishlist adjustments to the W22 limits.

- 3.7 The model validation process was based on 8 January 2023. On this day 100% of operations were westerly, with the North Runway 28R operational for departures between 0900 and 1800.
- 3.8 The simulated metrics (taxi out times, runway throughput, counts of aircraft coming on block, off block, lifting off and touching down) show a close match with the actual data both in magnitude and daily profile. Across the day, the difference between the average simulated and average real taxi out time is 9 seconds, with the simulation generating slightly lower taxi times than were observed in reality.
- 3.9 Taxi out time measures the time elapsed from the aircraft coming off blocks until it crosses the runway stopbar to begin its take-off roll. Departure ground delay is the accumulation of all delay experienced in the same period, i.e. all components of taxi-out time other than unimpeded taxi-time. The estimated effect of proposed airfield capacity increases on these metrics is, in our view, the best way to assess the physical and operational ability of the airfield to deliver a flight schedule.
- 3.10 Efficient towing of aircraft occurs in the model. Taxiway, towing, runway, and runway exit usage restrictions and patterns have been implemented in the model. Given the close match in the model validation outputs, it is our view that no significant airfield capacity affecting element has been omitted from the model.
- 3.11 Airfield infrastructure was updated in the model, based on expected situation during W23 in relation to taxiway closures for works and projects expected to be complete. No changes are expected in respect of operating procedures for minimum aircraft separations.
- 3.12 In both scenarios, it is presumed that the Winter 2023 schedule of increased demand materialises as expected. We have previously observed a general pattern whereby airlines may accept sub-optimal slots (whether in relation to timing, series fragmentation, or both) in order to meet demand for an operation. In order to capture this trend, our baseline scenario assumes that this redistribution effect occurs, with these new services operating at the nearest available time, given the effective runway limits for that scenarios, in the simulation.
- 3.13 The Winter 2023 flight schedule to be modelled was based on expected W23 demand, but also with sufficient operations to properly test out the proposed R60 capacity increases. It is based on the schedule of 8 January 2023, and then contains a total of 780 flights of which over 100 are new operations. Most of these movements could be accommodated at the times requested without any changes to the runway limits.
- 3.14 This means that some of the modelled operations may not materialise in W23 and thus the schedule can be considered as an aggressive growth scenario, with a likelihood that the performance metrics produced by the model may be conservative relative to those likely to transpire if growth is weaker. Nonetheless, we consider it important to test out the potential impact of a decision to increase the capacity. To isolate the effect of a decision to implement the Wishlist relative to maintaining the W22 limits, we asked Egis to simulate the W23 Schedule coordinated according to the wishlist scenario and separately according to a baseline scenario in which no changes are made to the limits.
- 3.15 Table 3.2 summarises the results of the W23 Wishlist and W22 limits scenario simulations, overall and in terms of local averages across various parts of the day, as provided to the Coordination Committee. Further details are set out in the Egis simulations published alongside. For these simulation scenarios, the updated R10 limits are included as proposed by

Dublin Airport and IAA ANSP. These limits have the effect of preventing within-hour bunching.

Table 3.2: Departure Taxi Out Time

| Time (UTC) | W23 Wishlist scenario | W22 limits scenario | Difference |
|---------------------|-----------------------|---------------------|------------|
| Average (0530-0900) | 00:12:24 | 00:13:12 | - 00:00:48 |
| Average (0900-2000) | 00:12:36 | 00:12:42 | -00:00:06 |
| Average (2000-2130) | 00:12:42 | 00:11:54 | +00:00:48 |
| | | | |
| Daily average | 00:11:36 | 00:11:42 | -00:00:06 |
| Peak | 00:14:36 | 00:14:48 | -00:00:12 |

Source: Egis, Slide 21. Taxi times in minutes and seconds.

Peak times refer to the window with the highest average value. Values are in hours, minutes and seconds.

- 3.16 In summary, relative to maintaining the Winter 2022 limits unchanged, the W23 Wishlist limits are expected to lead to:
 - No material impact on taxi-out times on average across the day, or on the peak taxi-out time.
 - A shorter morning peak due to W22 limits pushing more operations into earlier hours, such as between 0530 and 0600.
 - An increase in average taxi out time of 48 seconds between 2000 and 2100, due to the higher number of movements permitted under the W23 Wishlist limits and the knockon effect of these.
 - No material impact on taxi-in times.
- 3.17 Given the discussions within the Coordination Committee on the risk that the North Runway operating hours would not be extended in June as planned, we asked Egis to run a sensitivity under which the North Runway was operational during 0900-1800 only. To assess the impact of a potential scenario whereby the extension of the North Runway operational hours to 0700-2300 would be delayed, Egis simulated the W23 Wishlist scenario but with the North Runway only operational from 0900-1800. The results are displayed at slides 28 and 29.
- 3.18 The results show the primary impact of the shorter operational window being in the hours directly affected:
 - Closure of the North Runway between 0700 and 0900 increases the peak taxi-out time from 14.5 minutes at 0800 to just over 18 minutes at 0900.
 - Closure of the North Runway at 1800 results in a second peak of taxi-out times, again close to 18 minutes, at 1930.
- 3.19 In the late evening, there is then a secondary effect whereby a higher number of arrivals causes a longer departure queue, albeit for the small number of departing aircraft operating at that time.

Other Modelling

3.20 Dublin Airport commissioned ARUP to carry out simulation modelling on its behalf, which was also presented to the Coordination Committee. Dublin Airport also presented the results of

- its own modelling. These models, especially the ARUP model, display similar results to Egis as regards daily average taxi-out times, and the daily profile.
- 3.21 We consider that this provides a useful cross-check and cross-validation of the simulation modelling exercises.

Taxi Out times and On Time Performance (OTP) in Winter 2022

- 3.22 At the Coordination Committee pre-meeting, Dublin Airport provided an update on outturn operational performance in Winter 2022 compared to Winter 2019, from November to February inclusive. As noted in our Summer 2023 decision, this overview should be caveated by noting that trends across a season of single runway operations (such as Winter 2019) will be less comparable with the dual parallel operations now in place.
- 3.23 On Time Performance (OTP) in November and December remained significantly worse than the corresponding months of 2019. The gap narrowed in January, and by February this year, OTP has improved to a level slightly better than Winter 2019. Overall, across the four months, Arrival OTP is down by 12 percentage points and Departure OTP down by 13 percentage points. As we have noted previously, there are many factors which influence OTP at Dublin Airport other than those which relate to airport capacity. In both seasons, delay coded to Aircraft Rotation is the most significant contributor.
- 3.24 Average taxi-out times are in line with the performance seen in Winter 2019, at 13 minutes, which we note is also in line with the simulation modelling set out above. Average first wave taxi-out times (with the North Runway not yet operational) have been 1 minute higher than in 2019.

CAR Draft Decision

- 3.25 Under the Slot Regulation, we are required to review the parameters with a view to increasing the capacity and number of slots available for allocation, based on an objective analysis of the possibilities of accommodating the air traffic. On that basis, the Commission's draft decision is to amend the hourly runway limits in accordance with the W23 Wishlist. The reasons are as follows:
 - The evidence from the Egis simulations suggests that the additional capacity proposed can be accommodated by the parallel runway system without any material causative impact on delay.
 - Based on the Coordination Committee vote, the advice of the Committee to CAR is to declare runway limits in line with the Winter 2023 Wishlist.
 - The evidence suggests that, even if the North Runway operational hours are not extended as planned before W23, the additional runway capacity will not lead to an unacceptable level of deterioration in performance.
- 3.26 The disagreement within the Coordination Committee relates to the hours in which the North Runway was expected to be operational by now, but is not, namely 0700 to 0900 and 1800 to 2300. It is now planned to extend the hours in June. We understand that both Dublin Airport and Air Navigation Ireland/IAA ANSP expect to be able to facilitate the June date for extended

operational hours. 6 That date is four months before the start of W23.

- 3.27 While we have no reason to believe that the North Runway will not operate as planned between 0700 and 2300 in W23, we agree with Aer Lingus that it is prudent to consider a contingency scenario in which the operating hours remain at 0900 to 1800. As noted above, based on the Egis simulations, it is apparent that maintaining the shorter window would have a significant impact in the relevant hours, increasing the peak taxi-out time by 3.5 minutes, to 18 minutes. However, we do not consider this impact to be so significant as to warrant not declaring the additional capacity. We note that the wishlist capacity ultimately declared for the last seasonal declaration before Covid-19, the S20 capacity parameters, showed a peak taxi-out time of over 26 minutes. The peak taxi-out time modelled in respect of the parameters declared for S23 was 19 minutes.
- 3.28 It is important to note that, while additional movements would contribute to delay in a scenario where the North Runway operational hours are not extended, much of this impact on taxi-out times is likely to materialise regardless of whether or not the additional R60 capacity is declared.
- 3.29 Thus, given that 1) we expect that the hours will be extended by W23, and 2) even if they are not, the impact of that does not warrant withholding the proposed capacity, and 3) much of that effect on taxi times in such a scenario is likely to materialise regardless of the release of the proposed capacity: We propose to declare the additional capacity in line with the wishlist proposal and the majority advice of the Coordination Committee.
- 3.30 As with the Summer 2023 declaration, we agree with Dublin Airport that it is prudent to limit the initial North Runway capacity release to preclude potentially excessive bunching of the schedule, as the relevant operational stakeholders become acclimatised to the changed operation. We also note that further additional capacity is not likely required to accommodate the air traffic.
- 3.31 In line with Condition 4 of the North Runway planning permission, which limits the use of the crosswind runway to 'essential occasional use', our modelling assumes no use of the crosswind runway 16/34 as an active runway. As per the Summer 2023 declaration, we continue to take account of Condition 3 in respect of our simulations of the operation of the main runways.
- 3.32 As set out in the S23 declaration decision, any Operating Restrictions within the meaning of Regulation (EU) No 598/2014 ought to be set out such that there is clarity on the scope and duration of the legally enforceable constraining factor which it will represent during a given scheduling season. Where this is not case, as particularly noted in the S23 decision in respect of Condition 5 of the North Runway planning permission, and should a determination subsequently be made such that an Operating Restriction falls to be enforced in that scheduling season in a manner which requires a reduction in operations, it may be necessary for the Commission to review the affected parameters in the prevailing declaration and/or for parties not to use their allocated slots. Pending any such determination, the R60 parameters in the night hours remain in line with the pre-existing single (southern) runway capacity for the W23 declaration.

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⁶ Air Navigation Ireland (ANI) is the Air Navigation Services Provider established pursuant to the Air Navigation and Transport Act, 2022, which will take over the air navigation services functions of the IAA on vesting day.

⁷ https://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014R0598

Parking Stands

3.33 We propose to retain the hard constraint on stands, while updating the stand count relative to W22 to take account of any changes to stand availability in the various apron areas. Dublin Airport proposed maintaining the current parameter while updating the count, as usual, to reflect seasonal changes. There was no objection or alternative proposal made within the Coordination Committee.

4. Terminal Building Coordination Parameters

- 4.1 Our Draft Decision is to roll forward the W22 rolling hourly PTB limits, which are set out in Table 4.1.
- 4.2 We propose to maintain the load factor assumptions of 85% for scheduled services in Terminal 1, and 95% for charter services. We propose to maintain the referral parameters in relation to Terminal 2 check-in desks and US Preclearance as per the W22 capacity.

Table 4.1: Hourly Terminal Limits - Draft Decision

| | Departures | Arrivals |
|------------|------------|----------|
| Terminal 1 | 3,700 | 3,550 |
| Terminal 2 | 3,700 | 3,050 |

Source: CAR.

Proposed Hourly Limits – Dublin Airport

- 4.3 Dublin Airport proposed to roll forward the PTB hourly limits from W22. It noted that, with the trial of the C3 machines ongoing and uncertainty as to the full extent of the benefits which this new technology will bring to the security processors, it is prudent to retain the current declared capacity until the benefit can be fully quantified. Dublin Airport also noted that the PTB limits are unlikely to be a constraining factor on the allocation of slots in W23, with the W23 Wishlist demand estimated to be 74% of the current available capacity.
- 4.4 This proposal was supported by all parties with the exception of Ryanair, who considers that the parameters should be in line with those declared for summer and thus the winter parameters are being artificially constrained.

Proposed Referral Limits – Dublin Airport

- 4.5 Dublin Airport proposed retaining the referral parameter for Terminal 2 check-in desks 1-28 (Terminal 2 operators excluding Aer Lingus) where demand exceeds 28 desks. It also recommended retaining the referral for US Preclearance, which applies to any new flights, or time changes to pre-existing flights, intending to use this facility.
- 4.6 There were no objections or alternative proposals in relation to these limits.

Draft Decision on Terminal Capacity Parameters

- 4.7 We note Ryanair's objection to the PTB parameters. Given the potential differences between processing rates in summer and winter, the fact that the summer parameters are currently higher is not, alone, a compelling piece of evidence to increase the winter parameters.
- 4.8 We agree with the proposal of Dublin Airport to maintain the existing limits for W23, in the context of uncertainty as to the capacity improvement which will be provided for by the C3 equipment during W23 and where the proposed T60 parameters are not in any case expected to be constraining on the allocation of slots. We note that the majority advice of the Coordination Committee is to maintain the existing limits. We suggest that, once the benefits of C3 can be fully identified, this will likely lead to an increase in the declared capacity for future seasons, as contended for by Ryanair.

| 4.9 | We also propose to roll forward all referral parameters from W22, which are detailed in the Appendix. There was no objections or alternative proposals put forward by the Coordination |
|-----|--|
| | Committee on this. |

5. Appendix: Proposed Winter 2023 Coordination Parameters

The Commission for Aviation Regulation proposes the following limits for the Winter 2023 season.

Runway Scheduling Parameters:

| | Runway Hourly Limits | | | | |
|----------|----------------------|------------|------------|--|--|
| Time UTC | Arrivals | Departures | Total | | |
| | Limit | Limit | Limit | | |
| 0000 | 23 | 23 | 32 | | |
| 0100 | 23 | 23 | 32 | | |
| 0200 | 23 | 23 | 32 | | |
| 0300 | 23 | 23 | 32 | | |
| 0400 | 23 | 23 | 32 | | |
| 0500 | 23 | 25 | 32 | | |
| 0600 | 23 | 35 | 40 | | |
| 0700 | 21 | <u>35</u> | <u>46</u> | | |
| 0800 | 25 | <u>24</u> | <u>45</u> | | |
| 0900 | 24 | 25 | 42 | | |
| 1000 | <u>25</u> | <u>25</u> | <u>43</u> | | |
| 1100 | 28 | <u>28</u> | <u>50</u> | | |
| 1200 | <u>28</u> | 28 | <u>49</u> | | |
| 1300 | <u>25</u> | <u>28</u> | <u>45</u> | | |
| 1400 | <u>25</u> | <u>25</u> | <u>42</u> | | |
| 1500 | 23 | 27 | 43 | | |
| 1600 | 24 | 26 | 46 | | |
| 1700 | <u>26</u> | <u>28</u> | <u>49</u> | | |
| 1800 | <u>26</u> | <u>27</u> | <u>46</u> | | |
| 1900 | 24 | <u>25</u> | <u>40</u> | | |
| 2000 | 24 | 24 | 39 | | |
| 2100 | 25 | 23 | 39 | | |
| 2200 | 32 | 23 | 42 | | |
| 2300 | 23 | 23 | 32 | | |
| Totals | <u>589</u> | <u>619</u> | <u>970</u> | | |

| Maximum number of movements per 10 minute | | | |
|---|---|--|--|
| period- Dual runway operations | | | |
| Maximum Total 13 | | | |
| Maximum Arrivals | 6 | | |
| Maximum Departures | 7 | | |

| Maximum number of movements per 10 minute | | | | |
|--|---|--|--|--|
| period- Single runway operations | | | | |
| Maximum Total | 9 | | | |
| Maximum Arrivals 6 | | | | |
| Maximum Departures 6* | | | | |
| Exception: Maximum Departure Limit is 7 | | | | |
| movements at 0600, 0610, 0620, 0630, 0640, | | | | |
| 0650 | | | | |

Passenger Terminal Parameters:

| | Departures | Arrivals |
|------------|--------------|--------------|
| | Hourly Limit | Hourly Limit |
| Terminal 1 | 3,700 | 3,550 |
| Terminal 2 | 3,700 | 3,050 |

Notes:

- 1) The hourly limit for passengers is rolled every 10 minutes.
- 2) Load factors of 85% are applied to Scheduled services for Terminal 1.
- 3) Load factors of 85% are applied to Scheduled services for Terminal 2.
- 4) Load factors of 95% are applied for Chartered services for both Terminal 1 and Terminal 2.

Stand Parameters:

| | GA | Non- | | Turnaround Stands | | | | | | | | All | |
|---------|-------|------------|-------|-------------------|-----|----|----|----|----|-----|----------|-------|-------|
| | | Turnaround | | | | | | | | | | | |
| | W.A.N | W.A.S | Total | 5G | MRO | P1 | P2 | Р3 | P4 | S.A | Triangle | Total | Total |
| Contact | | | | | | 22 | 11 | 11 | 21 | 9 | | 74 | 74 |
| Remote | 8 | 16 | 24 | 15 | 6 | 3 | | | | | 5 | 29 | 53 |
| All | 8 | 16 | 24 | 15 | 6 | 25 | 11 | 11 | 21 | 9 | 5 | 103 | 127 |

Note: The table represents NBE stand capacity.

| Area | Constraint |
|--------|--|
| Stands | Where demand for stands exceeds supply based on coordination allocation, flights |
| | to be referred to Dublin Airport for detailed assessment. |

Referral Parameters:

| Area | Flag |
|--|----------------------------------|
| T2 Check-in Desks 1-28 (T2 Operators excluding EI) | Demand exceeds 28 desks |
| US Preclearance | New flights and schedule changes |