

Appendices (W2021/22)

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Appendix 1

Runway Scheduling Limits Winter 2021/22

Arrivals Hour (UTC)																			
	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	Average	Total
Winter 2020	38	39	37	45	44	34	41	41	42	39	40	41	42	43	38	38	17	38.8	659
Capacity change RSL1								+1	-1		+1				-1	+1	-1		
Winter 2021	38	39	37	45	44	34	41	42	41	39	41	41	42	43	37	39	16	38.8	659

Departures Hour (UTC)																			
	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	Average	Total
Winter 2020	27	43	43	43	45	45	41	46	42	44	43	44	44	45	41	28	22	40.4	686
Capacity change RSL1			+1						-1			+1	+1	-1	-1	-2	+2		
Winter 2021	27	43	44	43	45	45	41	46	41	44	43	45	45	44	40	26	24	40.4	686

Appendix 2

Additional Runway Scheduling Constraints Winter 2021/22

Arrivals

- 1 Within each hour, and having regard to historic rights, no more than 5 arrivals should be scheduled in each 5-minute period in the hour.
- 2 The schedule, having regard to historic rights, will be co-ordinated to a 20-minute slot constraint, offset by 10 minutes. No more than 15 arrivals should be scheduled in each 20-minute period.
- 3 Only Airlines with a historic allocation of Night Quota are allowed to schedule arrivals at 0610 or 0615.

Departures

- 1 Within each hour, and having regard to historic rights, no more than 5 departures should be scheduled in each 5-minute period in the hour.
- 2 The schedule, having regard to historic rights, will be co-ordinated to a 20-minute slot constraint, offset by 10 minutes. No more than 16 departures should be scheduled in each 20-minute period.
- 3 Each hour, and having regard to historic rights, will be coordinated to an offset rolling hour. The hour is offset by 10 minutes and rolls through the hour every 20 minutes. No more than 45 departures will be scheduled in any rolling hour between 0600 and 2255 (UTC), except between 1650-1905 (UTC) when the rolling hour capacity will be 46.

Time (UTC)	0600 - 1645	1650 - 1905	1910 - 2255
Capacity	45	46	45

Arrivals and Departures

- 1 Ad Hoc slots will be unavailable between 0430 and 0800 (UTC).
- 2 Ad-Hoc slot allocation will be suspended when weather conditions deteriorate. (Exceptions, contained in ANNEX 3 of Local Rule 2, will be allowed to operate during the suspension.)

Appendix 3

Heathrow Terminal Scheduling Limits Winter 2021/22

Terminal	A/D	Constraint	Limit
T2	D	Combined 1 Hour	3500
		Combined 3 Hour	8550
	A	International & CTA 1 Hour	3900
		International & CTA 2 Hour	6500
		Domestic 1 Hour	600
T3	D	International 1 Hour	3700
		International 3 Hour	8300
	A	International 1 Hour	4650
		International 2 Hour	7100
T4	D	International 1 Hour	2800
		International 3 Hour	6000
	A	International 1 Hour	2500
		International 2 Hour	4300
T5	D	Combined 1 Hour	5000
	A	International 1 Hour	4500
		Domestic 1 Hour	1200

Check-in Limits

Terminal 2

Zone	Desks	Declaration
A	32	32
B	26	26
C	12	12
D	46	46

Terminal 3

Zone	Desks	Declaration
A	33	33
B	29	29
C	26	26
D	26	26
E	26	26
F	26	26
G	28	28

Terminal 4

Zone	Desks	Declaration
A	14	14
B	5	5
C	26	26
D	16	16
E	16	16
F	26	26
G	10	10
H	14	14

Terminal 3 Integrated Baggage System Limit

Coordination Limit: 33 laterals
 Upper Limit: 45 laterals

Terminal 4 Baggage System Limits

ABF Warning Limit: 44 MUPs
 Upper Limit: 56 MUPs
 MBH Warning Limit: 80 MUPs
 Upper Limit: 92 MUPs
 TBF Single Limit 10 MUPs

Appendix 4

Load Factors Winter 2021/22

W20 Declared	T2 Domestic	T2 CTA & Int	T2 Combined	T3 International		T4 International		T5 Domestic	T5 International (+ Dom Dep)	
Day of Week	A	A	D	A	D	A	D	A	A	D
1	86%	84%	82%	84%	84%	87%	86%	84%	84%	83%
2	82%	82%	81%	81%	85%	84%	84%	79%	80%	79%
3	80%	79%	79%	77%	84%	83%	86%	81%	79%	79%
4	79%	82%	85%	81%	87%	83%	87%	78%	82%	83%
5	81%	85%	87%	85%	89%	87%	89%	77%	86%	86%
6	78%	89%	87%	87%	88%	85%	88%	83%	86%	87%
7	86%	89%	85%	88%	87%	90%	89%	85%	87%	86%

Appendix 5

Stand Limits Winter 2021/22

Table 5.1

Total Physical Stand Supply - for information only. This is not the W2021 Declared Stands

Winter 2021/22										
Apron	F	E	E (747-400)	E (777-200)	D (767 – 300)	D (757)	C (A321)	C (A319)	B	TOTAL
T2	9	10	0	2	0	0	14	0	0	35
T3	14	20	1	5	1	1	3	0	0	45
T4	6	13	6	2	2	0	4	1	0	34
T5	15	15	13	0	4	0	15	1	0	63
Total excl. Cargo	44	58	20	9	7	1	36	2	0	177
Cargo	3	5	2	2	0	0	0	0	0	12
Total incl. Cargo	47	63	22	11	7	1	36	2	0	189

- MARS: main centrelines counted except on MARS stands (predominately used by narrow body aircraft) which are declared as 2 centrelines e.g.
 - Stand 218 declared as 218L & 218R
 - Stand 221 declared as 221L & 221R
- MCA: allocated based on current predominate usage requirement:
 - Stands 415 – 420 declared as 3 x C(A321) and 1 x C (319)
 - Stands 449 – 452 declared as 2 x E
- 701 & 702: no live movements

Table 5.2

Stand outages for construction work

Winter 2021/22 Stand Outages for Construction Work										
Apron	F	E	E (747-400)	E (777-200)	D (767 – 300)	D (757)	C (A321)	C (A319)	B	TOTAL
T2	0	0	0	0	0	0	0	0	0	0
T3	0	-1	0	0	0	0	0	0	0	-1
0	0	0	0	0	0	0	0	0	0	0
T5	0	0	0	0	0	0	0	0	0	0
Total excl. Cargo	0	-1	0	0	0	0	0	0	0	-1
Cargo	0	0	0	0	0	0	0	0	0	0
Total incl. Cargo	0	-1	0	0	0	0	0	0	0	-1

- Terminal 3 airbridge works will remove one stand for W21 Season

Table 5.3

Stand downgrades for project work and/or operational resilience.

Winter 2021/22 Stand Downgrades for Project of Operational Resilience										
Apron	F	E	E (747-400)	E (777-200)	D (767 – 300)	D (757)	C (A321)	C (A319)	B	TOTAL
T2	-3	3	0	0	0	0	0	0	0	0
T3	-8	6	2	0	0	0	0	0	0	0
T4	-2	0	2	0	0	0	0	0	0	0
T5	-4	4	0	0	0	0	0	0	0	0
Total excl. Cargo	-17	13	4	0	0	0	0	0	0	0
Cargo	-2	2	0	0	0	0	0	0	0	0
Total incl. Cargo	-19	15	4	0	0	0	0	0	0	0

Remote Code F stands are downgraded to Code E3 to prevent A380 remote movements

- **T2:** Stands 254, 255, 258 Code F remotes restricted to Code E3
- **T3:** Stands 209, 210, 212, 213 Code F remotes restricted to E3
318, 327 restricted to E2 (747-400)
Stands 357, 594, 595, 596 Code F remotes restricted to Code E3
- **T4:** Stands 440, 441 restricted Code E3 to E2 (747-400)
Stands 453, 454 Code F remotes restricted to Code E3

Table 5.4

Additional stand outages due to operational issues e.g. Maintenance, Stand Cleaning, Off Slot Performance, etc.

Winter 2021/22 additional Stand Outages e.g. Maintenance, Stand Cleaning, Off Slot Performance etc										
Apron	F	E	E (747-400)	E (777-200)	D (767 – 300)	D (757)	C (A321)	C (A319)	B	TOTAL
T2	-1	-1	0	0	0	0	-2	0	0	-4
T3	-1	-1	-1	0	0	-1	0	0	0	-4
T4	-1	-1	0	-1	0	0	-1	0	0	-4
T5	-1	-1	-1	0	0	0	-1	0	0	-4
Total excl. Cargo	-4	-4	-2	-1	0	-1	-4	0	0	-16
Cargo	0	-5	0	-2	0	0	0	0	0	-7
Total incl. Cargo	-4	-9	-2	-3	0	-1	-4	0	0	-23

Additional stand outage declaration maintains a similar level of contingency to the W20 declaration:

- 1 pier served Code F stand removed in each terminal
- Contingency stands removed for operational issues
- **T4:** stand 453 removed from T4 declaration for T3 South Side towing
- **Cargo:** stands 601-606 removed due to no fuel, reverse parking or GA use; stand 616 for resilience.

Table 5.5

W21 Total Stands Declared for Schedule Coordination

Winter 2021/22										
Apron	F	E	E (747-400)	E (777-200)	D (767 – 300)	D (757)	C (A321)	C (A319)	B	TOTAL
T2	5	12	0	2	0	0	12	0	0	31
T3	5	24	2	5	1	0	3	0	0	40
T4	3	12	8	1	2	0	3	1	0	30
T5	10	18	12	0	4	0	14	1	0	59
Total excl. Cargo	23	66	22	8	7	0	32	2	0	160
Cargo	1	2	2	0	0	0	0	0	0	5
Total incl. Cargo	24	68	24	8	7	0	32	2	0	165

Note: GA capacity is declared separately (see Appendix 6)

Appendix 6

Additional Constraints and Explanatory Notes

W2021/22 Runway Scheduling Limits

The RSL Working Group has agreed to re-consider any flex requests that were considered but not accepted at the RSL meeting, prior to the circulation of the SAL (Schedule Airline Listing) at the end of May 2021 and again after the IATA conference at the end of June 2021. These wish lists would all have been received by ACL before the RSL meeting.

New or Retimed slots after 22:40 (local)

To minimise the unplanned use of scarce night allocation movements due to delayed operations, no new or retimed services shall be allocated slots later than 22:40 (local) without a proportionate allocation of night quota - if such quota is available for allocation. If no such quota is available, relative to the forecast use for the airline, then no slots shall be allocated.

ATM Cap

A cap on the annual number of Air Transport Movements (ATMs) at Heathrow of 480,000 was introduced as a planning condition for the development of Terminal 5. In order not to exceed this level, a limit on the number of slots that may be allocated for Air Transport Movements during the Winter 2021/22 season, is set at 9,238 per week.

Additionally, after the slot hand back deadline in August 2021, the total seasonal number of air transport movements allocated should not exceed 186,488.

Night Flight Restriction

Aircraft of Quota Count 4 (QC4) will not be scheduled to operate between 23:30 and 06:00 (local) i.e. in the Night Quota period.

(This applies to Scheduled times only and does not apply to flights which have been delayed into the night period.)

Voluntary Agreement on Night Flights

The informal voluntary agreement between Heathrow and Heathrow airlines regarding night flights is that:

- Early morning arrivals will not land before 04:30 (local).
(This does not apply to arrivals delayed from the day before. However, if they have been subject to such severe delays that a further delay to ensure that they arrive after 04:30 would make little difference, then the Heathrow APOC may decide to refuse permission for an arrival before 04:30.)
- Cargo flights will not be scheduled to operate between 23:30 and 06:00 (local).
(This applies to Scheduled times only and does not apply to flights which have been delayed into the night period.)

Terminal Declarations

It is becoming increasingly difficult to encapsulate the complicated nature of each operational/facility constraint within a simple declared capacity limit for each terminal. We appreciate your continued cooperation in assessing the full impact of scheduling changes, notably new entrant airlines and significant changes from existing carriers, including slot exchanges.

Following consultation at the Terminal and Stands Limits Working Group (TSL), the Winter 2021/22 Terminal limits have been agreed.

Heathrow will continue to declare limits for a) Terminals 3 and 4 Baggage Systems and b) Terminals 2, 3 & 4 Check In.

A380 Reclaim Belts

Heathrow has a number of A380 flights operating at the airport. Although there is variation in the seat capacity and transfer volumes of the A380 flights, in general a larger reclaim belt is required for an A380 operation.

With agreement at the Terminal and Stands Limits Working Group, Heathrow declares a limit on the number of A380 flights arriving within 60 minutes in Terminals 2, 3 and 4.

Based upon our assessments as to what is suitable for an A380 operation, we declare the following arrivals reclaim capacity for A380 operations, in a rolling hour:

Terminal	Reclaim Belts declared suitable for A380 operations
T2	6
T3	3
T4	3

Any breaches of this limit should be referred to Heathrow to assess the individual flight to take account of seat capacity and transfer volumes.

Transit Flights

Transit flights require all passengers to be processed through transfer security unless held in transit gate lounges. Due to the resulting peak passenger flows this has a disproportional impact on transfer security capacity. It is therefore important to separate transit flights to enable them to use the limited transit gate facilities or to limit the impact on transfer security.

Therefore, only one transit flight should be scheduled in each terminal within any 90 minute period. This limit is to be enforced for new transit flights.

Stands

Stand capacity is a critical constraint at Heathrow. Modelled stand demand versus available supply will continue to constitute a formal co-ordination parameter for each

apron for Winter 2021/22. Stand supply needs to be assessed at terminal level on all campuses. Where any breaches of the terminal stand declarations occur, we request that ACL either seek airline scheduling adjustments to resolve any overages, or refer the overage to Heathrow for assessment, to determine if a solution can be found within the constraints of the apron concerned.

As agreed at the TSL meeting of April 2021 remote stands 209, 210, 211, 212 and 213 will be allocated to Terminal 3 for coordination purposes.

Modelling of capacity at Heathrow has shown that to ensure aircraft flow is maintained effectively it will be necessary to use other terminals' stands for aircraft from Terminal 3. This will increase the number of towing movements which in turn may cause congestion on associated taxiways. In mitigation, it must be ensured as part of the co-ordination process that the likelihood of this is minimised, and not exacerbated, by changes to slot allocations or timing.

We ask you to be mindful of the need to minimise carriers' ground time in the peak period and give this a high priority in the allocation of available runway slots.

Domestic, CTA, International Stand Capacity

There is a need for the schedule coordination process to consider domestic, CTA, and international stands capacity individually.

As previously, we request that ACL carry out high level assessments that differentiate domestic, CTA, and international demand against capacity in Terminals 2 and 5. The assessment is to be carried out at Initial Coordination, after the IATA Conference, and after the slot hand-back deadline. The results are to be shared with Heathrow. This will enable a trigger for early notification of issues and prompt any actions required to address the problems, including potential re-timing of slots.

Aircraft parking at Heathrow Airport outside of scheduled turnaround periods

In recent years it has become apparent that several away based carriers have elected to cancel flights during planned holiday periods and park their aircraft at Heathrow outside their scheduled turnaround periods. This practice causes congestion at the airport and has negative impact on airport operations over an extended period of time.

(See also General Aviation below)

New / unproven aircraft types

To avoid potential operational issues, we request that ACL refers to Heathrow for individual review any applications for aircraft to operate in any terminal / facility which they have not operated previously.

Heathrow airport will provide a list of any aircraft at terminal level for ACL reference.

General Aviation (GA) Stand Capacity

To ensure GA stand demand does not exceed supply, a separate stand capacity limit for GA is required.

Declarations will make a distinction between GA stands capable of servicing live movements and stands capable of parking tows only. Assessments carried out should therefore be able to distinguish between stand demand that requires live stands and demand that can be decanted to parking only stands.

Five stands are required for GA parking and two for GA live movements

- GA parking = 3x narrow body and 2x wide body
- GA live = 2 x Code C or 1 x Code E3

Apron	F	E	E (747-400)	E (777-200)	D (767-300)	D (757)	C (A321)	C (A319)	TOTAL
Live *		1					2		2 x code C or 1 x code E3
Parking Only		2					3		5

**Stands 457(L&R) will be used for live GA movements and can either be used by 2x Code C A321 or 1x Code E3. For red carpet movements Stand 458 (E3) can be used. Live aircraft that are not using the red carpet, will most likely arrive/depart from Stand 456 or another 450 stand.*

GA stand declarations only impact cargo stands capacity i.e. cargo is reduced by 3 narrow body stands. Other stands declared as GA were previously already excluded from capacity declarations.

Peak periods will require the following restrictions to GA Parking (only applicable for Winter Seasons):

- Thanksgiving: no GA Parking (live declaration unaffected) 2 days before until 2 days after
- Christmas: no GA Parking (live declaration unaffected) 21 to 27 December inclusive.
- New Year: no GA Parking (live declaration unaffected) 29 December to 2 January inclusive.

Roads

The Central Terminal Area 2-way scheduling limit remains at 14000pph for Winter 2021/22.