Appendices

1 Runway Scheduling Limits
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Appendix 1

Runway Scheduling Limits Summer 2018

Arrivals Hour (UTC)	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	Average	Total
Summer 2017	39	39	37	45	41	40	40	43	41	41	44	41	45	43	41	41	22	40.2	683
Capacity change RSL1					+1		+1	-1	-1		-1	+1				+1			
Summer 2018	39	39	37	45	42	40	41	42	40	41	43	42	45	43	41	42	22	40.2	684

Departures Hour (UTC)	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	Average	Total
Summer 2017	25	45	42	45	43	44	40	44	45	44	44	43	44	44	44	34	29	41.1	699
Capacity change RSL1					1	-1					1						1		
Summer 2018	25	45	42	45	44	43	40	44	45	44	45	43	44	44	44	34	30	41.2	701

Air Transport Movement Cap

Weekly Planning Limit: 9,646.

Appendix 2

Additional Runway Scheduling Constraints Summer 2018

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 0510 or 0515.

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 0500 and 2155 (UTC), except between 1550-1805 (UTC) when the rolling hour capacity will be 46.

Time (UTC)	0500 - 1545	1550 - 1805	1810 - 2155
Capacity	45	46	45

Arrivals and Departures

1 Ad Hoc slots will be unavailable between 0430 and 0800 (UTC).

2 A reduced ad-hoc capacity will be declared in all hours both for arrivals and departures following the hand-back deadline on 15th January 2018. Before ad-hoc slots can be allocated in any hour the declared capacity will reduce by one arrival and one departure. Therefore in any hour to re-allocate slots there must be a minimum of 2 cancellations for 1 ad-hoc and 3 cancellations for 2 ad-hoc flights.

Arrivals	**Hour (UTC)**																
	05	**06**	**07**	**08**	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Summer 2018 Capacity	39	39	37	45	42	40	41	42	40	41	43	42	45	43	41	42	22
Reduced Capacity at the hand-back deadline				-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Summer 2018 Capacity for ad hoc recycling	0	0	0	43	40	38	39	40	38	39	41	40	43	41	38	40	20

Departures	**Hour (UTC)**																
	05	**06**	**07**	**08**	**09**	**10**	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**20**	**21**
Summer 2018 Capacity	25	45	42	45	44	43	40	44	45	44	45	43	44	44	44	34	30
Reduced Capacity at the hand-back deadline				-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2	-2
Summer 2018 Capacity for ad hoc recycling	0	0	0	43	42	41	38	42	43	42	43	41	42	42	42	32	28

3 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 Summer 17

Terminal	A/D	Constraint	Coordination Limit	Upper Theoretical Limit
T2	D	Combined 1 Hour	**2800**	3500
		Combined 3 Hour	**6800**	8550
	A	International & CTA 1 Hour	**2600**	3900
		International & CTA 2 Hour	**5100**	6500
		Domestic 1 Hour	**400**	600
T3	D	International 1 Hour	**3000**	3500
		International 3 Hour	**7000 (0000-1725)**	8100
			6100 (1730-2359)	
	A	International 1 Hour	**3500**	4200
		International 2 Hour	**5000**	7500
T4	D	International 1 Hour	**2000**	2800
		International 3 Hour	**4250**	6000
	A	International 1 Hour	**1800**	2500
		International 2 Hour	**3000**	4300
T5	D	Combined 1 Hour	**4500**	5000
	A	International 1 Hour	**3750**	4500
		Domestic 1 Hour	**950**	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	35	35
B	32	32
C	31	31
D	27	27
E	32	32
F	27	27
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
H	14	14
G	10	10

Terminal 3 Integrated Baggage System Limit

Coordination Limit: 33 laterals
Upper Limit: 40 laterals

Appendix 4

Load Factors Summer 19

Summer 18	T2 Domestic	T2 CTA & International	T2 Combined	T3 International		T4 International		T5 Domestic	T5 International	T5 Combined
Day of Week	A	A	D	A	D	A	D	A	A	D
1	88%	85%	84%	84%	90%	88%	87%	90%	86%	85%
2	78%	83%	82%	81%	87%	87%	86%	86%	83%	81%
3	76%	82%	84%	77%	88%	82%	87%	83%	84%	81%
4	78%	83%	88%	80%	87%	84%	89%	80%	85%	84%
5	81%	84%	88%	84%	90%	87%	88%	83%	88%	88%
6	81%	88%	90%	86%	90%	88%	87%	86%	88%	89%
7	86%	90%	90%	88%	91%	90%	87%	86%	88%	87%

Appendix 5

Stand Limits Summer 18

Table 5.1

Total Physical Stand Supply - For Information Only, this is not the S18 Declared Stands

Summer 18										
Apron	**F**	**E**	**E (747-400)**	**E (777-200)**	**D (767-300)**	**D (757)**	**C (A321)**	**C (A319)**	**B**	**TOTAL**
T2	12	10	0	2	0	0	12	0	0	**36**
T3	10	19	4	4	2	1	3	0	0	**43**
T4	6	12	7	2	2	0	4	1	0	**34**
T5	15	15	10	0	4	0	15	1	0	**60**
Total exc. Cargo	**43**	**56**	**21**	**8**	**8**	**1**	**34**	**2**	**0**	**173**
CARGO	0	8	2	2	0	0	0	0	0	**12**
Total inc. Cargo	**43**	**64**	**23**	**10**	**8**	**1**	**34**	**2**	**0**	**185**

- MARS – main centrelines counted except MARS stands which are predominately used by narrow body aircraft and therefore are declared as two centre-lines, 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

Summer 18 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
T4	0	0	0	0	0	0	0	0	0	0
T5	0	0	0	0	0	0	0	0	0	0
Total exc. Cargo	**0**	**-1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-1**
CARGO	0	0	0	0	0	0	0	0	0	0
Total inc. Cargo	**0**	**-1**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**-1**

- **T3:** Construction of Temporary Transfer Facility
  - Stand 323 closed until late 2018

Table 5.3

Stand downgrades for project work and/or operational resilience

Summer 18 Stand Downgrades for Projects or Ops. Resilience										
Apron	**F**	**E**	**E (747-400)**	**E (777-200)**	**D (767-300)**	**D (757)**	**C (A321)**	**C (A319)**	**B**	**TOTAL**
T2	-6	6	0	0	0	0	0	0	0	0
T3	-4	2	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 exc. Cargo	**-16**	**12**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
CARGO	0	0	0	0	0	0	0	0	0	0
Total inc. Cargo	**-16**	**12**	**4**	**0**	**0**	**0**	**0**	**0**	**0**	**0**

Remote Code F stands are downgraded to Code E3 to prevent A380 remotes

- **T2:** Stands 209, 210, 253, 254, 255, 258 Code F remotes restricted to Code E3

- **T3:** Stands 318 and 327 restricted to E2(747-400)
  Stands 594, 595, 596 Code F remotes restricted to Code E3

- **T4:** Stands 440, 441 restricted Code E3 to E2(747-400)
  Stands 453 and 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.

Summer 18 Additional Stand Outages, e.g. Maint, Off-slot Perf.										
Apron	**F**	**E**	**E (747-400)**	**E (777-200)**	**D (767-300)**	**D (757)**	**C (A321)**	**C (A319)**	**B**	**TOTAL**
T2	-1	-2	0	0	0	0	-2	0	0	-5
T3	-1	-1	-2	-1	0	-1	0	0	0	-6
T4	-1	-3	-3	-1	0	0	-1	0	0	-9
T5	-1	-1	-1	0	0	0	-1	0	0	-4
Total exc. Cargo	**-4**	**-7**	**-6**	**-2**	**0**	**-1**	**-4**	**0**	**0**	**-24**
CARGO	0	-5	0	-2	0	0	0	0	0	-7
Total inc. Cargo	**-4**	**-12**	**-6**	**-4**	**0**	**-1**	**-4**	**0**	**0**	**-31**

Additional stand outage declaration maintains a similar level of contingency to the S17 / W16 declaration:

- One Pier Served Code F stand removed in each terminal

- **T2:** Requirement as declared for S17 / W17
- **T3:** Requirement as declared for S17 / W17
- **T4:** Stands 453, 454 & 455 removed from T4 declaration for T3 south-side towing as declared for S17 / W17
  Stand 456 removed due to frequent Royal Suite use
- **T5:** Requirement as declared for S17 / W17
- **Cargo:** Requirement as declared for S17 / W17. Stands 601-606 removed due to no fuel, reverse parking or GA use. 616 for resilience.

Table 5.5

S18 Total Stands Declared for Schedule Coordination

Summer 18										
Apron	**F**	**E**	**E (747-400)**	**E (777-200)**	**D (767-300)**	**D (757)**	**C (A321)**	**C (A319)**	**B**	**TOTAL**
T2	5	14	0	2	0	0	10	0	0	**31**
T3	5	19	4	3	2	0	3	0	0	**36**
T4	3	9	6	1	2	0	3	1	0	**25**
T5	10	18	9	0	4	0	14	1	0	**56**
Total exc. Cargo	**23**	**60**	**19**	**6**	**8**	**0**	**30**	**2**	**0**	**148**
CARGO	0	3	2	0	0	0	0	0	0	**5**
Total inc. Cargo	**23**	**63**	**21**	**6**	**8**	**0**	**30**	**2**	**0**	**153**

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

Appendix 6

Additional Constraints and Explanatory Notes

S18 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 October 2017 and again after the IATA conference at the end of November 2017. These wish lists would all have been received by ACL before the RSL meeting.

New or Retimed slots after 22:40 (local)

In order 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 Summer 2018 season, is set at 9,646 per week.

Additionally, after the slot hand back deadline in January 2018, the total seasonal number of air transport movements allocated should not exceed 299,026.

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 the Heathrow airlines regarding night flights is:

- 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 Duty Manager Airside 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

As throughput increases, 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 Summer 18 Terminal limits have been agreed.

Heathrow will continue to assess any capacity overage requests that fall within the boundaries of the initial coordination limits and the upper limits which reflect the theoretical capacity of the terminals.

Heathrow will continue to declare limits for the Terminal 3 Integrated Baggage System.

Heathrow will continue to declare limits for check-in in Terminals 2, 3 & 4.

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.

As a continuation from Winter 11 onwards, through 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	2

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

Transit Flights

From Winter 10 onwards, through agreement at the Terminal and Stands Limits Working Group a new limit was introduced on the number of transit flights within each terminal in a given period. 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 Summer 18. 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 previously agreed, with regards to the T3/T5 boundary, all stands starting with ‘5’ east of stand 582 (including 582) will be T3 and all stands starting with ‘5’ west of stand 582 (excluding 582) will be T5. This allows a better balance of stand capacity for T3 and T5.

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, we must ensure 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.

Code F Stands

As agreed with the airline community at the Heathrow Stand Governance Board, Heathrow should not plan for remote A380 operations. The remote code F stands at the airport have generally been designed for remote parking and contingency use only, due to their locations and equipment. As agreed by the Terminal and Stands Limits Working Group, to ensure there are limited remote A380 operations and to assist in A380 resilience, all Code F remotes have been declared as Code E. Thus the remote Code F stands will be available for all scheduling up to and including Code E aircraft.

We kindly request that ACL continue to refer to Heathrow any requests that exceed this declared capacity to assess the characteristics of the flight and the operational issues.

Domestic, CTA, International Stand Capacity

As agreed at the Winter 13 Terminal and Stands Limits Working Group, there is a need for the schedule coordination process to consider domestic, CTA, and international stands capacity.

As a continuation from Winter 13, 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 a number of away based carriers have elected to cancel flights during planned holiday periods and park their aircraft at Heathrow outside of their scheduled turnaround periods. This practice, in conjunction with the current programme of construction works limiting stand capacity, causes congestion at the airport and has negative impact on airport operations over an extended period of time.

Until construction works affecting stand capacity are complete airlines should not leave aircraft parked at Heathrow Airport outside of scheduled turnaround periods in particular during the US Thanksgiving holiday period (from the Monday before Thanksgiving until the following Sunday inclusive) and during the Christmas holiday period (21st December to 2nd January 2018 inclusive).

(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.

Examples of which are:

- Airbus A350-1000
- Boeing 747-8 Intercontinental and Freight
- Airbus A350-900 in Terminal 4.

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

General Aviation (GA) Stand Capacity

As agreed at the Winter 14 Terminal and Stands Limits Working Group, 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

Summer 18 - GA									
	F	E3	E2 (747-400)	E (777-200)	D (767-300)	D (757)	C (A321)	C (A319)	TOTAL
Live*		1					2		2x code C or 1x 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:

- Thanksgiving – no GA Parking (live declaration not affected), 2 days before until 2 days after
- Christmas – no GA Parking (live declaration not affected), 21st December to 27th December inclusive.
- New Year – no GA Parking (live declaration not affected) 29th December to 2nd January inclusive.

Roads

The Central Terminal Area 2-way scheduling limit remains at 14000pph for Summer 18.