

Gatwick Airport Scheduling Declaration Summer 2016

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Appendix 1

Gatwick Airport Scheduling Declaration Summer 2016

Hourly Runway Scheduling Limits

S16 Declaration

Start of UTC Hour	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	15hr (05-19)	17hr (05-21)
Total Limit	29	47	54	52	51	49	55	55	55	53	51	52	55	55	54	46	43	41	29	30	784	868
Arrival Limit	20	20	25	26	23	24	28	29	27	27	26	27	29	28	28	27	23	36	27	25	394	453
Departure Limit	20	39	35	29	30	27	29	28	30	29	27	27	28	30	28	25	22	10	10	10	441	473
Arr-Dep Flex:	11	12	6	3	2	2	2	2	2	3	2	2	2	3	2	6	2	5	8	5	51	58

Changes against S15

Start of UTC Hour	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	15hr (05-19)	17hr (05-21)
Total Limit	-3							2	1			2							-2		5	5
Arrival Limit	-4	-4			1	1			3									1		3	1	2
Departure Limit					-1	-1	1									1		-9	-10	-10	0	-9

The Hourly Limits in hours 0 - 3 are set at 20 Arrs, 10 Deps and 20 Total. Any Ad hoc departures scheduled in these hours must be referred to GAL for approval.

The principle behind the summer 2016 declaration is to provide capacity where it is most needed and reduce capacity where it is not expected to be used.

Appendix 2

Gatwick Airport Scheduling Declaration Summer 2016

Additional Runway Constraints

- 1 Having regard to historic rights, the following constraints should apply;
- 2 Within each consecutive 15 minute period, starting at 10 minutes past the hour (55-05, 10-20, 25-35, 40-50), no more than 14 movements, consisting of no more than 7 arrivals or 9 departures should be scheduled.
- 3 Where the 15 mins straddles an hour with in excess of 26 arrivals, the arr 15 minute may be increased to 8.
- 4 In hours where the arr / dep limit is 30 or more, the 15 minute capacity may be increased to 9 or 10 as required to accommodate the hourly demand with no 3 consecutive 15minutes periods of 10 movements. Where possible, demand should be distributed evenly across the hours to avoid 10 movements in 2 consecutive 15minutes periods followed by 9 movement period.
- 5 Note that in hours where the arrivals limit is over 28 there is a corresponding reduction in the total limit which should also be reflected at a 15 minute level.
- 6 In each 5 minute period there should be scheduled no more than 5 departures or 4 arrivals. Where historic allocations exceed this, airlines will be requested to move their slot times on a voluntary basis with a target to achieve a maximum of 6 per 5 mins on departure and 5 per 5 mins on arrival for S16. The criteria for implementation have been set by ACL and agreed at the Coordination Committee.
- 7 The following table describes the 15 minute limits which have been adhered to for S16 coordination.

S16 Applied 15 minute Limits

	R15 Period	Arrival	Departure	Total			R15 Period	Arrival	Departure	Total			R15 Period	Arrival	Departure	Total
05:00	0455-0505	8	10	13		12:00	1155-1205	7	9	14		19:00	1855-1905	7	9	13
05:00	0510-0520	8	10	13		12:00	1210-1220	7	9	14		19:00	1910-1920	7	9	13
05:00	0525-0535	8	10	13		12:00	1225-1235	7	9	14		19:00	1925-1935	7	9	13
05:00	0540-0550	8	10	13		12:00	1240-1250	7	9	14		19:00	1940-1950	7	9	13
06:00	0555-0605	8	9	14		13:00	1255-1305	8	9	14		20:00	1955-2005	7	7	11
06:00	0610-0620	8	9	14		13:00	1310-1320	8	9	14		20:00	2010-2020	7	7	11
06:00	0625-0635	8	9	14		13:00	1325-1335	8	9	14		20:00	2025-2035	7	7	11
06:00	0640-0650	8	9	14		13:00	1340-1350	7	9	14		20:00	2040-2050	7	7	11
07:00	0655-0705	8	9	13		14:00	1355-1405	7	9	14		21:00	2055-2105	9	5	11
07:00	0710-0720	8	9	13		14:00	1410-1420	7	9	14		21:00	2110-2120	9	5	11
07:00	0725-0735	8	9	13		14:00	1425-1435	7	9	14		21:00	2125-2135	9	5	11
07:00	0740-0750	8	9	13		14:00	1440-1450	7	9	14		21:00	2140-2150	9	5	11
08:00	0755-0805	7	9	14		15:00	1455-1505	7	9	14		22:00	2155-2205	8	5	11
08:00	0810-0820	7	9	14		15:00	1510-1520	7	9	14		22:00	2210-2220	8	5	11
08:00	0825-0835	7	9	14		15:00	1525-1535	7	9	14		22:00	2225-2235	8	5	11
08:00	0840-0850	7	9	14		15:00	1540-1550	7	9	14		22:00	2240-2250	8	5	11
09:00	0855-0905	7	9	14		16:00	1555-1605	7	9	14		23:00	2255-2305	7	7	11
09:00	0910-0920	7	9	14		16:00	1610-1620	7	9	14		23:00	2310-2320	7	7	11
09:00	0925-0935	7	9	14		16:00	1625-1635	7	9	14		23:00	2325-2335	7	7	11
09:00	0940-0950	7	9	14		16:00	1640-1650	7	9	14		23:00	2340-2350	7	7	11
10:00	0955-1005	7	9	14		17:00	1655-1705	7	9	14		23:00	2355-0450	7	7	11
10:00	1010-1020	7	9	14		17:00	1710-1720	7	9	14						
10:00	1025-1035	7	9	14		17:00	1725-1735	7	9	14						
10:00	1040-1050	7	9	14		17:00	1740-1750	7	9	14						
11:00	1055-1105	7	9	14		18:00	1755-1805	7	9	14						
11:00	1110-1120	7	9	14		18:00	1810-1820	7	9	14						
11:00	1125-1135	7	9	14		18:00	1825-1835	7	9	14						
11:00	1140-1150	7	9	14		18:00	1840-1850	7	9	14						

Appendix 3

Gatwick Airport Scheduling Declaration Summer 2016 Stand Capacity Limit

Since ACL are working with unlinked flight schedules when allocating slots, an ATM based approach to achieving the correct balance of demand in each Terminal to reflect Pier Served and Coaching Gate capacity. It is recognised that the approach outlined below can only approximate achieving the correct balance so it is being implemented as a warning limit such that action can be taken by ACL in consultation with GAL and airlines to redress the imbalance after slots have been allocated.

1. An hourly and 2-hourly runway movement limit is applied in each Terminal which is reflective of the number of Pier Served code C centrelines plus an additional tolerance to reflect Terminal coaching capacity. This has been calibrated against S15 demand.
2. The limits are set as a proportion of the total runway capacity such that the combined hourly Terminal limits are 20% higher than the runway limit and the combined 2-hourly limits are 10% higher than the runway limit. This ensures that the stand limit never constrains runway capacity.
3. The limits are applied to both departures slots and total slots from 0400 to 0959 UTC when stand capacity is most constrained.

The table below illustrates how the proposed warning limits for S16 have been calculated.

	Code C Centrelines	% Total	Tolerance	Hourly Warning Limit	2-Hourly Warning Limit
South	38	51%	5%	56%	53%
North	37	49%	15%	64%	57%
Total	75	100%	20%	120%	110%

i.e. No more than 56% of hourly runway slots (departures and total) should be allocated to South Terminal and no more than 53% of slots over 2 hours between 0400 and 0959 UTC. The slots are counted on a rolling half hour basis.

The table below shows how this translates into rolling hourly / 2-hourly ATM limits in each Terminal.

Terminal ATM Splits

Hourly Limits - NT=64%, ST=56%

Terminal	ATM	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00
North	Dep	13	19	25	24	23	21	19	19	20	19	18	18	19
North	Tot	19	24	30	32	35	34	33	33	33	32	32	33	35
South	Dep	11	16	22	21	19	18	16	17	17	16	16	16	16
South	Tot	16	21	26	28	30	30	29	29	28	28	27	29	31

2-Hourly Limits - NT=57%, ST=53%

Terminal	ATM	04:00	04:30	05:00	05:30	06:00	06:30	07:00	07:30	08:00	08:30	09:00	09:30	10:00
North	Dep	34	38	42	39	36	35	34	34	34	33	32	32	32
North	Tot	43	50	57	59	60	59	59	58	57	58	59	61	63
South	Dep	31	35	39	37	34	33	32	32	31	31	30	30	30
South	Tot	40	47	54	55	56	56	55	54	53	54	55	57	58

Appendix 4

Gatwick Airport Scheduling Declaration Summer 2016 Terminal Scheduling Limits

Area	Lowest capacity area	Capacity	Scheduling Limit S16
NT Deps	Central Search, Dep Lounge (soft)	~4300	4300 per hr every 30 mins 7900 per 2 hrs every 30 mins
NT Int Arr	Immigration, Int Reclaim	~3500	3500 per hr every 30 mins
NT Dom Arr (Inc CTA)	Dom Reclaim	800 (one belt)	800 per hr every 15 mins
ST Deps	Dep Lounge (soft), Check In	~3800	3800 per hr every 30 mins 7000 per 2 hrs every 30 mins
ST Int Arr	Immigration, Int Reclaim	~3350	3350 per hr every 30 mins
ST Dom Arr (Excl CTA)	Dom Reclaim	~680	650 per hr every 15 mins
NT Dom / CTA Deps	Pier Served Stands	6 stands	6 departures per 45 mins every 5 mins
ST Dom / CTA Deps	Pier Served Stands	5 stands	5 departures per 45 mins every 5 mins

Notes: Capacity Limits relate to runway demand with load factors applied to seat numbers. **Changes from 2015 are highlighted in red.**
NT Deps capacity increased +500/hr with Gen 2 security lanes and NT Int Arr increased +500/hr with opening of new e-gates.

CTA, common travel area, defined as Channel Islands, Isle of Man and Republic of Ireland.
Domestic includes Northern Ireland.

Appendix 5

Gatwick Airport Scheduling Declaration Summer 2016 Seat Load Factors

Summer 2016 load factors for ACL (capped at Summer 2015 +/- 5% pts)			Monday	Tuesday	Wednesday	Thursday	Friday	Saturday	Sunday
North Terminal	Arrivals	Charter	99.8%	99.7%	97.7%	98.0%	98.5%	99.3%	98.8%
		CTA	91.7%	81.8%	76.4%	77.3%	88.1%	92.4%	89.7%
		Dom	90.6%	90.6%	85.2%	86.4%	87.0%	92.2%	89.1%
		Sched Int	92.5%	93.2%	92.7%	92.9%	93.3%	93.3%	91.8%
	Departures	Charter	100.0%	99.7%	99.3%	100.3%	99.8%	98.8%	98.8%
		CTA	85.2%	73.9%	74.9%	81.6%	89.3%	91.2%	87.5%
		Dom	91.9%	93.2%	93.6%	94.9%	90.3%	90.3%	93.2%
		Sched Int	94.6%	94.4%	94.2%	94.4%	94.1%	93.6%	94.4%
South Terminal	Arrivals	Charter	96.1%	95.7%	93.3%	94.0%	93.4%	94.7%	95.7%
		CTA	92.5%	84.2%	80.8%	83.6%	86.2%	88.9%	90.8%
		Dom	86.6%	82.9%	77.0%	72.4%	77.9%	77.4%	81.8%
		Sched Int	91.2%	91.5%	91.0%	90.8%	91.4%	91.9%	93.7%
	Departures	Charter	95.2%	95.7%	94.6%	96.7%	94.6%	94.4%	96.4%
		CTA	87.8%	86.6%	90.2%	91.4%	93.6%	92.6%	89.0%
		Dom	81.7%	81.8%	84.2%	90.0%	89.8%	82.1%	81.8%
		Sched Int	94.6%	95.0%	95.9%	95.4%	94.9%	94.3%	94.9%

Note that those changes which have been capped are highlighted in red. They are all CTA or Domestic.