

Drs. B.I. Otto
Executive Vice President & COO
Board of Management



Airport Coordination Netherlands
For the attention of Ms C. Ditvoorst
Evert van de Beekstraat 23
1118 CL LUCHTHAVEN SCHIPHOL

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Fax number	Handled by	Your letter of	Schiphol,
-	B. Straver	-	28 September 2017

Subject : Capacity declaration summer season 2018

Dear Ms. Ditvoorst,

Please find enclosed the capacity declaration for the summer season 2018 (attachment 1). We trust that you will allocate the slots for the next summer season to the aircraft operators in accordance with the limitations and requirements as specified in this capacity declaration. The enclosed capacity declaration is applicable to Commercial Aviation as well as General Aviation.

Nominal operational runway capacity has been determined by LVNL and is based on the VEM Performance Standard for summer 2018. The declared operational runway capacity is based on the assumptions and requirements as specified in attachment 2.

The capacity declaration for summer 2018 has been determined by Amsterdam Airport Schiphol, in accordance with Council Regulation 95/93, as amended, the 'Convenant Luchtvaartsector' (Covenant Aviation Sector) of 26 June 2003 and the 'Besluit Slotallocatie' (Decree Slot Allocation), after it was concluded from in-depth discussions that no unanimous agreement could be reached in the 'Operationeel Schiphol Overleg' (Operational Management Committee Schiphol).

As agreed, ACNL will communicate the capacity declaration and the resulting so-called runway graphs (or similar information) to the airlines through publication on its web site or its portal e-Airportslots.

Pagenummer

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Date

28 September 2017

A copy of this letter will be sent to the Ministry of Infrastructure and the Environment, the 'Omgevingsraad Schiphol' (Regional Consultation Committee Schiphol), LVNL (Air Traffic Control the Netherlands), the Schiphol Airline Operators Committee, the Board of Airline Representatives in the Netherlands, the airlines KLM, Martinair, Transavia, TUIfly, Corendon Dutch Airlines and easyJet, as well as the Coordination Committee Netherlands and the associated Scheduling and Slot Performance Committee.

Yours sincerely,
ROYAL SCHIPHOL GROUP

A handwritten signature in blue ink, consisting of several loops and a long vertical stroke, positioned over the typed name and title.

Birgit Otto
Executive Vice President & Chief Operations Officer

Attachments:

1. Capacity declaration Amsterdam Airport Schiphol; summer 2018
2. Feasibility of ATC capacity

Pagenummer

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Date

28 September 2017

Copies to:

- **Members 'Operationeel Schiphol Overleg'**
- **'Omgevingsraad Schiphol'**
- **Ministry of Infrastructure and the Environment:**
 - **State Secretary – Ms S.A.M. Dijkma**
 - **Directorate-General for Mobility and Transport:**
 - **Mr M.M. Frequin**
 - **Mr R. Huyser**
 - **Human Environment and Transport Inspectorate:**
 - **Inspector-General – Mr J. van den Bos**
- **LVNL:**
 - **Mr J.Daams**
- **SAOC:**
 - **Ms M. Bordes**
- **BARIN:**
 - **Mr F. Allard**
- **KLM:**
 - **Mr P. Elbers**
 - **Mr R.M. de Groot**
- **Martinair:**
 - **Mr M. de Nooijer**
- **Transavia:**
 - **Mr M. ten Brink**
- **TUIfly:**
 - **Mr R. Polderman**
- **Corendon Dutch Airlines:**
 - **Mr M. Boogerd**
- **easyJet**
 - **Mr W. Vet**
- **Coordination Committee Netherlands:**
 - **Chairman Mr B. Imminga**
- **Scheduling and Slot Performance Committee:**
 - **Chairman Mr B. Imminga**

Capacity declaration Amsterdam Airport Schiphol; summer 2018

Environmental capacity; available number of slots for Commercial Aviation

The number of slots available for landing and take-off operations of Commercial Aviation during the summer season 2018 (March 25, 2018 through October 27, 2018; 31 weeks) is specified in the table below. For the summer season, local time equals UTC + 2 hours.

*Available number of slots and movements for Commercial Aviation; summer season 2018
(March 25, 2018 through October 27, 2018)*

	Total number of departures and arrivals	Number of night departures and arrivals
Movements	313,740	22,000
Planning limit (slots)	313,740	23,219

The following definitions apply:

Commercial Aviation: Flights performed by an air carrier, providing scheduled flights, programmed charters or ad hoc flights which are open for individual bookings for passengers and/or freight and/or mail, including positioning flights which are directly linked to the operation of these flights.

General Aviation: All aviation except commercial aviation. Including but not limited to business aviation, air taxi operations and technical flights.

Night departure slot: Departure slot in the period 22:40 – 06:59 LT (20:40 – 04:59 UTC)

Night arrival slot: Arrival slot in the period 23:00 – 07:19 LT (21:00 – 05:19 UTC)

Night slot: Either a night departure slot or a night arrival slot

Night movement: Departure or arrival with a runway time in the period 23:00 – 06:59 LT (21:00 – 04:59 UTC)

Planning limit: Total number of slots available for allocation provided that all applicable requirements are met, as determined by the slot coordinator.

The numbers of slots and movements as specified in the above table are based on (i) the upcoming legally binding maximum of 500,000 aircraft movements in Commercial Aviation during an operational year (1st November through 31st October), of which no more than 32,000 are night movements and on the (ii) "Tijdelijke regeling van de Staatssecretaris van Infrastructuur en Milieu, van 8 mei 2017, nr. IENM/BSK-2017/107529, houdende vaststelling van vervangende grenswaarden voor de geluidbelasting in de handhavingpunten passend bij een maximum aantal vliegbewegingen handelsverkeer in de nacht van 32.000 voor het gebruiksjaar 2018 op de luchthaven Schiphol (Tijdelijke regeling volumeplafond nachtvluchten Schiphol)."

Nominal operational runway capacity

For slot allocation purposes for both Commercial and General Aviation, the operational runway capacity for the summer season 2018 has been determined as follows:

ATM mode ¹	Possible within period from – to (UTC)	Nominal capacity per hour		Nominal capacity per 20 minutes	
		IFR Arrivals	IFR Departures	IFR Arrivals	IFR Departures
Day; departure peak mode (S)	05:00 – 19:39	36	74	12	25
Day; arrival peak mode (L)	05:00 – 19:39	68	38	23	13
Day; off peak mode (O)	04:00 - 04:39	24	30	8	10
	04:40 - 04:59	24	40	8	14
	05:00 - 20:39	36	40	12	14
	20:40 – 20:59	36	25	12	9
Night mode (N)	21:00 - 03:59	24	25	8	9

Coordination of runway capacity will be based on

- Constraints for 20 minutes periods, and
- For periods of equal ATM mode with a minimum duration of one hour – constraints on rolling hours, i.e. each 60 minute interval that occurs within that ATM mode, with a stepsize of 20 minutes, will have a constraint on capacity.

Additional requirements:

- Arrival and departure peak modes should not overlap.
- Each arrival peak mode period shall be separated from a preceding departure peak mode period by an off peak mode period. Between the first departure and arrival peak, the duration of this off peak mode period should be at least 30 minutes. The duration of this off peak mode period between any other departure and arrival peak shall be at least 20 minutes.
- Each departure and arrival peak mode shall have a minimal duration of 40 minutes, except for the first peak mode at 05:00 UTC, which has a minimal duration of 20 minutes.
- Slots should be requested and will be allocated per 5 minutes.

¹ Departure peak mode: one runway is used for landings, two runways for take-offs. Day arrival and departure procedures are applied.
 Arrival peak mode: two runways are used for landings, one runway for take-offs. Day arrival and departure procedures are applied.
 Off peak mode: one runway is used for landings, one runway for take-offs. Day arrival and departure procedures are applied.
 Night mode: one runway is used for landings, one runway for take-offs. Night arrival and departure procedures are applied.

In the bracket list, that forms integral part of this declaration, the number of available arrival and departure slots for any 20 minute interval and per rolling hour is shown. This capacity depends on the operational runway capacity for the different ATM modes and the agreed peak- and off-peak times for the day period and should meet the mentioned additional requirements. The bracket list for the twenty-four hours period, in accordance with the above table, is specified in Attachment 1.

The bracket list will be endorsed together with this capacity declaration.

Additional requirements and conditions

1. This declaration for summer 2018 is based on a total assumed number of 185,000 movements (Commercial Aviation only) during the winter season 2017/2018 (October 29, 2017 through March 24, 2018, 21 weeks), in accordance with the capacity declaration for winter 2017/2018. If the actual number of movements in said period is less than 185,000, Schiphol will decide, taking into account the input received from the OSO-parties in August 2017, whether the unused capacity will be added to the planning limit of 313,740 slots for summer 2018. The manner and to which degree unused capacity from winter 2017/2018 will be transferred will be determined by Schiphol in the third week of February 2018. The actual transfer, if any, will take place after the 24th of March 2018.

In relation to the transfer of night capacity, the following applies: The declaration for summer 2018 is based on a total number of 10,735 night slots (Commercial Aviation only) during winter 2017/2018 (October 29, 2017 through March 24, 2018, 21 weeks), in accordance with the capacity declaration for winter 2017/2018. If the number of night movements in said period is less than 10,000 movements, the difference will be added to the planning limit of 23,219 night slots for summer 2018.

2. Based on the legally binding noise limits "Lnight" in the legislation mentioned above, a target of 32,000 actual night movements (Commercial Aviation only) during the operational year 2018 should be taken into account for the allocation of night slots.
3. It is noted that for the purpose of the above provision, night slots imply departure slots in the bracket 22:40 – 06:59 LT (winter 21:40 – 05:59 UTC; summer 20:40 – 04:59 UTC) and arrival slots in the bracket 23:00 – 07:19 LT (winter 22:00 – 06:19 UTC; summer 21:00 – 05:19 UTC).

Explanatory remarks

1. It is noted that operational year 2018 should be considered a transition period prior to adoption of the new legislation. Procedures and policies, especially regarding night slots and night movements, may be revised for future capacity declarations.
2. Some supplemental information which is relevant for operators planning operations at Amsterdam Airport Schiphol is provided in Attachment 2.

Attachment 1: Bracket list summer 2018

Time from [UTC]	Time to [UTC]	# Arrivals	# Departures	# Rolling hour Arr	# Rolling hour Dep
0:00	0:15	8	9	-	-
0:20	0:35	8	9	-	-
0:40	0:55	8	9	24	25
1:00	1:15	8	9		
1:20	1:35	8	9		
1:40	1:55	8	9		
2:00	2:15	8	9		
2:20	2:35	8	9		
2:40	2:55	8	9		
3:00	3:15	8	9		
3:20	3:35	8	9		
3:40	3:55	8	9		
4:00	4:15	8	10	-	-
4:20	4:35	8	10	-	-
4:40	4:55	8	14	-	-
5:00	5:15	12	25	-	-
5:20	5:45	18	20	-	-
5:50	5:55	11	6	-	-
6:00	6:15	23	13	68	38
6:20	6:35	23	13		
6:40	6:55	23	13		
7:00	7:15	23	13		
7:20	7:35	12	25	36	74
7:40	7:55	12	25		
8:00	8:15	12	25		
8:20	8:35	12	25		
8:40	8:55	12	14	-	-
9:00	9:15	23	13	-	-
9:20	9:35	23	13	-	-
9:40	9:55	12	25	36	74
10:00	10:15	12	25		
10:20	10:35	12	25		
10:40	10:55	12	14	-	-
11:00	11:15	23	13	68	38
11:20	11:35	23	13		
11:40	11:55	23	13		

12:00	12:15	12	25		
12:20	12:35	12	25	36	74
12:40	12:55	12	25		
13:00	13:15	12	14		
13:20	13:35	23	13	68	38
13:40	13:55	23	13		
14:00	14:15	23	13		
14:20	14:35	12	25	36	74
14:40	14:55	12	25		
15:00	15:15	12	25		
15:20	15:35	12	25		
15:40	15:55	12	25		
16:00	16:15	12	14	-	-
16:20	16:35	23	13	68	38
16:40	16:55	23	13		
17:00	17:15	23	13		
17:20	17:35	23	13		
17:40	17:55	23	13		
18:00	18:15	12	25	36	74
18:20	18:35	12	25		
18:40	18:55	12	25		
19:00	19:15	12	25		
19:20	19:35	12	25		
19:40	19:55	12	14	36	40
20:00	20:15	12	14		
20:20	20:35	12	14		
20:40	20:55	12	9	-	-
21:00	21:15	8	9	24	25
21:20	21:35	8	9		
21:40	21:55	8	9		
22:00	22:15	8	9		
22:20	22:35	8	9		
22:40	22:55	8	9		
23:00	23:15	8	9		
23:20	23:35	8	9	-	-
23:40	23:55	8	9	-	-

This bracket list summer 2018 resembles the available slots per 20 minutes and per rolling hour, in accordance with the underlying capacity declaration summer 2018 and the current distribution of historical slots. Alternations to the bracket list summer 2018 are possible, provided that it is in accordance with the declaration. The bracket list summer 2018 is part of the declaration. No changes to the bracket list are possible after the endorsement of the final version of this capacity declaration, which will be at least seven days before the IATA Initial Submission Date.

Note that due to technical limitations rolling hours containing the transition to the next day cannot be defined. Therefore only 20 minutes capacities are defined for 23:20-0:40 hours UTC.

Attachment 2: Supplemental information

In addition to the capacity limitations, aircraft operators should take into account that the operating restrictions as specified below are effective at Amsterdam Airport Schiphol.

Operating restrictions based on certificated noise levels

1. Aircraft which are certificated in accordance with the noise standards of ICAO Annex 16 Chapter 2:
 - Take-off and landing is not allowed.
2. Aircraft which are certificated in accordance with the noise standards of ICAO Annex 16 Chapter 3, for which the margin of the sum of the three certification noise levels, relative to the sum of the three applicable ICAO Annex 16 Chapter 3 certification noise limits, is not more than 5 EPNdB:
 - New operations are not allowed.
 - For aircraft equipped with engines with bypass ratio ≤ 3 , take-off and landing is not allowed between 18:00 and 07:59 hr. local time (16:00 – 05:59 UTC for summer season).
 - For aircraft equipped with engines with bypass ratio > 3 , it is not allowed to plan take-offs between 23:00 and 06:59 hr. local time (21:00 – 04:59 UTC for summer season).
3. Aircraft which are certificated in accordance with the noise standards of ICAO Annex 16 Chapter 3, for which the margin of the sum of the three certification noise levels, relative to the sum of the three applicable ICAO Annex 16 Chapter 3 certification noise limits, is more than 5 EPNdB:
 - No restrictions.

It is noted that, if required for noise control purposes, the operating restrictions as specified above may be amended.

RNAV 1 (P-RNAV) requirement for all flights to and from Schiphol

The Netherlands requires operational RNAV 1 (P-RNAV) approval for all IFR flights at all times to and from Schiphol. More information can be found in AIC-A 02/11, 19 MAY 11.

Preferred aircraft types

In view of severe noise-related capacity constraints for the night and early morning periods, as well as the need to minimize noise impact on the environment, it is of essential importance that noise of each aircraft movement during night and early morning is as low as possible. Aircraft operators are therefore urged to use the quietest possible aircraft types for night and early morning flights. In addition, in respect of legal limits on aircraft emissions, it is of the utmost importance that aircraft operators use the cleanest possible aircraft for all operations at Amsterdam Airport Schiphol.

It is noted that Amsterdam Airport Schiphol has adopted and will continue to develop a policy to further encourage the use of quieter (and cleaner) aircraft, for instance through its airport charges system which includes reductions and surcharges based on certification noise levels.

Attachment 2: Feasibility of ATC Capacity

This Capacity Declaration is based on ATC The Netherlands' Safety, Efficiency and Environment Performance Standard (VEMPS) Summer 2018 (LVNL-reference number D/S&P 17/206), which contains detailed capacity figures for individual parts of the ATM System. Available ATC capacity depends on the assumed availability of infrastructure (runways, taxiways, airspace) to be used for Schiphol traffic moving to and from their assigned gates.

Required investments for ground operations

With Schiphol Group, a joint investment programme has been agreed to provide sufficient capacity for ground operations. The following measures from the "500k movements roadmap" shall be realised not later than 1 July 2018 and preferably earlier:

- o permanent alternative helispot (at current alternative location, already realised)
- o one-way traffic inbound and outbound K apron
- o double taxiway in G-H bay including connection to taxiway A and B

If these conditions are not met this has a negative effect on the ground control capacity, and therefore the effective Schiphol (runway) capacity.

Airspace capacity

Non-Schiphol traffic flows, to and from adjacent ANSP's (e.g. BelgoControl, MUAC) and to and from other airports (e.g. EHRD, EHEH, future EHLE) interfere with LVNL traffic flows to and from Schiphol. As airspace capacity reaches its limits in ACC sectors 2 and 3, further increase of non-Schiphol traffic flows above the levels mentioned in the VEMPS may result in reduced punctuality (delays). In particular, interference of EHEH traffic with ATC The Netherlands' sector 3 traffic is already at a critical level. Because traffic restrictions are generated on a first come first serve basis, most delays will involve Schiphol traffic.

Availability taxiways and aircraft stands

LVNL performance data depend on the availability of aircraft stands, taxiways for taxiing traffic to and from its aircraft stand and possibilities to perform a regular pushback from the airport stand ("regular operations"). Irregularities in the availability of taxiways, e.g. tow traffic, traffic that is waiting on the taxi track, traffic that is not taxiing from or to its aircraft stand and the blocking of regular pushback possibilities, will result in negative capacity consequences.

Even distribution of traffic

Traffic should be evenly distributed over the hour- and twenty-minutes periods, to achieve maximal use of available capacity. In practice, traffic distribution inside the 20 minute brackets tends to be "skewed" to either the first or the last part of the bracket. "Skewness" inside the twenty minute brackets has negative capacity consequences.