Royal Schiphol Group
APOC | Airport Operations Centre

10-03-2025

ROUND TABLE 1: APOC PROCEDURES

APOC organisation & procedures

- **APOC & Airport Capacity, Planning & Control (ACPC)**
- Regular Operations
- Disrupted Operations: sector briefing
- De-icing forecast
- APOC – NMOC – APOC communication

APOC DEVELOPMENT

2017
START APOC PROGRAMME

2019
OFFICIAL OPENING WITHIN WTC

2020
COVID & 'CORE' SCHIPHOL

2021
START EXTENDED SECTOR COLLABORATION

2022
AOP 3.0 AND START OPERATIONAL SHIFTS

2024
AIRPORT CAPCITY, PLANNING & CONTROL

AIRPORT CAPACITY, PLANNING & CONTROL

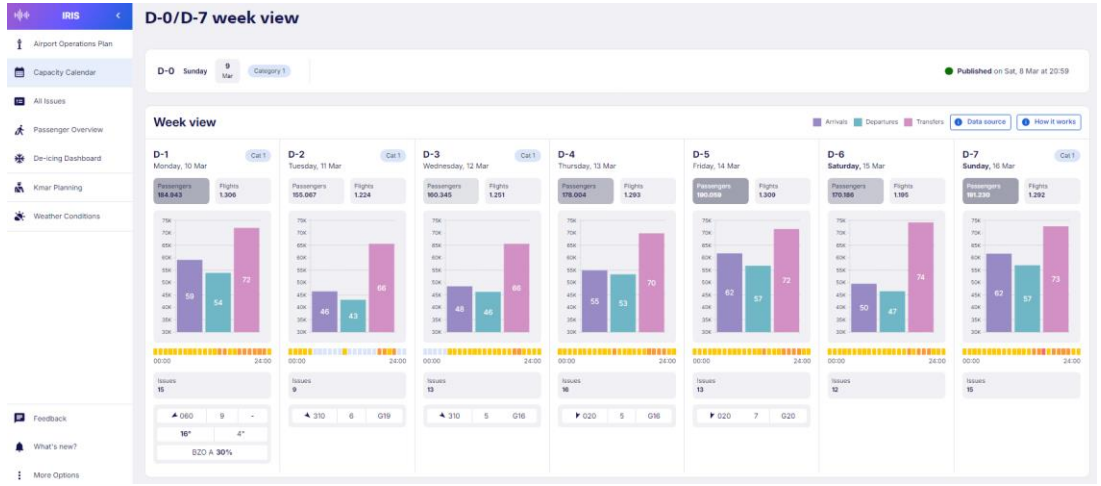
Slot & Capacity Management → Operational Capacity & Planning → Airport Operations Center (APOC) → Performance & Analytics

Y-3 | D-180 | D-7 | D+7 | D+X

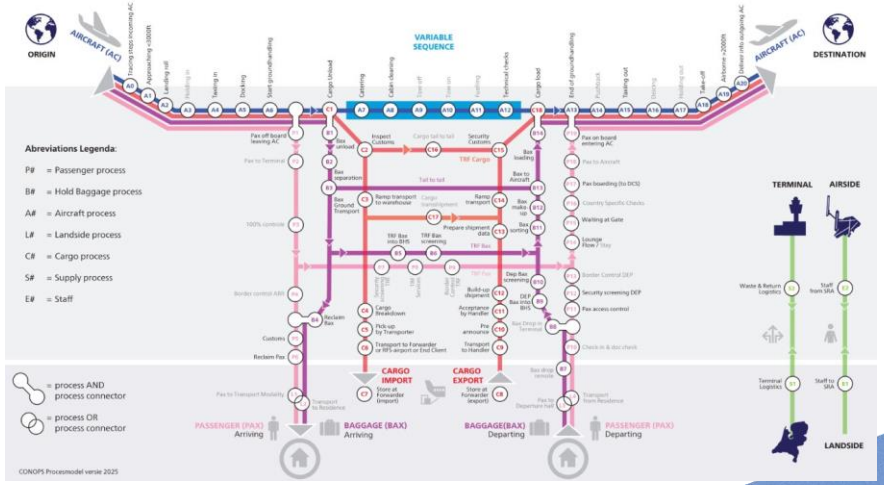
Solutions

Airport Operations Center (APOC)

Sector (Partner) Management



Performance & Improvement



Schiphol
APOC | Airport Operations Centre

APOC organisation & procedures

- APOC & Airport Capacity, Planning & Control (ACPC)
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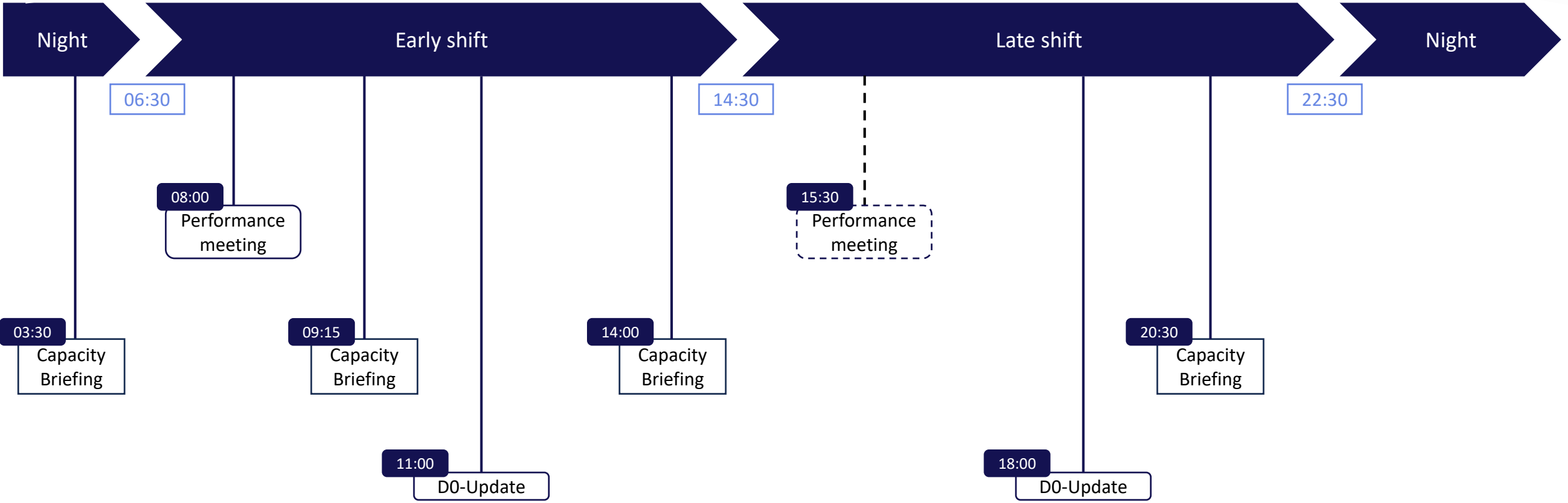
REGULAR OPERATIONS



APOC PERFORMANCE MEETING

Schiphol Group

KLM

Luchtverkeersleiding Nederland
Air Traffic Control the Netherlands

Koninklijk Nederlands Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat

Koninklijke Marechaussee

Douane
Ministerie van Financiën

Axxicom

AVIAPARTNER

MENZIES AVIATION

dnata

swissport

Viggo service enablers

APOC Performance Meeting

Weather forecast

WEATHER FORECAST

Weather forecast

Monday 10 March, 08 UTC till **Tuesday 11 March, 21 UTC**

UTC | CET | Data source | How it works

Last update: **Short term: 06:35 UTC** **Long term: 04:33 UTC**

	08	09	10	11	12	13	14	15	18	21	00	03	06	09	12	15	18	21
Visibility < 5km and/or ceiling ≤ 2000 ft (%)	40	15	5	0	0	0	0	0	0	0	30	65	80	30	0	0	0	5
Visibility < 5km and/or ceiling < 1000 ft (%)	40	15	5	0	0	0	0	0	0	0	30	65	80	30	0	0	0	0
RVR < 1500 m and/or ceiling ≤ 300 ft (%) BZO A	5	0	0	0	0	0	0	0	0	0	10	50	30	0	0	0	0	0
RVR < 550 m and/or ceiling < 200 ft (%) BZO B	0	0	0	0	0	0	0	0	0	0	0	20	20	0	0	0	0	0
RVR < 350 m (%) BZO C	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Wind direction (deg)	▶ 020	▶ 040	▶ 050	▲ 060	▲ 060	▲ 050	▲ 050	▶ 040	▶ 020	▶ 020	▶ 020	▼ 010	▼ 360	▼ 350	◀ 330	◀ 310	◀ 320	▲ 300
Wind speed (kt)	5	8	9	9	9	9	9	9	9	8	8	8	9	10	10	12	10	7
Gusts (kt)		13	14	14	14	14	14	14	14	13			14	15	15	17	15	
Standard deviation wind direction (deg)	25	25	25	25	25	25	25	25	25	25	15	20	20	15	30	20	20	15
Standard deviation wind speed (kt)	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	3
CB (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thunderstorm (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Aircraft Induced Lightning (AIL)	No AIL in TMA																	
Temperature (°C)	7	9	11	13	15	15	16	16	10	5	4	3	4	6	8	8	6	4
Dew point (°C)	3	4	4	5	5	5	4	4	5	3	3	3	3	3	1	0	1	1
Relative humidity (%)	76	71	62	58	51	51	45	45	71	87	93	100	93	81	61	57	70	81
Windchill	5	7							8	2	1	-1	0	3	5	5	3	1
Snow (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moderate or heavy snow (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Freezing precipitation (%)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pressure (hPa) (model output)	1002	1002	1002	1002	1002	1002	1002	1002	1003	1004	1004	1004	1003	1004	1004	1003	1003	1003
	08	09	10	11	12	13	14	15	18	21	00	03	06	09	12	15	18	21

Remarks by KNMI	**Short term**	**Long term**
Visibility and ceiling	Risk BZO due to VIS.	Risk BZO due to CLD.
Wind	--	--
Temperature	--	--
Precipitation	--	--
CB in FIR	--	--

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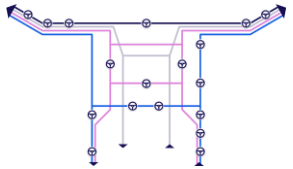
Weather forecast

Expected runway capacity



D0 expectations

D+1 review

D-1 – D-7 outlook

REGULAR OPERATIONS

Schiphol Group

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Air Traffic Control the Netherlands

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Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat

Capacity briefings

- Weather forecast
- Airside OPS (Schiphol)
- Expected runway use (ATC)
- In- and outbound capacity (ATC)
- Aircraft flow
- Hub control

APOC organisation & procedures

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- **Disrupted operations: sector briefing**
- De-icing forecast
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DISRUPTED OPERATIONS: SECTOR BRIEFING

Schiphol Group

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Air Traffic Control the Netherlands

KLM

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Meteorologisch Instituut
Ministerie van Infrastructuur en Waterstaat

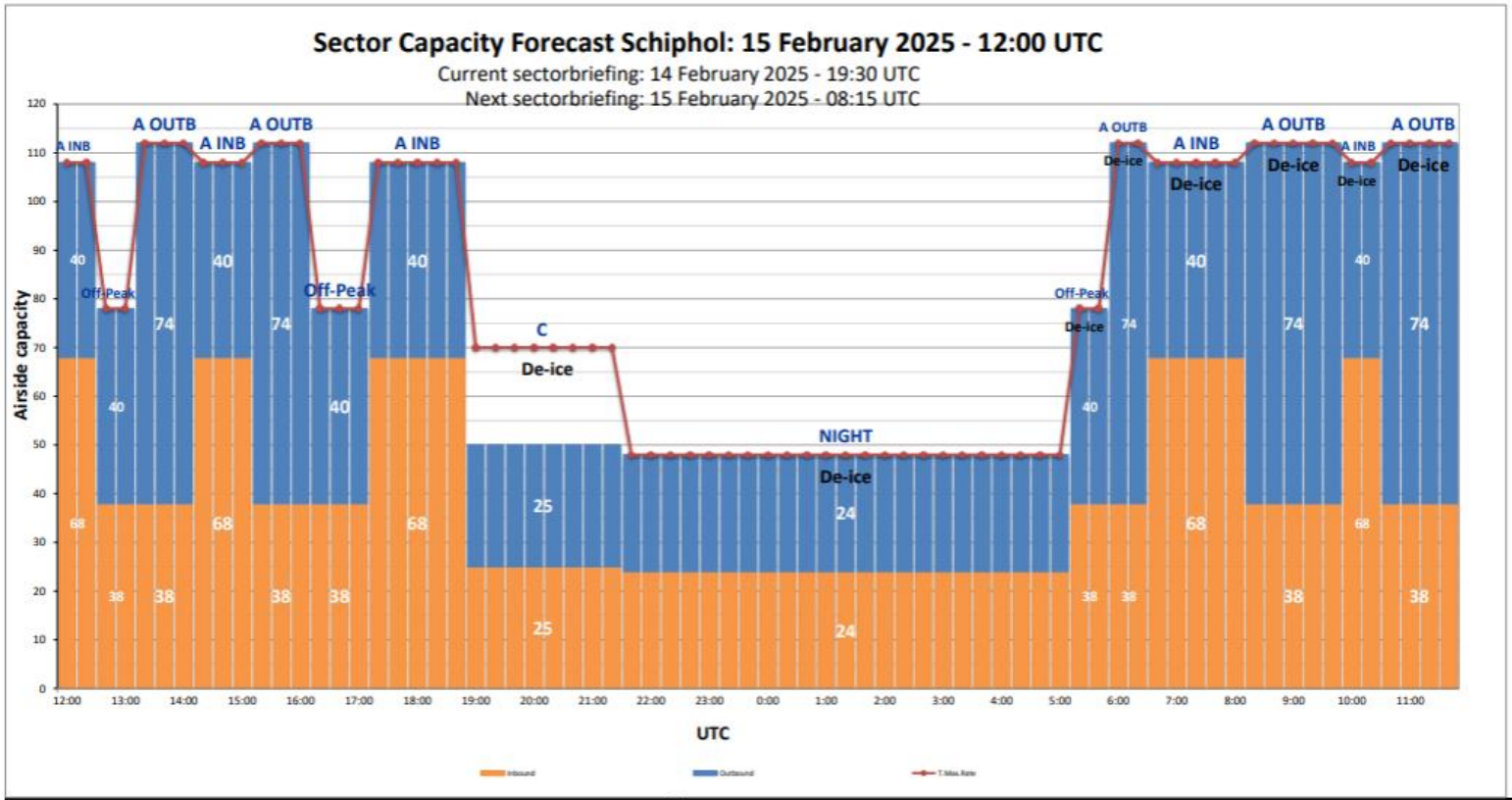
Sector Briefing

- Weather forecast
- Airside OPS (Schiphol)
- KLM De-icing expectations
- Expected runway use (ATC)
- In- and outbound capacity (ATC)
- Aircraft flow

Decide the biggest bottleneck per hour and per peak

DISRUPTED OPERATIONS: SECTOR BRIEFING OUTPUT

Sector Briefing



Scenarios as mentioned below only to be used in the winter				
Index		Max. rates		
Scenario	RWY's available	↓	↑	Remarks
NIGHT	1 ↓ RWY 1 ↑ RWY	24	24	
0	Nil	0	0	
E	1 RWY 'Mixed mode'	10	10	During sweeping (20 mins) = rate 0
D	1 RWY 'Mixed mode'	17	17	
C	1 ↓ RWY 1 ↑ RWY	35	35	
B INB	2+1	68	40	Winterops still in progress, no operational hamper
B OUTB	2+1	38	74	Winterops still in progress, no operational hamper
A INB	All Rwy's available	68	40	
A OUTB	All Rwy's available	38	74	

Free text
According to KNMI, chance of snowfall is currently varying between 0 cm and 7 cm in the period from 1800z till 0000z. Thereafter there will be no more snow during Sunday. First hour of snow will be covered with spraying. For the outboundpeak, we predict a 100% de-icing operation in which KLM combined with Menzies and Aviapartner cover 25 de-icings per hour until end of snow. Runway scenario is now predicted at C, and will be determined tomorrow. Currently, we expect de-icing to be the bottleneck. During the night, we might be restricted to a mixed mode runway in case the Polderbaan cannot be kept clear of snow.

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DISRUPTED OPERATIONS

De-icing Forecast

- De-icing weather forecast
- Expected de-icing
- Scenario definiton

DISRUPTED OPERATIONS

De-icing Forecast

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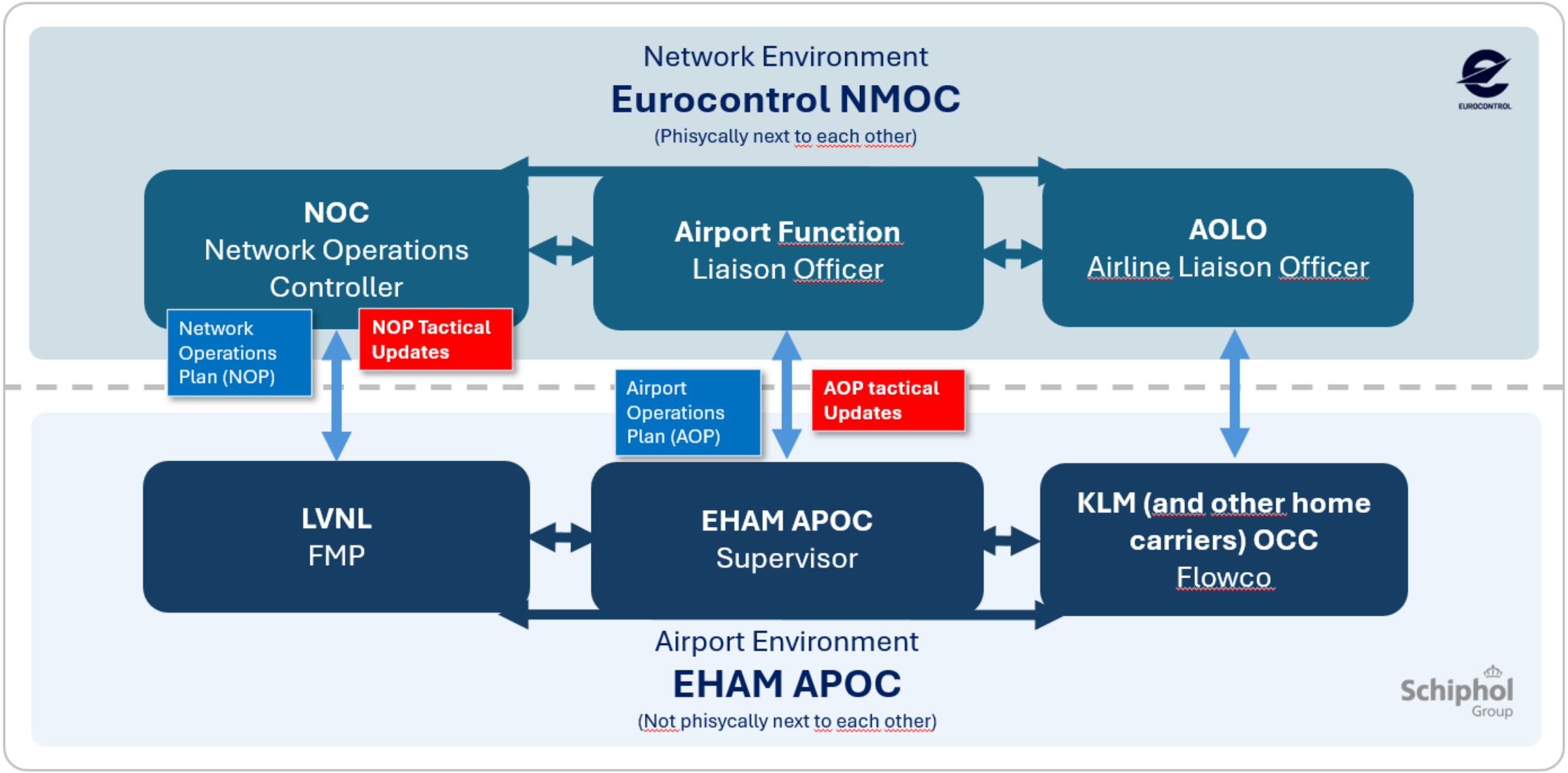
Communication to-be EHAM – Eurocontrol NMOC

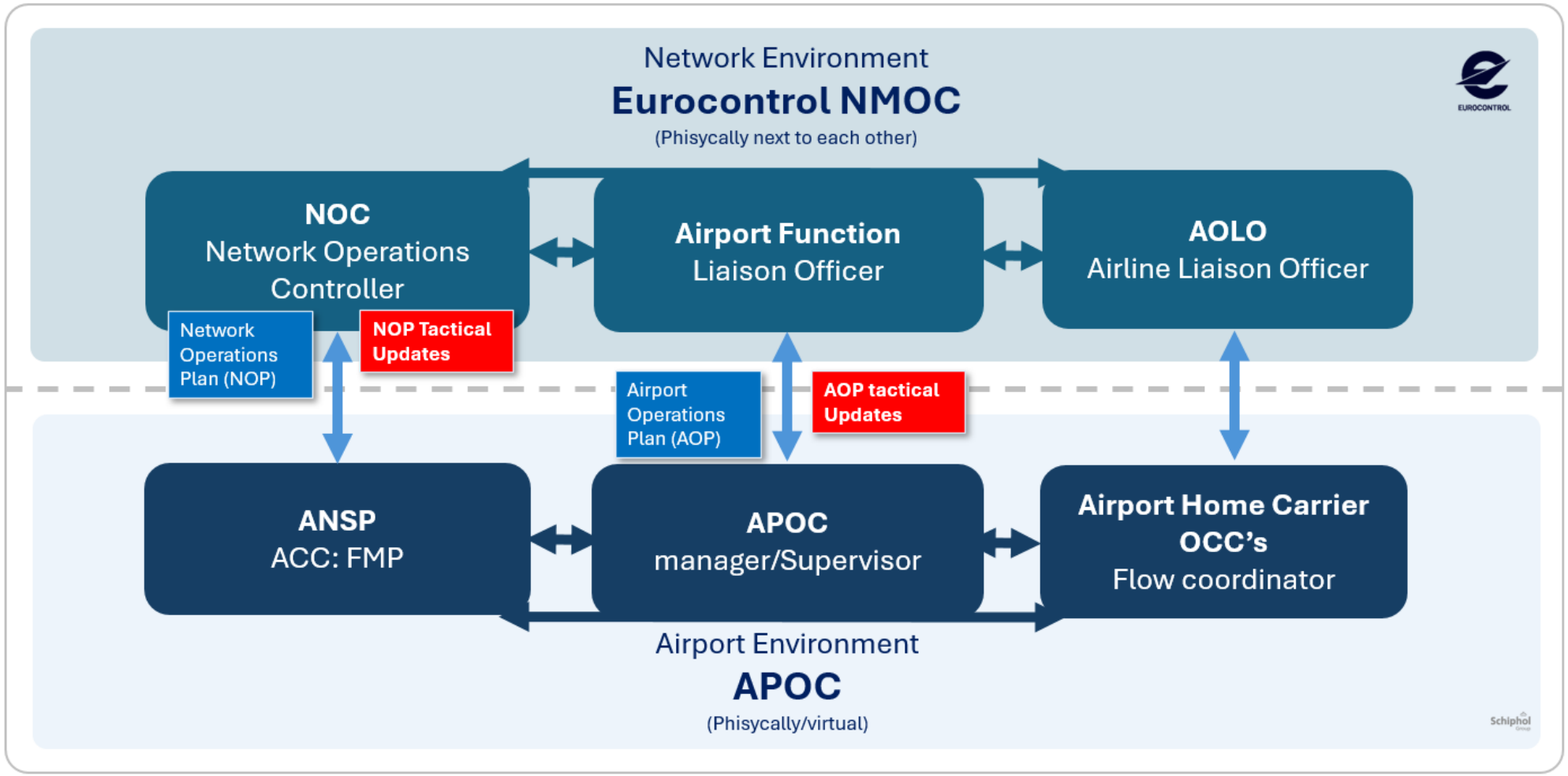
PreTACT D-1
TACT D0



FOR GENERIC USE: APOC - NMOC - APOC COMMUNICATION

Communication to-be Generic Airport – Eurocontrol NMOC

PreTACT D-1
TACT D0



APOC.
Let’s do it together!

APOC | Airport Operations Centre
World Trade Centre, Schiphol

Schiphol