

Reducing the number of night flights at Gatwick before 2025

Scoping the task

NDG BRIEFING TO AOC

DATE: TBC

The Gatwick Noise Management Board (NMB)

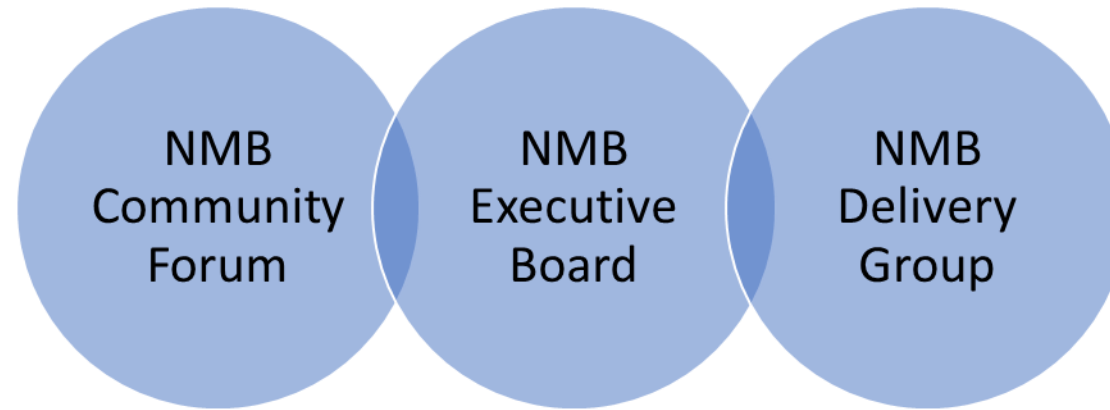
What does the NMB do?

The NMB seeks to reduce and mitigate Gatwick aircraft noise in a fair and proportionate manner, by balancing the interests of those communities negatively impacted by aircraft noise, and those of Gatwick Airport, by ensuring that the airport, and its wider industry partners, identify and effectively implement all safe, reasonable and practical measures to reduce aircraft noise impacts, and to put in place processes for engaging and dealing with the concerns raised by people that are, or could be, negatively impacted by Gatwick aircraft noise.

How does the NMB achieve these objectives?

The NMB works to identify and implement measures over and above those required by regulation and policy, recognising the invaluable and considerable experience of industry in the day-to-day management and operation of air transport. This industry experience, associated with a detailed understanding of the 'art of the possible' as regards potential noise improvement steps, benefits from the guidance and insights offered by Community Noise Groups (CNG) participating in NMB activities.

NMB Structure



Community Body ↔ Joint Body ↔ Industry Body

What is the NDG being asked to do?

Commit to using its best endeavours to minimise night flights in the period from now until the introduction of any new night flight limits in 2025

- Industry to explore how the number of flights operating at night can be reduced
 - 1) *Put in place collective and individual airline arrangements to review and challenge the scheduling of flights in the night period with the objective of materially reducing the number of flights scheduled in that period;*
 - 2) *Review night flight charges and bring forward proposals to increase them further and to ensure it is always more expensive to operate at night than during the day; and*
 - 3) *Propose additional arrangements through which night flight numbers can voluntarily be reduced, either at Gatwick or nationally.*
- *Core Night is 23:30 – 05:59 local time*

What is the current situation?

DfT Night Flight Consultation

Gatwick is a Designated Airport, giving the secretary of State powers under Section 78 of the Civil Aviation Act 1982 to impose restrictions on aircraft operating at night to mitigate and limit noise disturbance at night.

The outcome of the recent DfT night flight restrictions consultation, published 19 July 2021 determined that the existing night noise objective and existing night flight restrictions at the designated airports (including Gatwick) will be rolled over for a period of 3 years. The next night flight regime will therefore run from October 2022 to October 2025. DfT will implement a ban on QC4 rated aircraft movements at the designated airports, during the Night Quota Period (23:30 – 05:59) from October 2022.

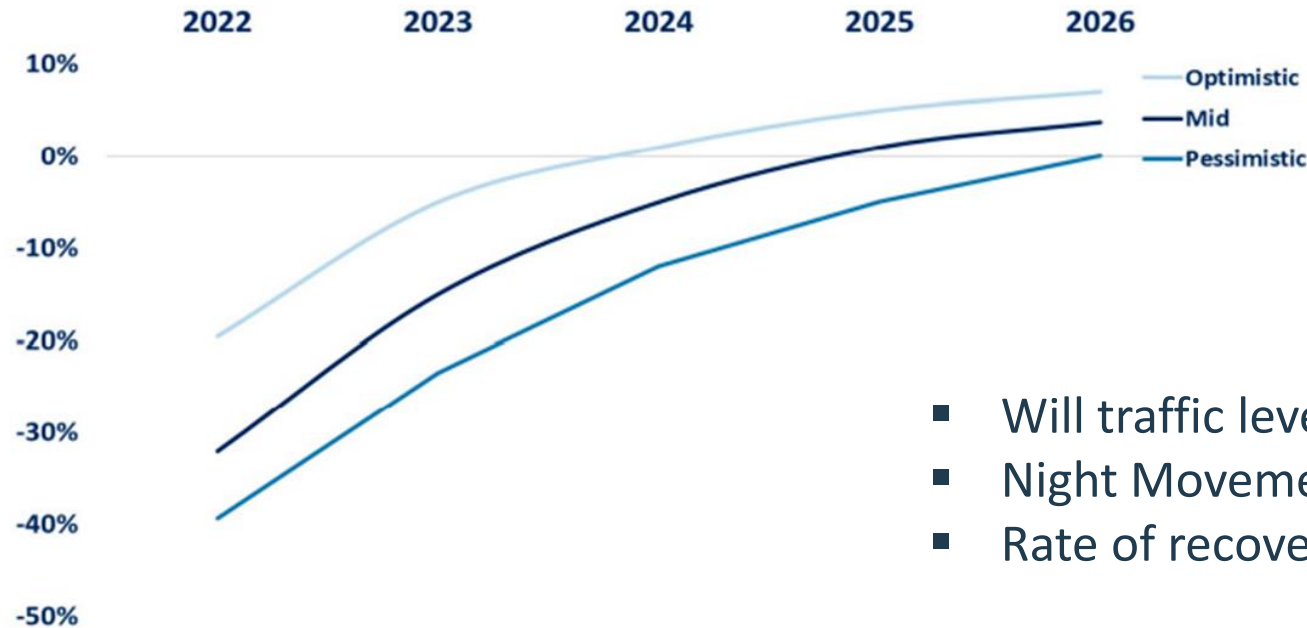
DfT aim to publish a further consultation on night flight restrictions post-October 2025, during 2023.

Night flying restrictions are divided into winter/summer, consisting of movement limits and the quota count system

→ Full Recovery (still) Not Before 2025



European Airport Passenger Traffic 5-year Forecast



- Will traffic levels recover 2019 volumes by 2025?
- Night Movements @Gatwick are currently < 20% of 2019
- Rate of recovery uncertain



Measuring success

- Unpredictable progress of traffic recovery impacts ability to assess the impact of any initiatives
- Night flights are currently < 20% of 2019
- Include recap of outcomes of measures already taken to reduce noise at night;
 - New quieter aircraft, QC4 withdrawal, Airport Charging regime, A320 series FOPP, departure noise limits
- Useful metrics
 - # Arrivals landing earlier taking them into core night – when scheduled after 05:59
 - # ATM delayed into core night
 - # ATM scheduled in core night
 - ??

Action 1: Discuss NDG task with: Airlines, GAL, Industry Resilience Group, NCF, ACL, DfT, CAA

Action 2: Quantify expected impact of 26L/09R resurfacing programme on night operations

Legal framework

Regulation 598

The role of competent authorities (SoS) is to ensure that the balanced approach to the management of aircraft noise is applied when operating restrictions are considered or implemented. *In doing so the competent authorities must ensure that there is appropriate consultation, that any operating restrictions are cost effective and that operating restrictions are only adopted if no other measures are appropriate to address the noise problem.*

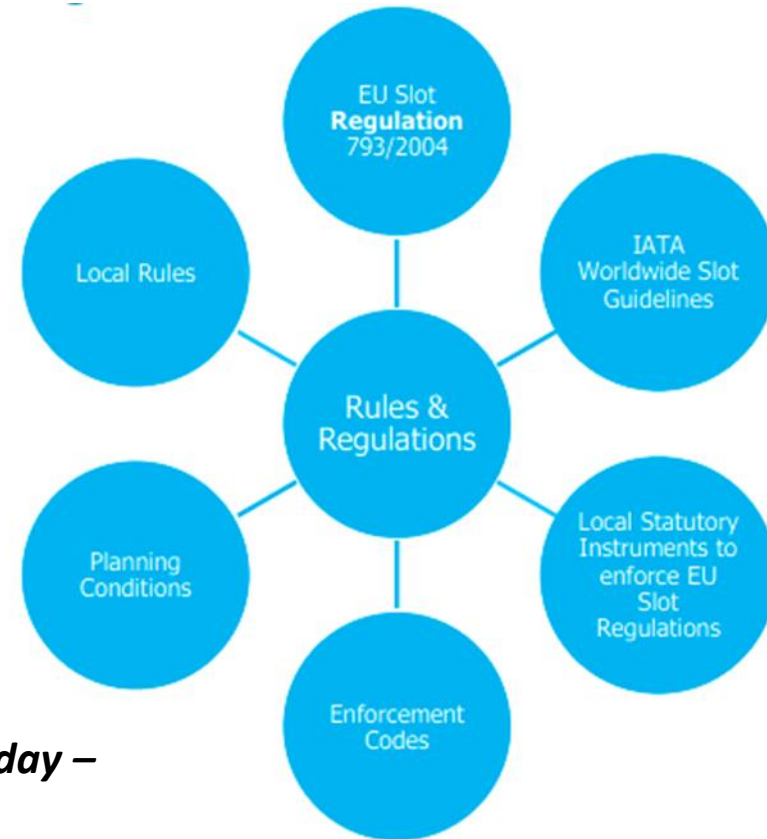
There are 4 principal elements to the balanced approach:

- ✓ the reduction of noise at source
- ✓ land-use planning and management
- ✓ noise abatement operational procedures
- ✓ operating restrictions

Application of Slot rules

Unilateral measures difficult to achieve

An airport slot is a permission given by a coordinator for a planned operation to use the full range of airport infrastructure necessary to arrive or depart at a Level 3 airport on a specific date and time.



Action 3: Verify with ACL possibility to include environmental criteria when moving/allocating airport slots

Action 4: Verify with DfT the position on moving flights from core night to day – Is this a restriction to night flying, subject to consultation requirements?

Scope clarification

CORE NIGHT OPERATIONS

Flights planned in the core night 23:30 - 05:59
Local

- Baseline 2019 data
 - Pandemic impact
- Flights delayed into the core night period
 - Statistics and KPI
 - Reasons for delay
- Exclusions
 - Emergency, diversions, extreme weather (fog, snow, high winds impacting flights using UK airports)

THE SCALE

- Statistics and seasonality
 - Emerging trends
- Flights operating in core night
 - Scheduled/delayed
- Baseline 2019 recovery assumed >2025
 - Measuring success
- Mitigation steps taken to reduce the number of night flights
 - e.g. Industry Resilience Group

Levers of influence

Action 5: Consider scheduled intensity of airport activity immediately prior to 23:30 and after 05:59

Action 6: Quantify delay elimination techniques deployed by LGW base operators (Ezy etc)

Scheduled in the Core Night	Delayed into Core Night causes/mitigation	Exceptions (Diversions/Emergencies/VIP)
Movement Limits (✓ DfT)	Extended turns (landside)	Dispensation Process (✓ DfT)
Quota Count (✓ DfT)	Extended turns (airside)	
Slot Regulation (✓ CAA)	En-route delay (ATC Flow Management)	
	Airport congestion (city pair)	
Airline Scheduling	Weather/technical	
Planning extended block times (to absorb some delay)	Industrial action	
Local Rule	Industry Resilience Group	

Night flights - if not Gatwick where?



Action 7: Quantify night measures employed by other Airports in England

Proposed first steps ?

- Quantify open Actions before NDG/8 January 19th 2022
- Decide whether the task as described is valid and within the remit of the NMB, and if so agree scope of the task proposed
- Assume that night traffic will return to 2019 levels before 2025
- Identify baseline benchmark data and management/reporting metrics
- Identify areas of activity that could influence a reduction to night flying
- Identify levers of change and what effect could potentially be achieved
- Establish what further improvements might be reasonably achievable and identify associated costs/resources, timescales and risks
- Report the NDG plan to the NEX

Action 8: Quantify Opportunity Cost and potential impacts to other noise initiatives

Preliminary Actions (to be assigned)

Preliminary Actions for delivery prior to NDG/8 19th January 2022

Action 1: Discuss NDG task with: Airlines, GAL, Industry Resilience Group, NCF, ACL, DfT, CAA

Action 2: Quantify expected impact of 26L/09R resurfacing programme on night operations

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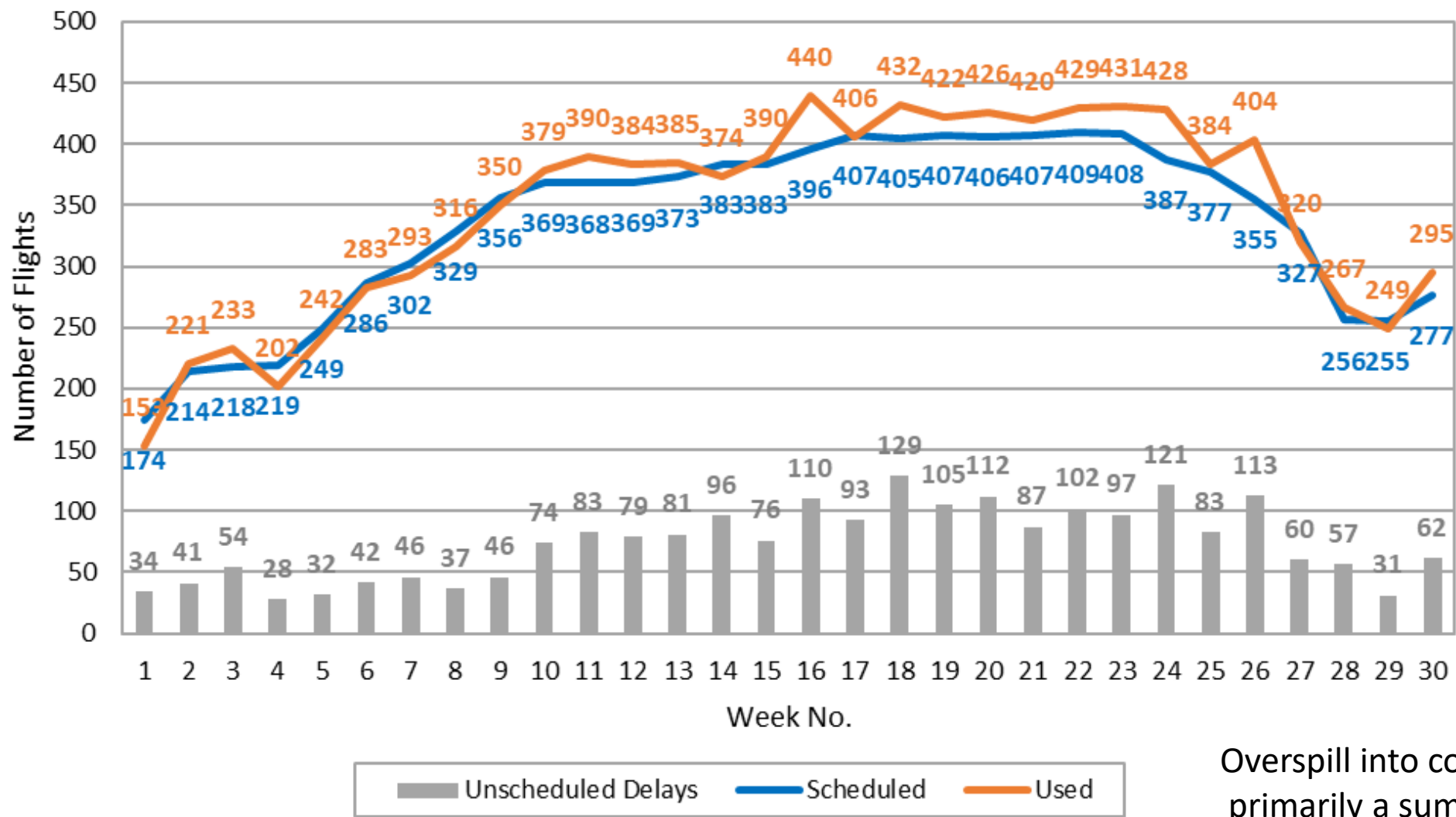
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Annex

SUPPORT MATERIAL

Summer 2019 Night Period NJMs



Overspill into core night period is primarily a summer season issue

Less congestion = fewer delays

Aerodrome Layout



General

Airport	London - Gatwick	
ICAO/IATA	EGKK/LGW	
State	United Kingdom	
Configurations in 2019	ARR:26L - DEP:26L	69%
	ARR:08R - DEP:08R	31%

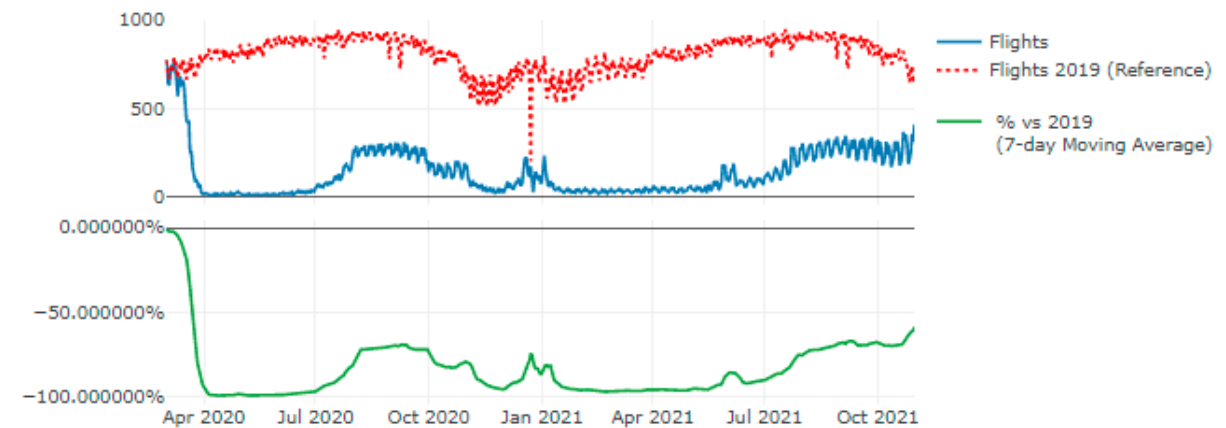
Only configurations with a minimum of 3% share are shown. Source: AIU Analysis

Summary

Indicator	Year 2019	Most Recent Month	12-month Trend
Total traffic (annual & recent month)	284916	8174 (Oct 2021)	
Average additional ASMA time [min/arr]	4.56	0.53 (Sep 2021)	
Average additional taxi-out time [min/dep]	8.94	0.53 (Mar 2021)	
Average arrival ATFM delay [min/arr]	2.92	0 (Oct 2021)	

Performance measures (other than traffic) are typically reported for the month preceeding the previous month, i.e. July -> May. Data reported under Most Recent Month dating back further point at on-going quality validation or missing reporting.

Daily Traffic Variation snapshot (Source: Network Manager)



What is the Impact of small delays?

Rolled yield throughput (six sigma)

To operate on time, each flight depends on dozens of processes functioning as planned, from check-in, to baggage loading, crewing, preparing the aircraft for flight, airport and airspace functions etc. For each process failure, a risk of delay occurs and multiplies. For aircraft conducting several flights each day – typical of LCC short/medium haul operations, the risk of excessive delay to its last flight of the day is significant and potentially financially ruinous (EU261 – next slide).



- Small system inefficiencies can lead to high accumulated prospect of delay
 - this example flight has only 72% likelihood of operating as scheduled.
- LCC operation of 6 sectors/day will experience at least 2 delayed flights for each aircraft each day
- Impact is dependent on duration of delay, it can be very serious

Delayed flights risk

AIRCRAFT OPERATORS

LCC Operations:

- easyJet
- Ryanair
- Wizz
- British Airways Eurofly
- Norwegian

EXTERNAL FACTORS

Adverse weather

Airspace congestion

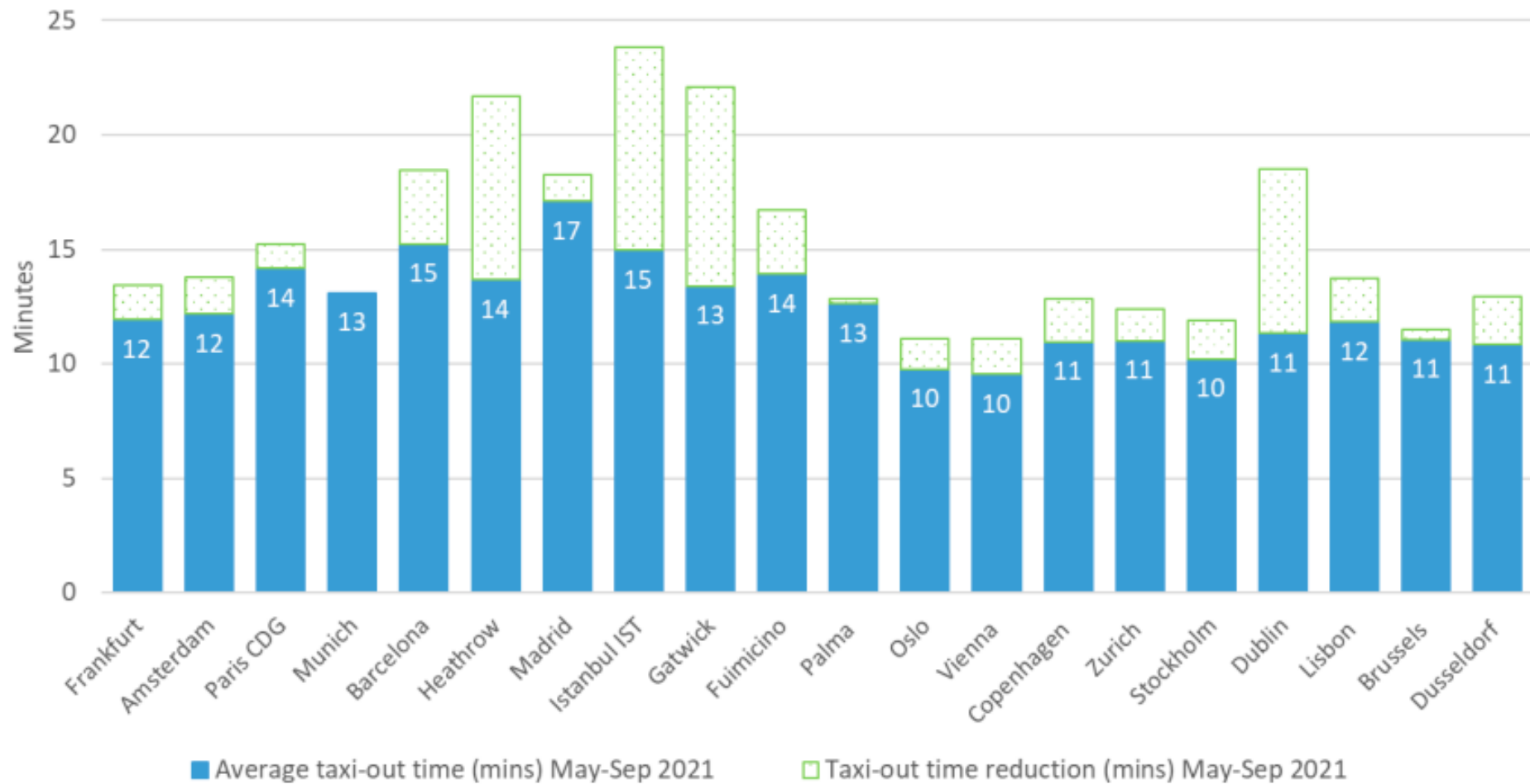
ATC industrial action

Turnaround delays (security, missing passenger, support vehicles etc)

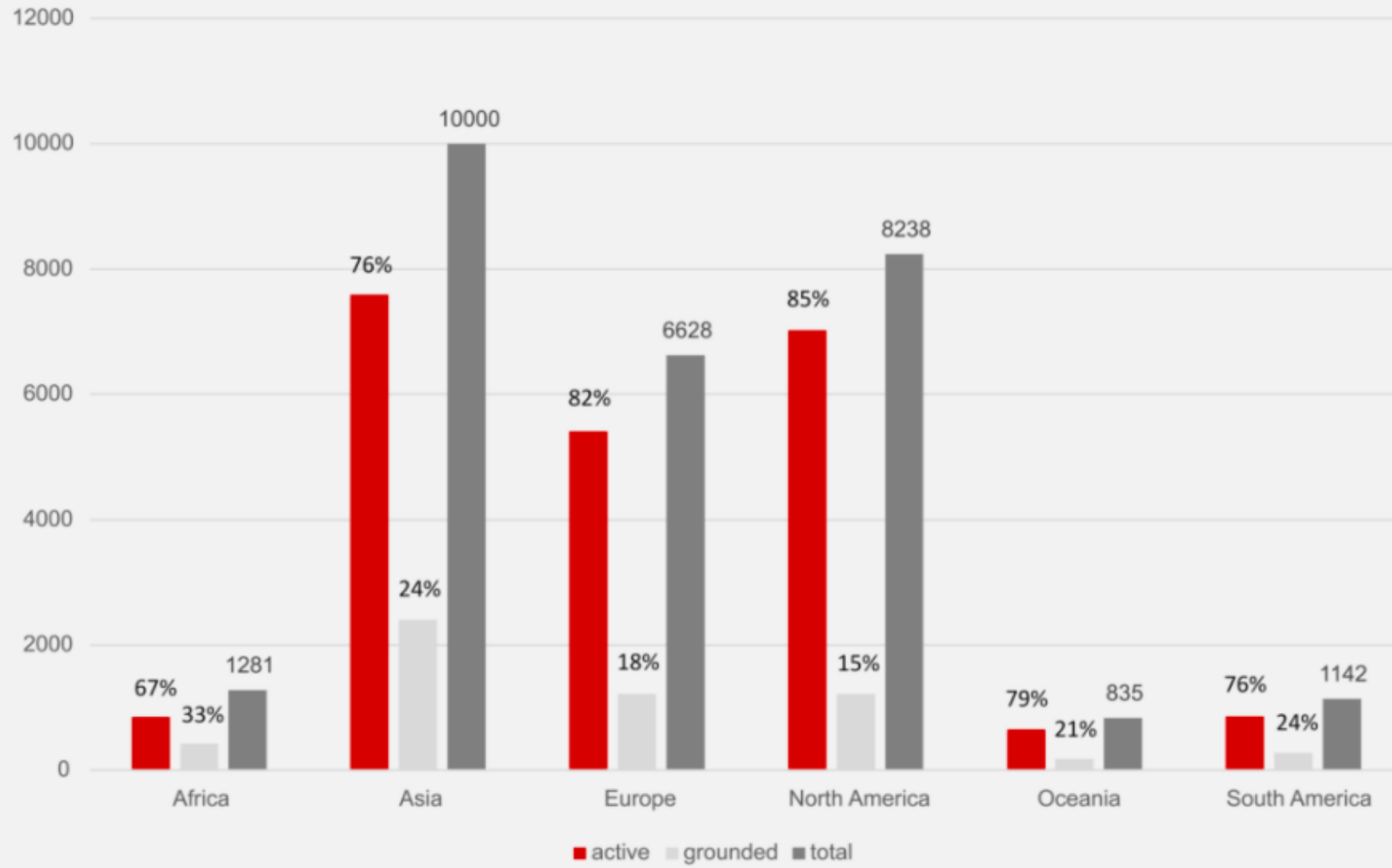
Any core night constraints likely to disproportionately impact locally based aircraft

LGW - 0600	0830 XXX 0915	1145 LGW 1230	1500 XXX 1545	1815 LGW 1900	2030 XXX 2115	2245 LGW
XXX - 0400	0830 LGW 0915	1145 XXX 1230	1500 LGW 1545	1815 XXX 1900	2030 LGW 2115	2245 XXX

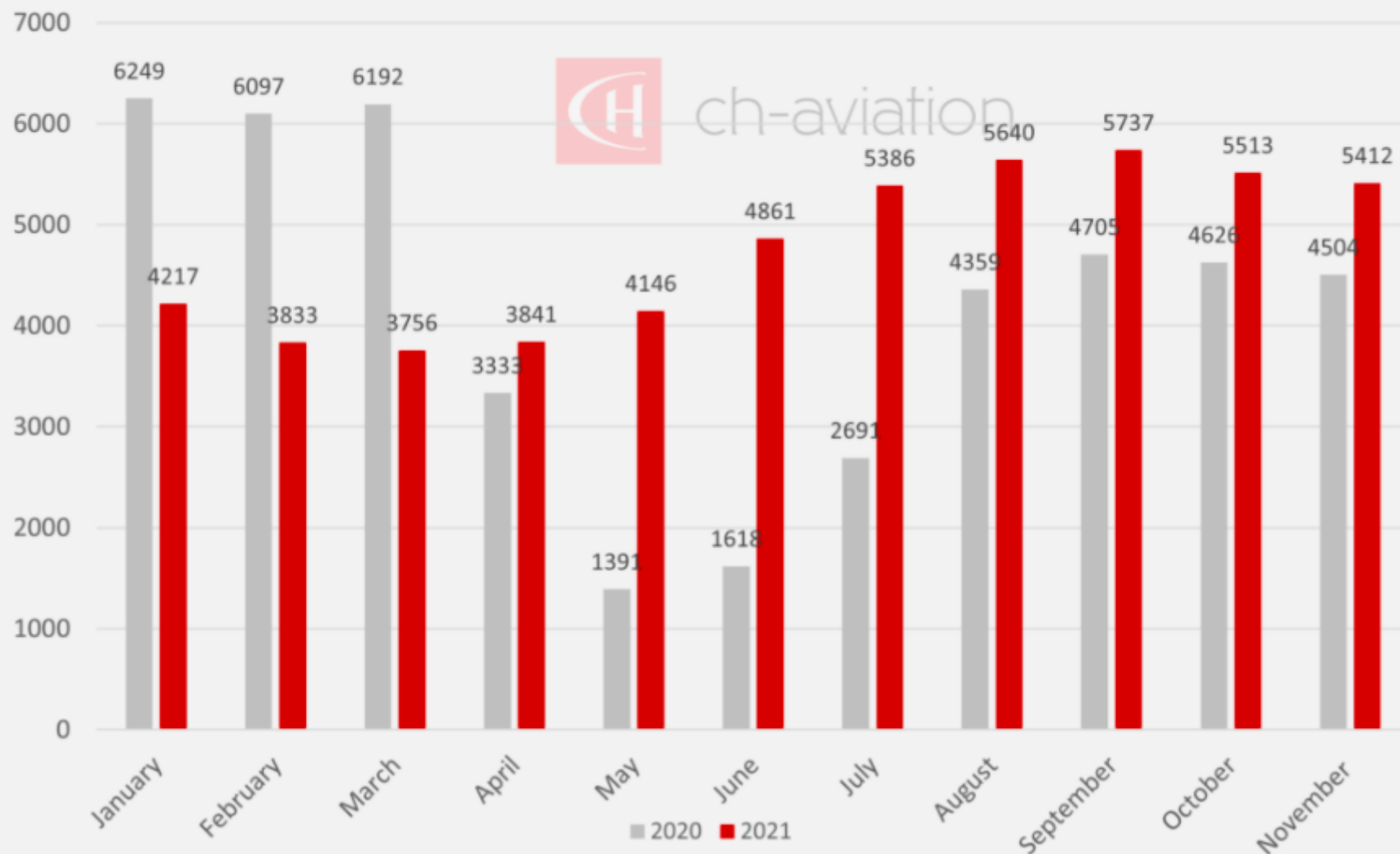
Reductions in average taxi-out time at the top 20 airports
May-Sep 21 vs May-Sep 19 for narrowbody aircraft



Global Fleet Size November 2021



Number of Active Fleet, Europe



A SINGLE EU261 EVENT ON A SINGLE FLIGHT RENDERS THE NEXT 40+ FLIGHTS UNPROFITABLE

