



# HCNF – Airspace, Noise & ATM Update

Mike Glen & Dave Knights – Airspace, Noise & ATM Specialist

27<sup>th</sup> January 2021

**Heathrow**

# Scope

- **Movements and Night Flights**
- **Slightly Steeper Approaches**
- **Ground Based Navigation Aids (Beacons) Rationalisation Programme**

# Movements and Night Flights



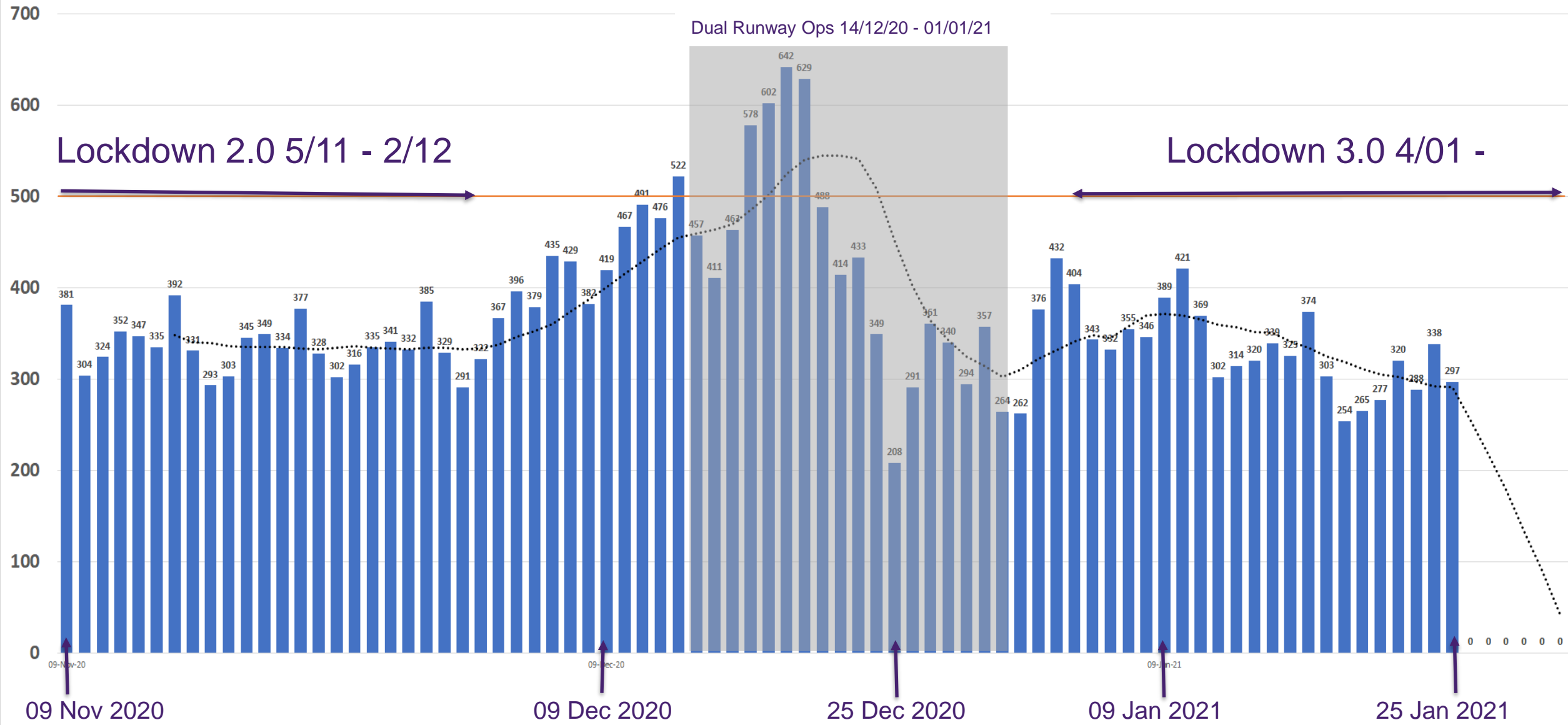
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# Total ATMs

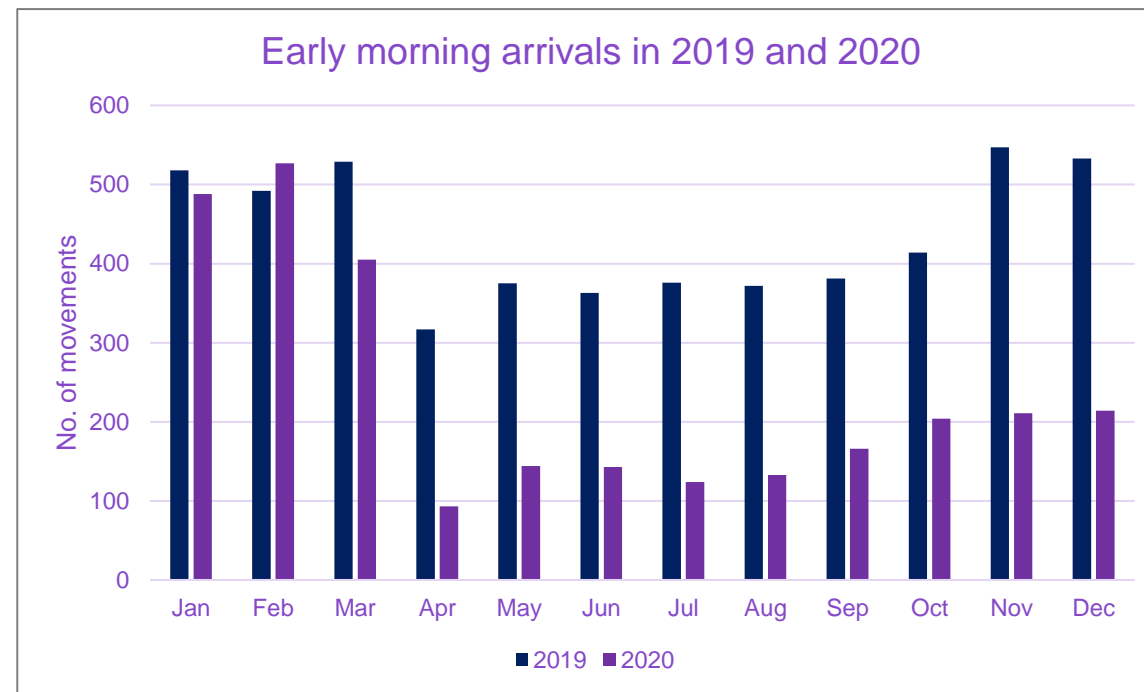
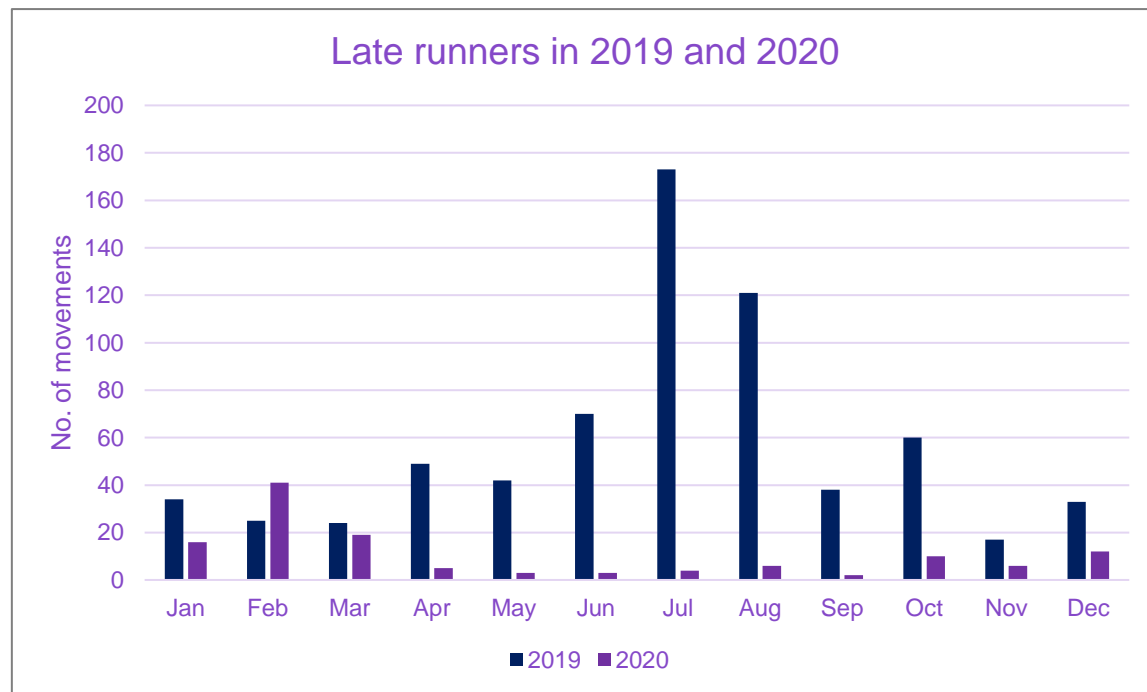
Dual Runway Ops 14/12/20 - 01/01/21

Lockdown 2.0 5/11 - 2/12

Lockdown 3.0 4/01 -



# Impacts of COVID-19 on night flights



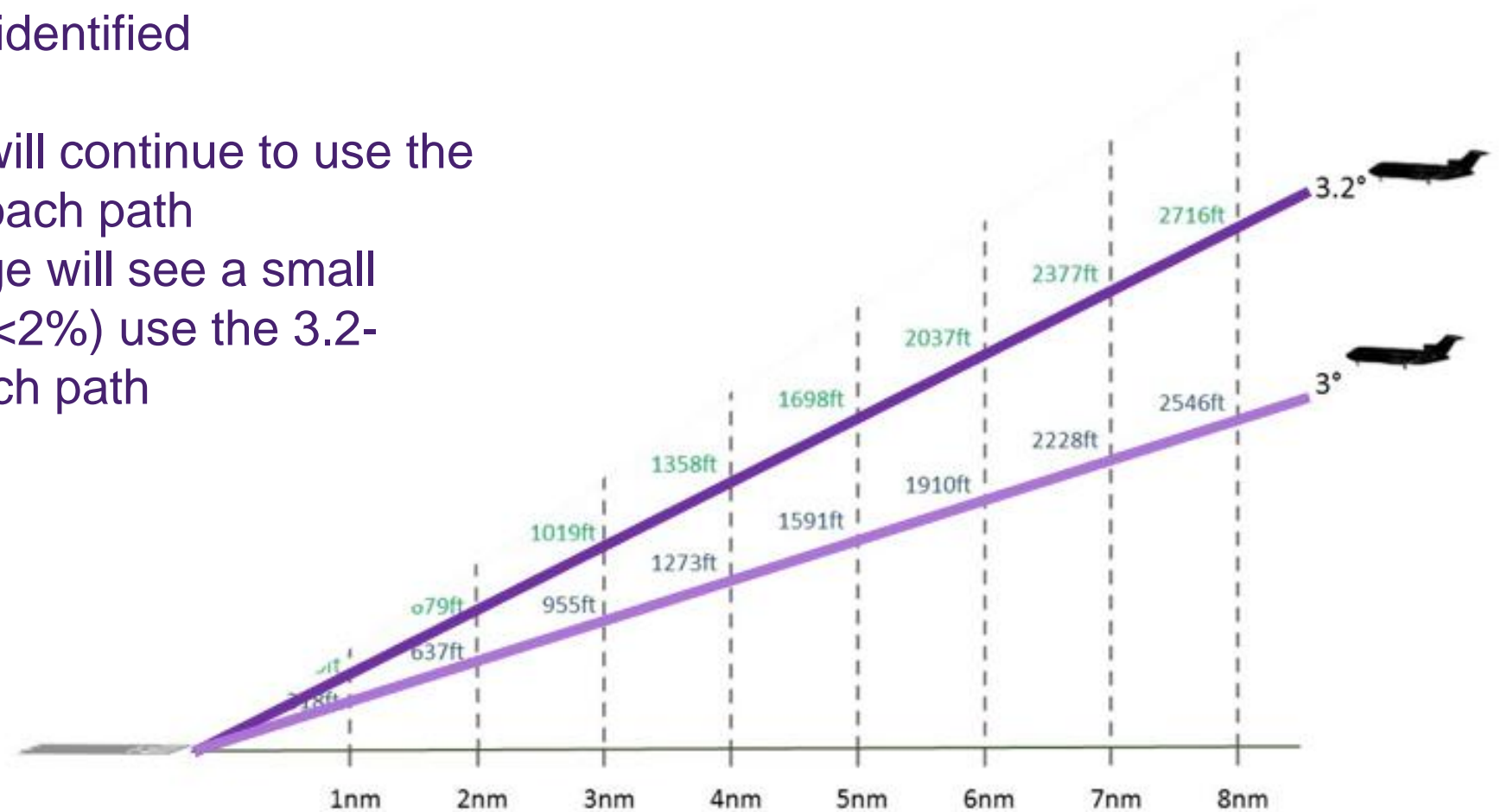
# Slightly Steeper Approaches



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# Slightly Steeper Approaches

- Trials in 2015 & 2017
- Small noise benefit identified
- All runway ends
- Majority of arrivals will continue to use the 3-degree final approach path
- This airspace change will see a small number of arrivals (<2%) use the 3.2-degree final approach path



# Slightly Steeper Approaches

## What has happened?

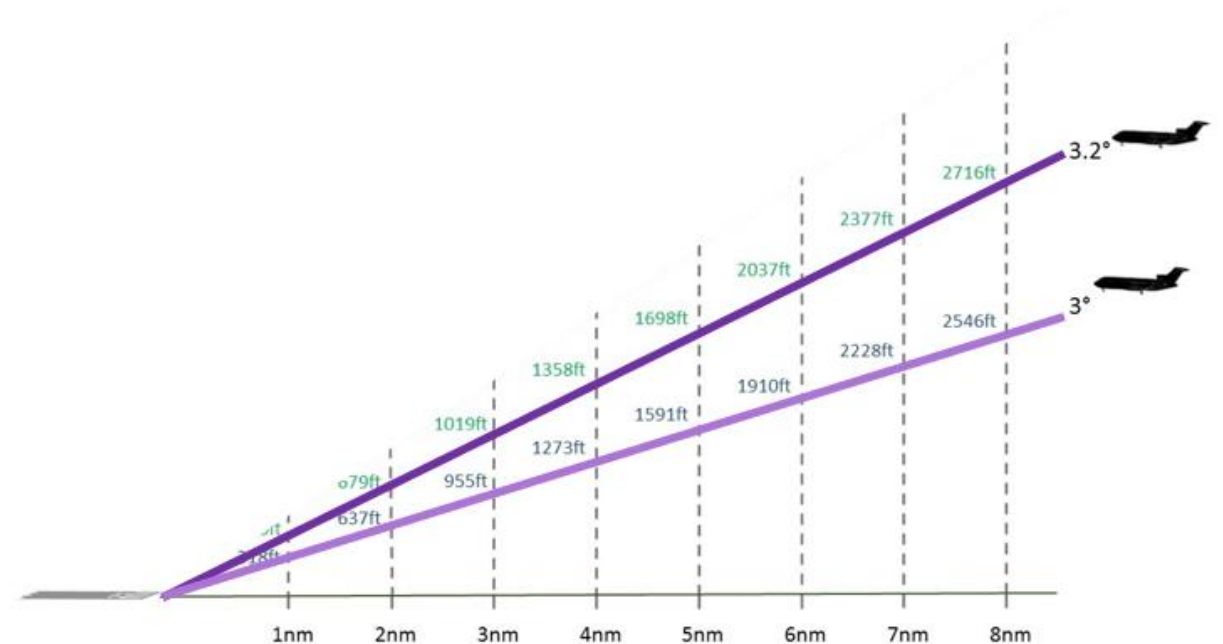
- Airspace Change started in 2018
- Paused in March 2020
- Re-started September 2020
- Proposed implementation December 2021

## Where are we in the process?

- Stage 3A – Consultation Preparation
- CAA Gateway – 26<sup>th</sup> February 2021

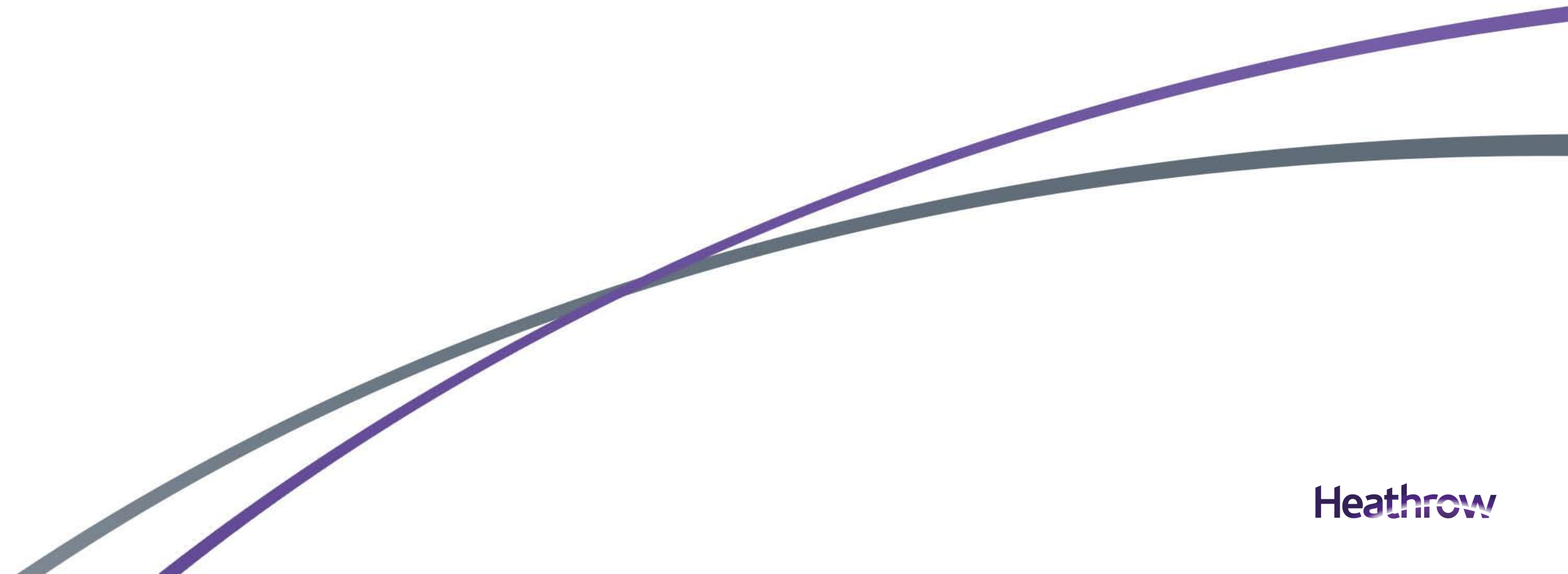
## What next?

- Subject to passing the CAA Gateway
- Consultation – **5<sup>th</sup> March to 2<sup>nd</sup> April 2021**
  - No live events
  - Please respond





# Navigational Aid (NAVAID) Rationalisation



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# Navigational Aids

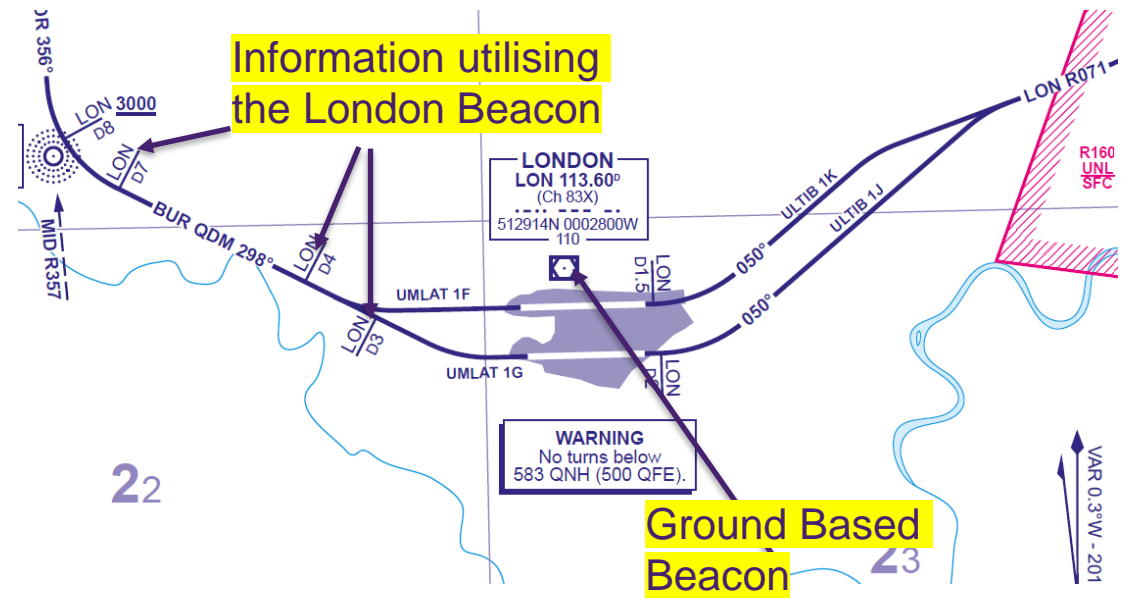
## What is a Navigational Aid?

Navigational aids are a form of marker, signal or device that assist an aircraft by guiding and navigating it to its destination.



## How does Heathrow use them?

Heathrow Air Traffic Control procedures use Ground Based Navigational Aids (beacons) to tell an aircraft where to fly. However, most aircraft now use satellite navigation technology, so the beacons are rarely used.



# Navigational Aids

## What is changing and why?

- Many of the beacons are reaching their end of life; some are over 40 years old with an original 15 – 20 year lifespan, making them harder to maintain
- Some have seen significant changes in the landscape that surrounds them, so the signal can be degraded
- They are also expensive to maintain/replace as they are old
- Technology has advanced over recent decades, so satellite navigation is already widely used by commercial airline operators and is a key enabler for Airspace Modernisation
- NATS plan to decommission 27 beacons by December 2022 – Heathrow is impacted by 17 of these

## What does this mean for Heathrow?

- There will be little impact on Heathrow as the beacons are rarely used
- An alternative solution to ground-based navigation procedures needs to be implemented by December 2022
- The plan is to replicate the current routes utilising the aircraft's on-board computer (Flight Management System)



# Summary

- What is the change?

Several Navigational Aids are being decommissioned to reduce cost and risk, and to meet the aspirations of Airspace Modernisation which is not based on ground-based beacons

- Who owns the navigational aids?

NATS own and maintain the beacons and are therefore responsible for the rationalisation programme. Heathrow is impacted by the change so needs to react to maintain a safe and efficient operation.

- When is this happening?

NATS plan to decommission 27 beacons by December 2022; so under current plans a suitable alternative must be implemented by 3<sup>rd</sup> December 2022.

- Will this mean any changes to flight paths?

The preferred mitigation is to replicate the routes as they are today

- Is this classed as an Airspace Change?

Heathrow will complete an impact assessment and demonstrate to the CAA that this is a safe and suitable mitigation. If approved, the implementation of the change will then likely follow the CAA's Airspace Change Process (CAP1616) as it updates how locations are referenced in the published procedures.

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