



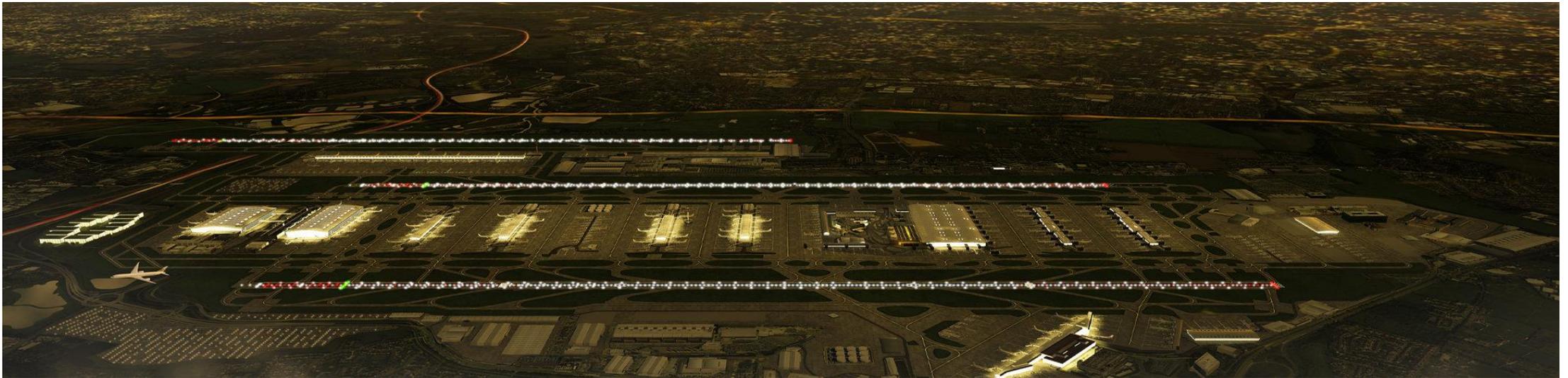
# HEATHROW FUTURE

Heathrow

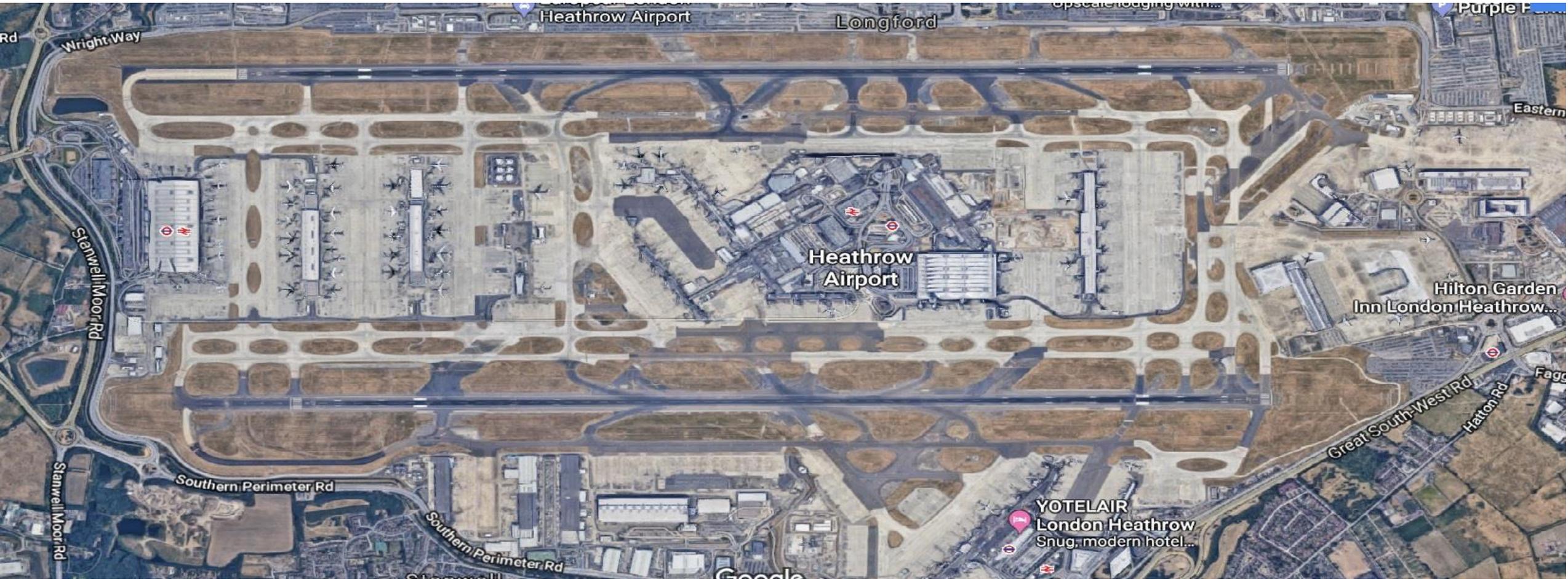
Ian Witter  
ICAO GRF Symposium 2019

**Heathrow**  
Building for the future

# FUTURE HEATHROW - EXPANSION



# Heathrow today



## ***FUTURE HEATHROW - EXPANSION***

### **Heathrow Today**

- **2 runways** (North – 3,902m x 50m; South – 3,658m x 50m)
- **80 million** passengers a year (2018)
- **475,000 flight movements** a year (2018) – an average of 1,300 a day.
- **98% capacity** – Flight movements at Heathrow are capped at 480,000/year
- **76,000 people** working in **400 businesses** located across airport.
- **Over 200 destinations** served – over 80 are long haul
- **84 countries** connected to Heathrow
- **1.5 million metric tonnes of cargo** travel through the airport each year
- **30% (by value) of the UK's exports** beyond the EU

### **Heathrow Expansion**

- **The new Heathrow runway will be the first new full length runway** to be built in the south east of England since 1950s – the last being at Heathrow
- **130 million** passengers per year capacity
- **740,000 flight movements** capacity
- The draft National Policy Statement (NPS) requires expansion to enable at least an additional **260,000 ATMs** from the airport.
- **52 expansion options** were looked at during the 2.5 year, £20m, Airports Commission process before it recommended a new Heathrow north-west runway.

## HEATHROW AND SNOW IN LAST 10 YEARS

During the snow events in March 2018, Heathrow was praised for keeping Europe's busiest airport running.

This is the first time since 2010 that Heathrow has experienced a significant snow fall.

Only a small number of flights in comparison to 2010 were cancelled and the airport remained open throughout the events.

### Ice-Proofing Pays Off as Heathrow Endures Rare London Blizzard

By **Christopher Jasper**

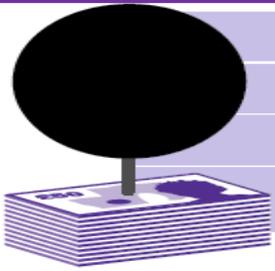
01 March 2018 09:46 *Updated on* 01 March 2018 15:48

- Europe's busiest airport keeps runways open during whiteout
- Hub has spent \$50 million on snowplows, gritters and de-icers

As the worst snowfall in years blocks roads and shuts down much of Britain's rail network, there is at least one bright spot for travelers -- London's once notoriously weather-sensitive Heathrow airport has managed to keep its runways open and flights operating.

Europe's busiest hub, which closed for four days in 2010 after just 90 minutes of snow, has so far ridden out the worst of the weather system dubbed "The Beast from the East" with only a handful of flight cancellations to other airports closed Thursday by the blizzard.

## Snow Facts



New vehicles and equipment

Aircraft de-icer storage and facilities

IT improvements - maps, tracking, CCTV

Operations centre, infrastructure improvements, passenger welfare

Further resources available for maintenance, equipment upgrades and training.



**SNOW CLEARING VEHICLES AND PIECES OF EQUIPMENT**

**An increase from 61 in 2010 / 2011**

Further vehicles provided by contractors for snow dump removal:



50

Lorries



15

Loading Shovels



80+

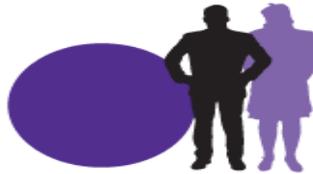
Cars & Mini buses

Staff to support the snow plan has significantly increased since 2010.



2010

(Plus approximately 150 aircraft de-icing staff per shift)



2017

The volume of contingency de-icer stored on site and locally for use on the airfield and aircraft.



**1.4 MILLION LITRES**  
FOR AIRFIELD  
(used by Heathrow staff)

**130,000 LITRES**  
of this volume is on wheels



**12 DAYS ACTIVITY**  
(which is replenished on an ongoing basis)



**1.3 MILLION LITRES**  
FOR AIRCRAFT  
(used by airlines & airline contractors)

The amount of snow produced across the airfield by heavy snowfall:



**10cm SNOW FALL**



**60,000 TONNES OF SNOW**



**4,000 LORRY LOADS**



Heathrow is the only UK commercial airport that has an on-site Met Office forecasters providing dedicated forecasts for the airport. The team are based in APOC and operate 24 hours a day, 365 days a year.

## The Fleet

The fleet includes:

34



**Tractor with front mounted brush/plough**  
Clears snow from stands and roads including 6 telehandlers for loading materials.

16



**Gator with front mounted plough**  
Sweeps snow from heads of stands and aircraft footprint.

15



**Runway sweeper**  
Sweeps runways and taxiways with a 5.5m mid-mounted brush and 9m front-mounted plough.

14



**Combi de-icer**  
De-ices stands and roads with solid or liquid product. 4 glycol recovery vehicles recover used product to minimise environmental impact.

9



**Taxiway de-icer**  
De-ices and anti-ices runways and taxiways before snowfall and freezing conditions. Extendable booms enable widths up to 45m to be covered.

9



**Multihog**  
Sweeps snow from heads of stands, roads and aircraft footprints.

8



**Compact jet sweeper**  
Uses a high pressure blower and rotary brush to remove snow from the manoeuvring area.

8



**Cat/Ramp Hogs**  
Clears ridges of snow which accumulate during the clearance process.

4



**Fastrack sweeper**  
Sweeps snow from the manoeuvring area at high speed.

3



**Snow blower**  
Cuts bulk snow for loading into removal trucks.

3



**Gritter**  
Clears airside roads by applying grit to improve traction.

# SNOW EVENTS 2017 – 2018 SEASON



## ***GRF IMPLEMENTATION***

Vast majority of snow events are light enough

Anti icing, de-icing and snow clearance will maintain runway as wet – 5/5/5.

Not Code 4 as never below -15 deg C

Possible scenario – last few movements before night restrictions start – if there is a snow shower and no time to clear - report some snow (few mm)

Implementation – Ops management awareness of principles but underline not to use it yet – Nov 2020

Questions and on to the other presenters....