# Noise: the ICAO Balanced Approach Michel ADAM

Senior Manager, Aviation Environment

**International Air Transport Association** 





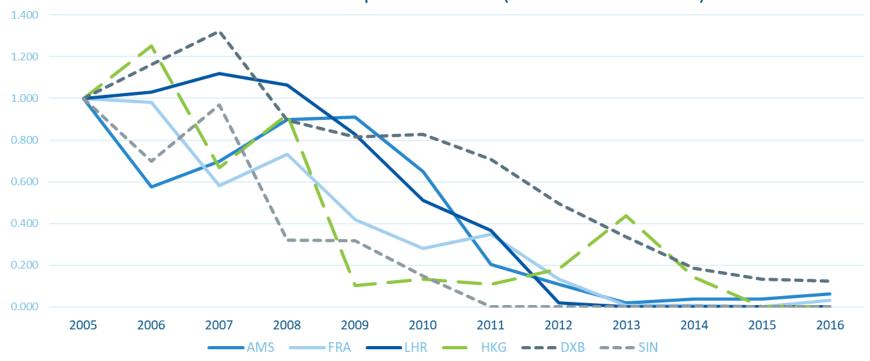
#### Noise at source

- The noise produced by an aircraft has been reduced by 88% or 30 dB over the past six decades.
- Airlines have been replacing old models with new quieter aircraft – over 15,000 since 2009 at a cost of \$1 trillion





#### Movements with Chapter 4 aircraft (normalized to 2005)





# Land-use management & planning

- Land-use planning has a direct effect on the number of people affected by aircraft noise
- Proper land-use planning policies are critical to preserve the noise reductions achieved through the introduction of quieter aircraft



## Operational measures

- Lead to direct environmental benefits
  - e.g. lower noise operations, flight paths over less-noise sensitive areas and optimum drag profiles
- Consultation of all stakeholders
- Safety remains the prime consideration

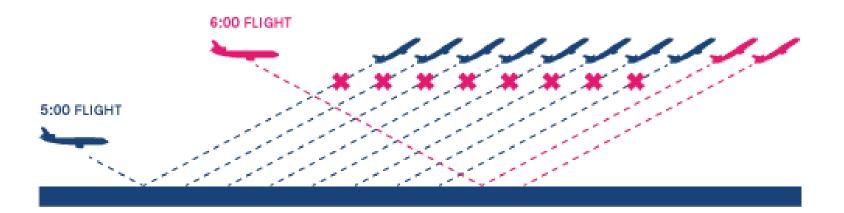


### Operating restrictions: a "last resort"

- Operating restrictions limit the ability of airlines to schedule flights in an optimal manner
- They worsen existing capacity constraints and may result in additional congestion

#### IMPACTS OF A CURFEW ON CONNECTIVITY

AT HUB AIRPORTS, EARLY MORNING ARRIVALS ENABLE PASSENGERS TO CONNECT TO A LARGE NUMBER OF FLIGHTS. IF ARRIVALS HAVE TO BE RE-SCHEDULED TO A LATER TIME AS A RESULT OF A CURFEW, MANY OF THESE CONNECTIONS WILL BECOME IMPOSSIBLE.





#### Restrictions to be based on certified levels

- Recognized in Resolution A39-1, App. E
- Principle is important to avoid:
  - Operators penalized even if they operate quieter aircraft
    - Example: quota count scheme which assimilates B77X to B77W or NEOs to CEOs
  - Airlines being penalized even if they comply with all certification/ATC requirements
    - Example: restriction based on noise levels measured on the ground



# Take-aways

- Authorities must adopt the Balanced Approach to address noise problems in a cost-effective manner
- There are other important ICAO policies that must be followed, in particular in Assembly Resolution A39-1

DESTINATION GREEN: THE NEXT CHAPTER



