State of the art: airport noise management
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10th UIC Railway Noise Workshop
15 March 2016, Paris
ACI EUROPE: who are we?

- European region of Airports Council International (ACI), the only worldwide professional association of airport operators

- Our members
  > 500 airports in 45 countries
  > 184 World Business Partners
  > 8 national airport associations
Noise is a key concern for airports

- Be a good and responsible neighbour
- Earn the licence to operate and to grow
## Aircraft noise addressed through the Balanced Approach

### ICAO Balanced Approach

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<th>Reduction of noise at source</th>
<th>Land-use planning</th>
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<td>National/local authorities</td>
<td>Operational stakeholders + local authorities / communities</td>
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**EU framework**

(Directive 2002/49/EC and Regulation 598/2014)
Aircraft noise addressed through the Balanced Approach

ICAO Balanced Approach

- Reduction of noise at source
- Land-use planning
- Noise abatement procedures
- Operating restrictions

Main role of the airport: ICAO

EU framework:
(Directive 2002/49/EC and Regulation 598/2014)

Operational stakeholders + local authorities / communities

National/local authorities
Airport as key player in aircraft noise management

- Aircraft fly higher during approach
- Lower engine thrust
- Co-benefits - lower air pollutant emissions

Example - Continuous Descent Approaches

Source: www.eurocontrol.int
Airport as key player in aircraft noise management

Communication with local authorities / residents

Noise monitoring

Noise abatement procedures

Collaboration with airlines and air navigation service providers

Additional instruments: e.g. noise-related landing fees
Results – quieter aircraft

Figure 2.2 80 dB Sound Exposure Level (SEL) contours for different aircraft that just meet the various ICAO Chapter limits

Source: European Aviation Environmental Report 2016
Results – reduced noise contours at many airports

Example - London Heathrow Airport

Source: A Quieter Heathrow, May 2013, www.heathrow.com
But there are many challenges ahead

- European air traffic expected to grow by 50% by 2035 compared to 2012

**Figure 1.7** Future technology improvements could stabilise overall aircraft noise exposure in the 2035 timeframe

- Increasing annoyance levels even if reduced noise exposure
  → importance of addressing **non-acoustic factors**

Source: European Aviation Environmental Report 2016
THANK YOU

www.aci-europe.org

www.airportcarbonaccreditation.org