

State of the art: airport noise management

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ACI EUROPE: who are we?

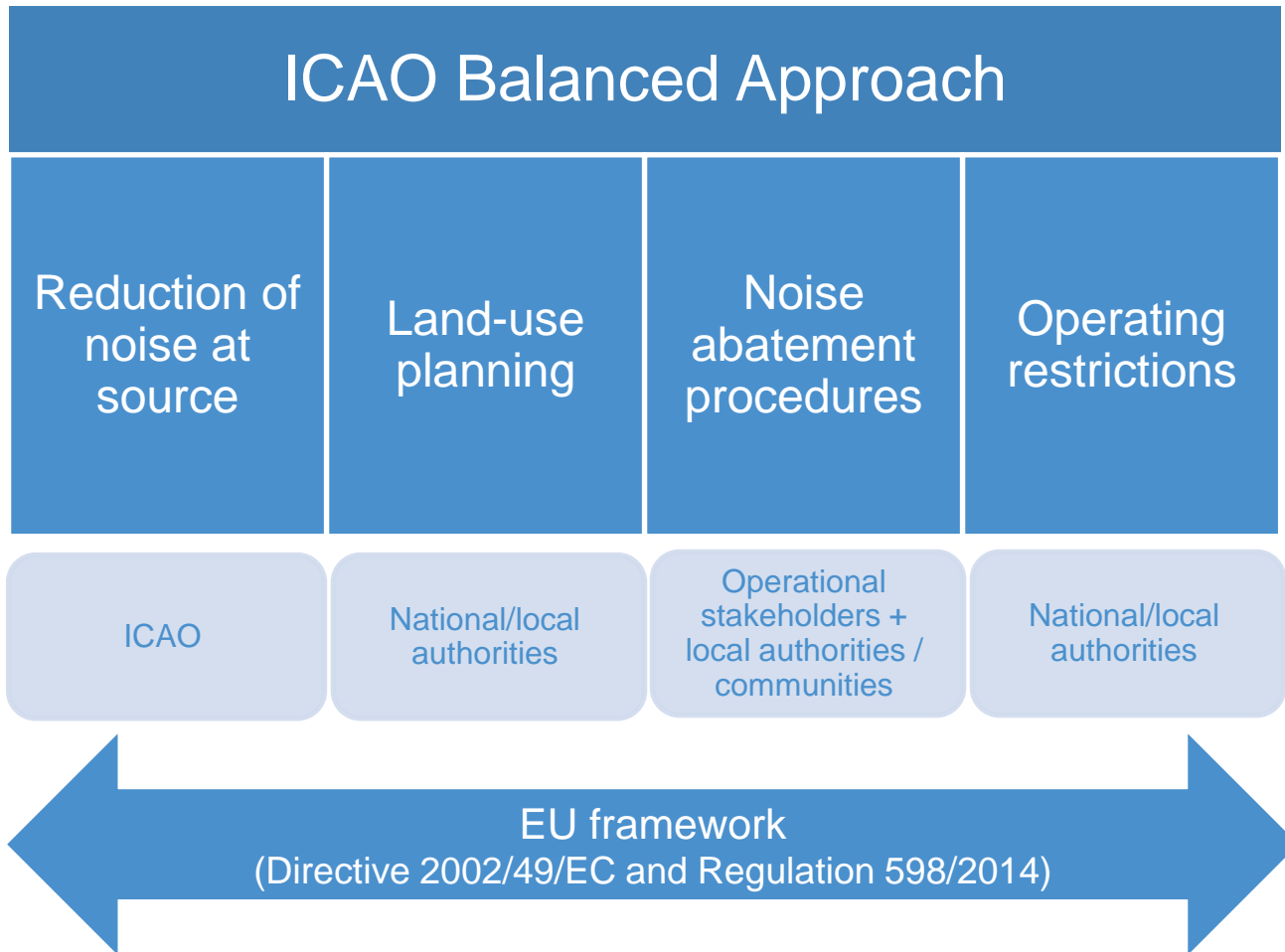
- European region of Airports Council International (ACI), the only worldwide professional association of airport operators
- Our members
 - > 500 airports in 45 countries
 - > 184 World Business Partners
 - > 8 national airport associations

➔ Noise is a key concern for airports

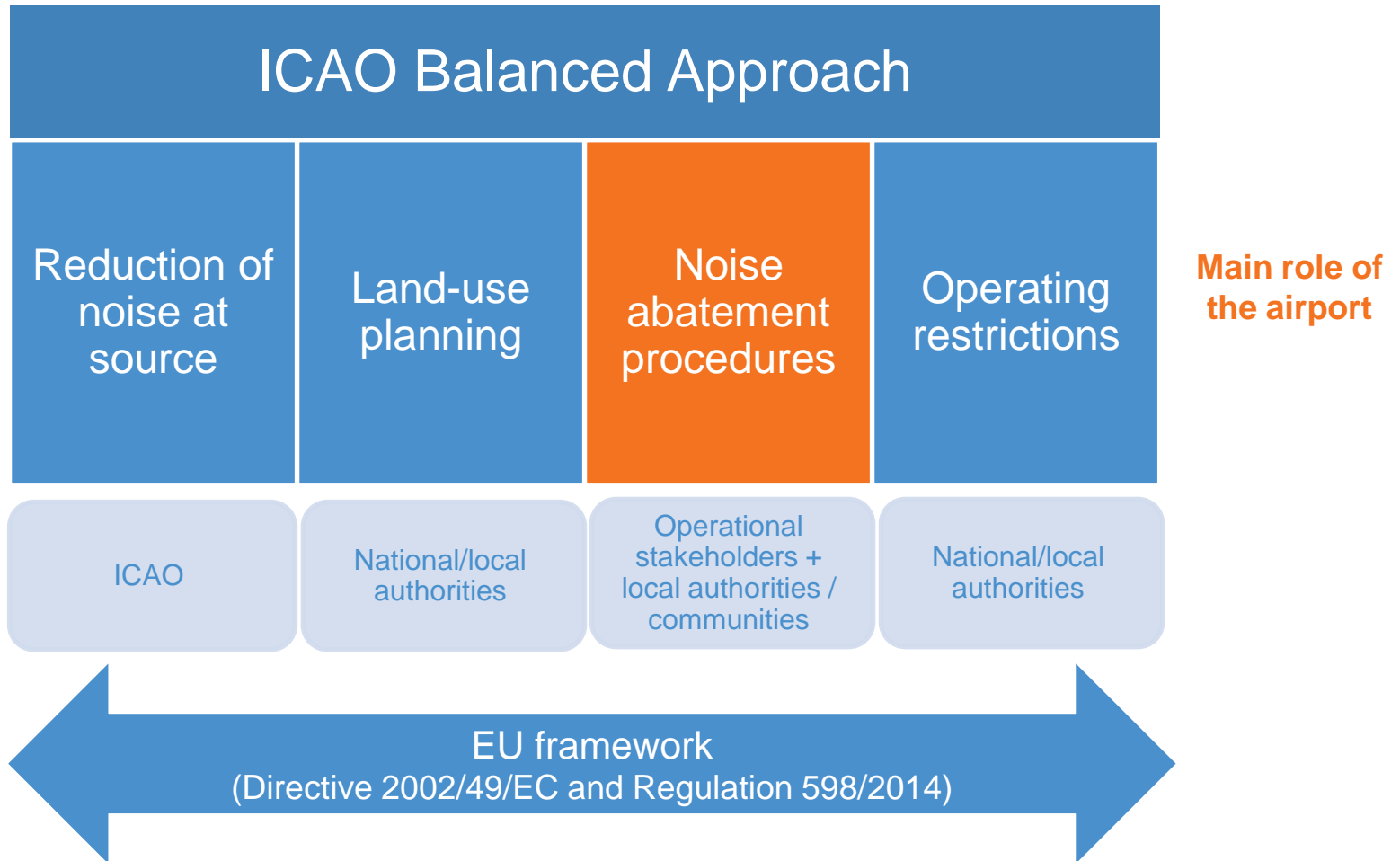
- Be a good and responsible neighbour
- Earn the licence to operate and to grow



Aircraft noise addressed through the Balanced Approach



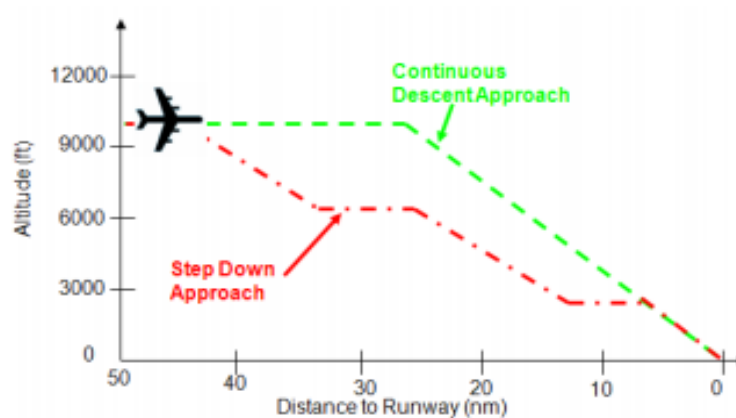
Aircraft noise addressed through the Balanced Approach



Airport as key player in aircraft noise management

Noise
abatement
procedures

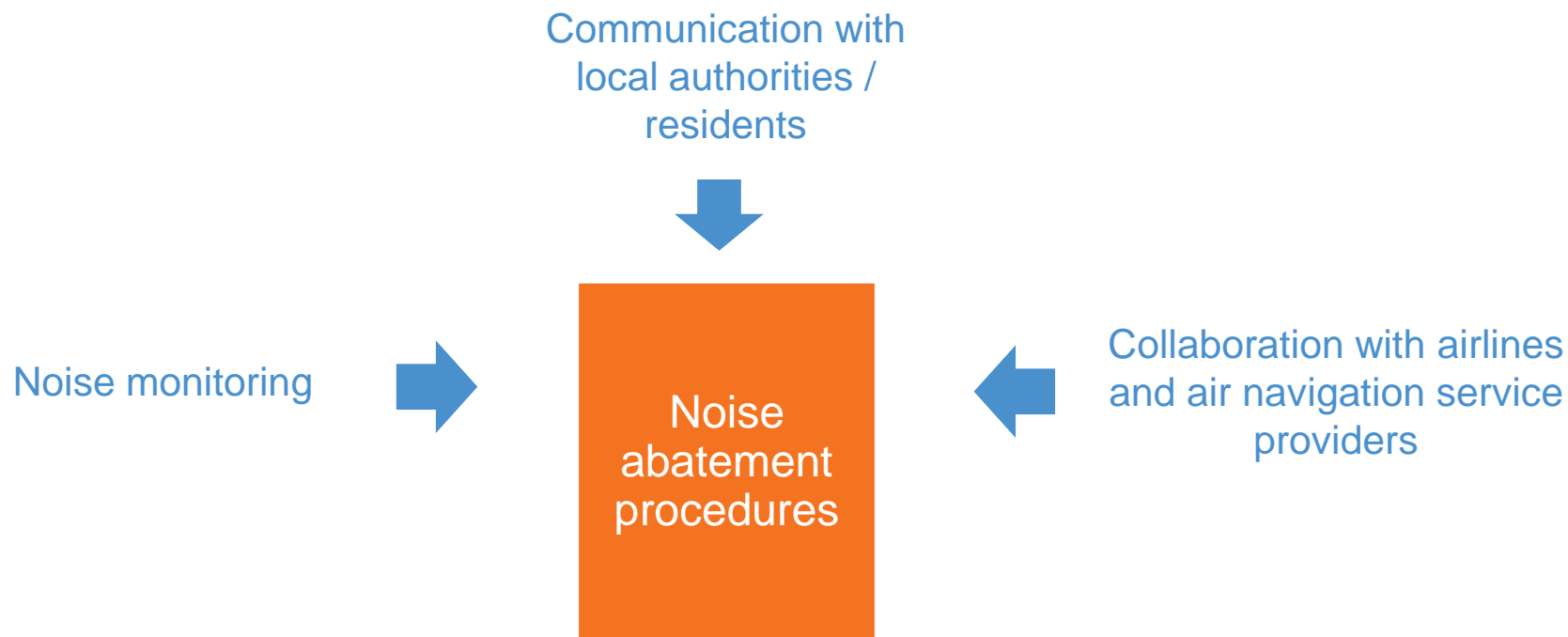
Example - Continuous Descent Approaches



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

Source: www.eurocontrol.int

Airport as key player in aircraft noise management



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

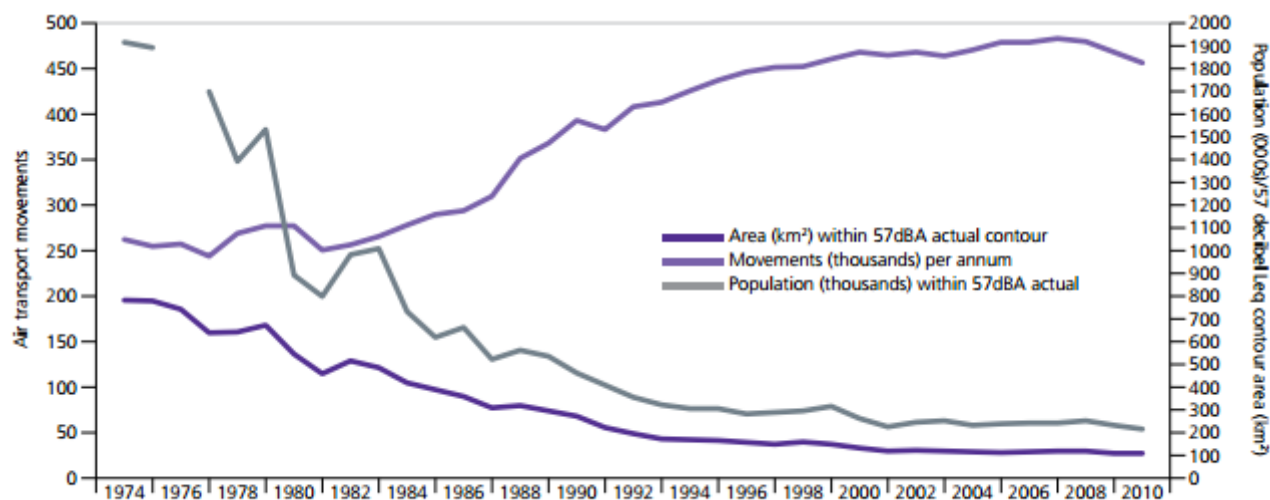


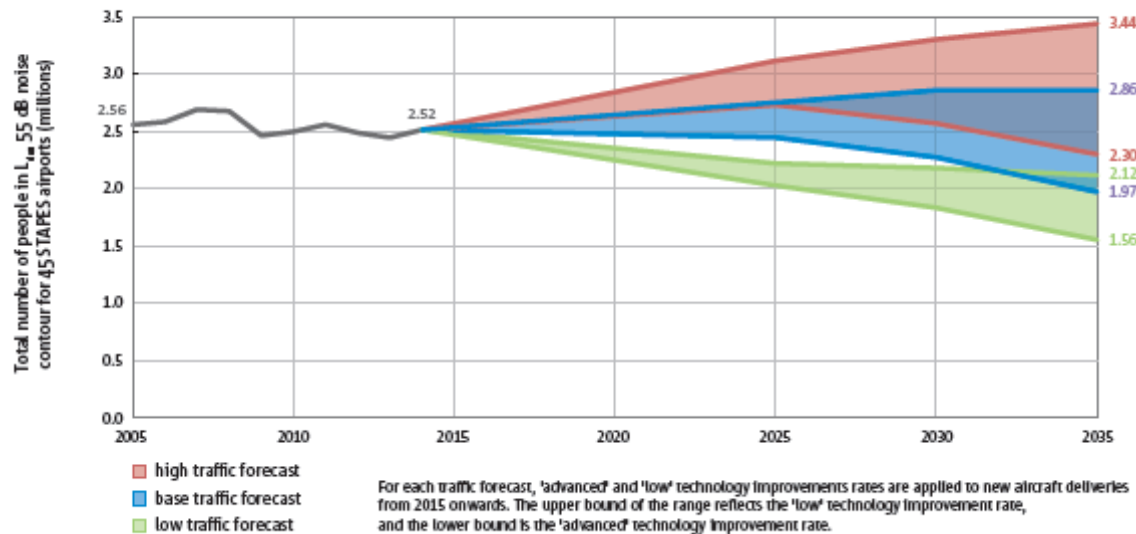
Figure 4.3 Area and population within the 57 decibel contour around Heathrow²⁴

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



Source: European Aviation Environmental Report 2016

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



THANK YOU

www.aci-europe.org

www.airportcarbonaccreditation.org

