

# Aircraft Noise Management

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## Aircraft Noise

- A potential barrier to global connectivity
- Aircraft are quieter, but traffic has grown
- Localized and intermittently perceived
- Complaints rising, but metrics can deceive
- · Research into health effects continues



- Aircraft noise is once again emerging as a key local sustainability challenge for the sector that can have global connectivity consequences.
- Increasing community activism targeting noise at airports in urban areas (particularly in Europe) is encouraging impulsive actions from politicians.
- Aircraft noise is generated by turbulent flows of air going into and out of the engines and around the airframe including the fuselage, wings, flaps and landing gear.
- Despite significant improvements in noise reduction over the last 40 years part of these gains have been countered by increased traffic.
- Aircraft noise is the most significant cause of adverse community reaction related to the
  operation and expansion of airports and, noise complaints are on the rise but complaints
  themselves don't tell the whole story in 2022, 1 individual lodged 23,431 complaints (90% of all
  complaints) about noise from aircraft using Dublin Airport
- Impacts of aircraft noise reflect the complex inter-relationship between the physical phenomena of sound and its perception by humans.
- Whilst it is recognized that aircraft noise can be a source of annoyance and sleep disturbance, there is insufficient evidence (at present) to conclude that aircraft noise causes other health issues. At least 43 academic papers on the potential impacts of aircraft noise on health have been published in the 6-month period between March and September this year. Establishing a causal link is challenging for individuals living and working close to airports, who are already exposed to multiple noise sources including road traffic. IATA will continue to monitor developments in this area.

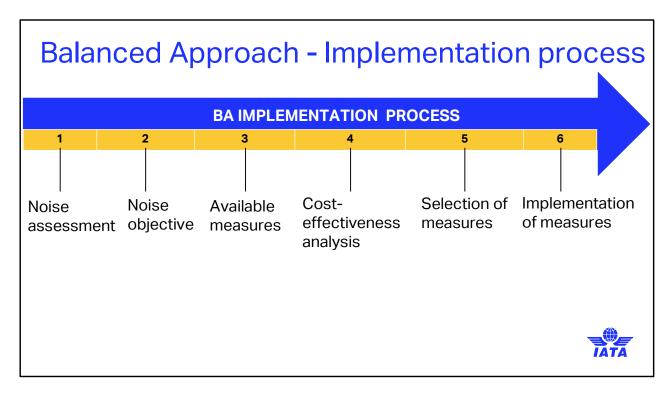
# Balanced Approach - Principles 1 2 3 4 Reduction of noise at source Land-use planning and management Procedures Noise abatement operational procedures restrictions



In 2001, the ICAO Assembly adopted the principle of the 'Balanced Approach' to aircraft noise management as a coherent method to address aircraft noise, and a foundation of noise regulation for aviation as a global industry.

The Balanced Approach is based 4 main principles:

- 1. Reducing noise at source
- 2. Land-use planning and noise impact management
- 3. Improved noise abatement operational procedures
- **4. Operational restrictions** including aircraft types, night curfews, noise quotas/budgets and capacity reductions should only be considered after all other options have been exhausted.



- The Balanced Approach follows a rigorous 6 stage implementation process starting from an initial noise assessment, the setting noise objectives, reviewing available measures, analysis of the cost-effectiveness of potential options through to selection and implementation of the chosen measures.
- The implementation process is underpinned by stakeholder consultations throughout and allows for dispute resolution

# Balanced Approach Global Framework









US-EU Air Service Agreement



- For 55 years, ICAO has led noise reduction in the sector through the noise certification process & more recently, the introduction of the Balanced Approach.
- Since its adoption in 2001, the Balanced Approach has been the main international mechanism to address noise concerns for communities whilst maintaining & growing the socio-economic benefits of aviation. In part it was introduced to avoid state disputes such as happened between the EU and US over hush kits back in early 2000's.
- The BA was enshrined in EU law in 2014 (598) & included in US-EU Air Service Agreements.
- However, recent political decisions in Europe seem to have overlooked these legal aspects and the lessons of history.

# Impacts of Noise Restrictions w/o BA

### **Reduced connectivity**



### **Finance**



- Limit airlines growth
- Business, trade & tourism

### International disputes



### **Congested airports**



- Fleet planning
- Historical slots
- Impaired pax experience



If the balanced approach is not followed, and operating restrictions are imposed without considering the first three pillars, the consequences can include:

- Reduced connectivity. For passengers, this means increase of their travel time, their cost, and their inconvenience since there will be fewer flights available.
   For Cargo, reduced connectivity will impact the transport of time-sensitive and perishable goods. Additionally, noise restrictions do not only impact connectivity, but they could also shift the noise problem to other airports.
- Operating restrictions have negative Financial impacts not only onto airlines but the
  whole industry stakeholders. They will impact business and trade by increasing the costs,
  and reducing revenues of firms that rely on international markets and international
  transport.
- Uncoordinated and unilateral decisions can violate international agreements leading to international disputes over unfair competition and trade disputes. This recently happened when the USA requested a Special Joint Committee meeting with the EU Commission under the US-EU Air Transport Agreement in the case of Schiphol's airport capacity reduction.
- And finally, operating restrictions could lead to Congestion of airports, increasing the
  operational complexity and uncertainty for airlines, affecting their fleet planning and
  historical slots if any, and impacting the passenger experience.

Therefore, it is important to follow the balanced approach to aircraft noise management, as it is the most effective and sustainable way to address the noise concerns while enabling the growth and development of air transport.

### Challenges to the BA - Europe Unknown outcomes: EC ruling **Experimental Regulation - AMS** Global impact on Capacity reduction up to 460k by 31 MAR 24 w/o BA historical slots/ international treaties Capacity reduction up to 452.5k by NOV24 with BA **Draft Decree on noise Quota Count** Night flights ban w/o BA through a revised Quota Count system **New Quota Count system on hold** 65 movement cap replaced by a new Quota Count system DUBLIN through BA Implementation on hold due to legal issues

Although the concept of the BA is endorsed by ICAO Member States, and has been adopted in the EU law, recent cases in Europe highlight flaws in its application. I will describe three recent cases where the Balanced Approach has been totally ignored, undertaken in the wrong order or being undermined by conflicting planning laws.

- Firstly, in Amsterdam, where there are two separate tracks to reduce capacity. Both reductions were announced prior to the Balanced Approach being undertaken. In the first track, the Balanced Approach was ignored, and in the second track, the BA has been undertaken in the wrong order.
- 2. The second case illustrated is in Belgium where restrictions at Brussels airport were announced prior to the BA being undertaken. In July 2023, the Belgian's Federal Transport Minister, proposed banning night flights from October 2024 at Brussels airport through a revised noise Quota system. Only a select list of stakeholders was able to review and comment on the draft text. IATA was not part of the consultation. A socio-economic impact study is expected to be produced for 2024 which needs to be shared in a transparent manner with the parties.
- 3. The last case is Dublin airport where the outcome of the BA is being legally

challenged. The decision to replace the 65-aircraft movement cap with an annual Quota Count (QC) for the night period has been appealed by north Dublin residents to the national planning authority. This led the QC system being put on hold until legal challenges associated with planning laws have been resolved.

# Conclusion

The ICAO Balanced Approach to Noise Management:

- Is a harmonized, science-based framework
- Delivers cost-effective solutions
- Avoids legal disputes
- Facilitates certainty in planning for airlines and conumers

It should **not** be reverse engineered to meet political objectives



- 1. BA is a robust science-based procedure that identifies the optimal solutions needed to achieve a noise objective.
- 2. Not only can it deliver cost effective solutions and avoids legal disputes it provides certainty in planning for airlines, airports and their customers
- 3. Evidence that BA is being reversed engineered to justify operational restrictions motivated by short-term political gains.
- 4. As long as the BA process continues to be undermined, we are likely to see:
  - Inappropriate noise objectives being determined,
  - Threats not only to passenger and business continuity but also of "noise leakage" as neighboring airports attempt to absorb the cut capacity
  - Danger that airports outside of Europe will adopt a similar short-sighted approach
  - Governments are likely to face costly legal action, infringement decisions and threat of retaliation from third parties, and
  - Airlines will face legal costs, uncertainties in fleet planning and slot coordination.



# Thank you



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