ANIMA – Critical review of BA implementation across Europe and lessons for future practice

ANIMA Final Event: Key findings and tools

Brussels

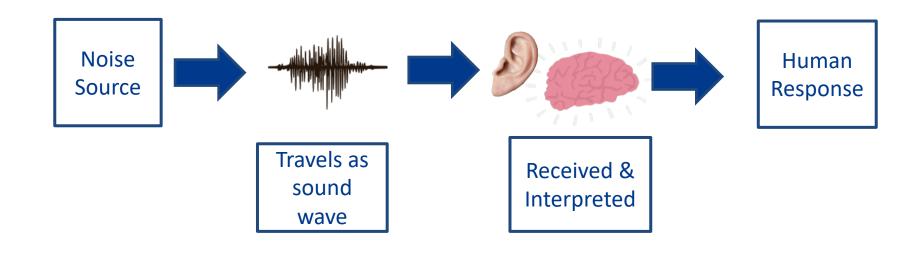
16th December 2021

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ANIMA focus: impact rather than noise exposure







Policy context

- EU policy: 'intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to the exposure to environmental noise' has not been achieved for aviation noise as:
 - Despite gradual shrinking of noise footprints around many large airports
 - Reported annoyance and sleep disturbance has increased overtime
 - WHO links these short-term responses to long-term health impacts

Why? Requires a better understanding of airport activity and interaction with their local communities



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No [769627]



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Understanding Airport BA implementation

Three key stages:

- 1. National data templates completed by ANIMA partner organisations and their networks
 - Overview of BA policy and practice across 27 European countries
- 2. Elite interviews with key aviation stakeholders
 - National Approaches to aviation noise regulation and management
 - Best practice implementation at selected EU airports
- 3. ANIMA exemplar case studies
 - 13 case studies covering airports with a range of noise management intervention experience





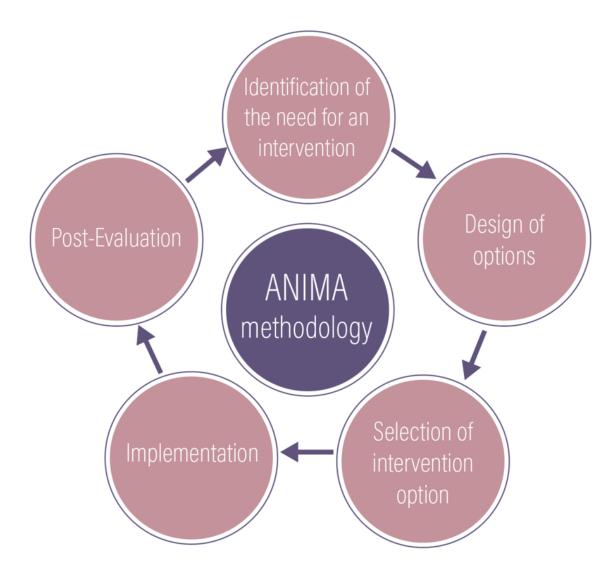
Headline findings

- BA interventions need to be tailored to local circumstances thus attempts to support airports need to allow flexibility in the response to noise management issues
- Larger airports generally addressed the requirements of END however effectiveness of actions questioned by some
- Land use planning policy and implementation a challenge in many settings leading to avoidable encroachment – better integration of responsibilities and more transparent development plans
- Despite a lot of activity direct benefit to community quality of life unclear

 requires broader and more systematic evaluation of the impact of BA
 interventions
- Helpful to acknowledge the wide range of airport experience when considering support:
 - Starting the Journey, Experienced Travellers, Pathfinders



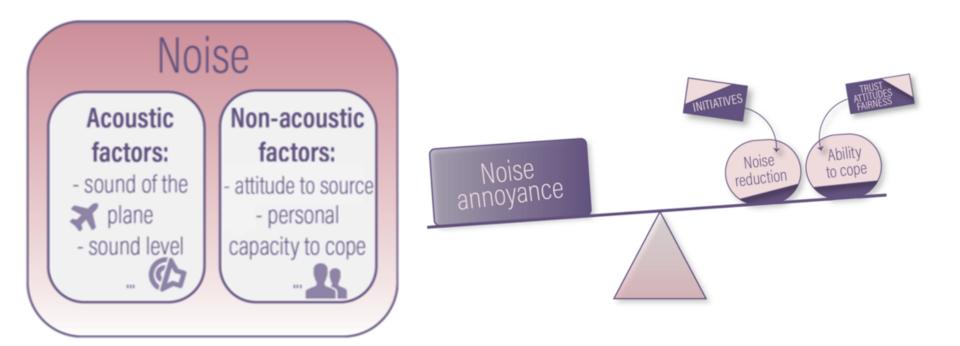








Annoyance response linked to nature of sound and non-acoustic influences





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Non Acoustical Factors	Strong	Intermediate	Weak
Modifiable	 Attitude towards the source Choice in insulation Choice in compensation (personal) Influence, voice (the opportunity to exert influence on behaviour of source) Perceived control Recognition of concern Trust 	 Avoidability Choice in compensation (societal) Expectations regarding future of source Information (accessibility and transparency) Predictability of noise situation Procedural fairness 	 Media coverage and heightened awareness to noise Social Status
Not modifiable	 Age (under 55) Income Individual sensitivity to noise Past experience with source 	 Duration of residency near airport Fear related to source of noise Home ownership (fear of devaluation) Use of airport services 	 Age (above 55) Awareness of negative consequences (health, learning) Children Education
Unsure/ need to be examined	 Conviction that noise could be reduced or avoided by others 	 Benefits from airport (personal, societal) Cross cultural differences Country of origin 	





Addressing NAF

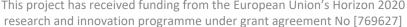
- Understand what makes for effective communication and engagement:
 - Guidance
 - Meaningful engagement
 - Processes to enable empowerment/control
 - Establish community concerns/values
 - Early engagement to align interventions with values
 - Enhanced communication tools role for VR
 - QoL what does it mean for airports and how can they make a positive contribution
 - Impact of interventions on QoL
 - Difficult to assess post hoc
 - Evaluation built into change process from outset





Exemplifying effective practice

Airport	BA Element	Specific Focus	
Cluj Operational change/ inter-dependencies		Interdependencies relating to proposed operational changes and baseline quality of life assessments	
	QoL	Review of QoL priorities against stakeholder expectations	
lasi	LUP	Tackling encouragement through the development of virtual stakeholder engagement platform. Identifying legislative requirements	
Heathrow	Operational change	How to capture and communicate flightpath concentration associated with PBN adoption. Defining management options	
jubljana	Communication	Development of dialogue forum to inform on operational changes and development of transparent system for complaint management (change to noise corridors with appropriate monitoring and indicators)	
otterdam	Operational change	Developing communication tools and approaches to assess the benefits and dis-benefits of re-distribution of noise exposure from two proposed departure procedures	
Zaporizhzhia	LUP	Using new airport noise exposure maps to inform noise protection zones	
Schiphol	Airports and COVID	A study to understand the impact of COVID on QoL near to and distant from an airport context	
-21 ANIMA		vived funding from the European Union's Horizon 2020 Ition programme under grant agreement No [769627]	



Aviation Noise Impact Management through Novel Approaches



Case study findings

- Illustrate challenges that airports and other aviation stakeholders face when balancing benefits of air transport growth against need to manage environmental impacts
- Need to work with communities to attain a 'licence to operate' or else resistance to development may increase
- How?
 - Early and comprehensive community engagement
 - Acknowledgement and addressing of trade-offs
 - Recognising importance of legislative frameworks and clear responsibilities if potential future problems are to be anticipated and avoided





Comprehensive community engagement¹

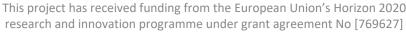
- Fostering two-way dialogue can ensure airport noise management addresses community concerns and thus delivers valued change
- But, it's not easy outcomes can be inconsistent and at times even conflicting
- Effective practice emphasises importance of:
 - Early engagement

20-Dec-21

- Agreement on 'measures' of success from the outset
- Using techniques appropriate to the communication and engagement task
- Reporting regularly to manage expectations and demonstrate progress

Engagement is less about 'doing the right thing', rather a process of 'doing things the

right way (so that the right thing to do can emerge)'



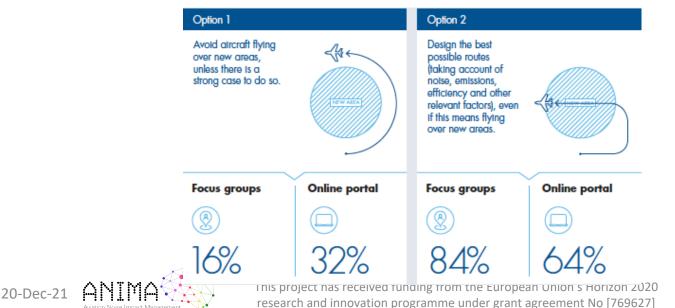


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Comprehensive community engagement²

- Tailoring techniques to tasks:
 - Focus groups and workshops allow complex issues to be introduced and discussed – good for early stages when seeking consensus on concepts/principles
 - More extensive engagement easier when choices are clear and decisions more straightforward (usually later in the change process)
 - Regular reporting on progress

through Novel Approaches





Trade-offs

- These can be between commercial and environmental objectives and also between environmental objectives (interdependencies)
 - Transparency essential
 - Technical assessments can highlight the consequences of a proposed change (may require novel metrics to be used) – but engagement with affected stakeholders still necessary to arrive at acceptable decisions
 - Where re-distributing noise there will be 'winners and losers' – establishing priorities for change early can help avoid stalemate and potential antagonism





Legislation and governance responsibilities

- Airports with less noise management experience have highlighted the critical importance of clear legislation indicating ownership of noise management issues
- Transparent systems of accountability facilitate effective oversight and help communities understand the basis for key decisions
- Overlapping and complex governance footprints can inhibit effective management, particularly with respect to land-use planning
- Case studies demonstrate that airports are developing their own definitions of good practice as they learn more about how best to manage noise based on their own circumstances
 - Needs to occur within the framework provided by clear noise action plans





Recommendations for communication and engagement

- Start early
- Clearly explain why this communication is taking place and the wider process into which the engagement is feeding, so as to manage resident and other stakeholder expectations.
- Accept that some issues are complex and will require the time and access to the expertise necessary to explain issues upon which opinions are being sought. This may require preparation and testing of communication materials in advance.
- Less extensive, but more intensive, qualitative tools can help foster quality dialogue.
- Communication with residents in ways that allow dialogue and mutual understanding are preferred over information provision directed at larger audiences
- When management principles are discussed, it is important that they are prioritised in order to inform later decision-making over proposed actions
- Dialogue should extend to the means by which progress/improvements can be measured/monitored to support decision-making and evaluation



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Future research priorities

- Impact of enhanced communication and engagement:
 - Acceptance/perceived fairness
 - Can increase satisfaction in process and outcomes/help reduce annoyance?
 - Optimise societal impact from investment in noise management interventions
- Striking the balance between inclusive and interactive engagement process and the avoidance of tortuous processes that alienate – streamlining
- Translating insight into community values (design principles) into meaningful change that can be tracked
 - What does success look like
 - Metrics to track performance against priorities
 - For example wrt airspace change dispersal vs concentration
 - How to capture the level of sharing (track distribution/noise on the ground)
 - What qualities of sharing are important Equity? Fairness? And how might these be measured to illustrate the relative merits of specific ACPs?
 - Balancing winners and losers where noise is re-distributed
 - Understanding the long-term community impacts associated with concentration and dispersal



