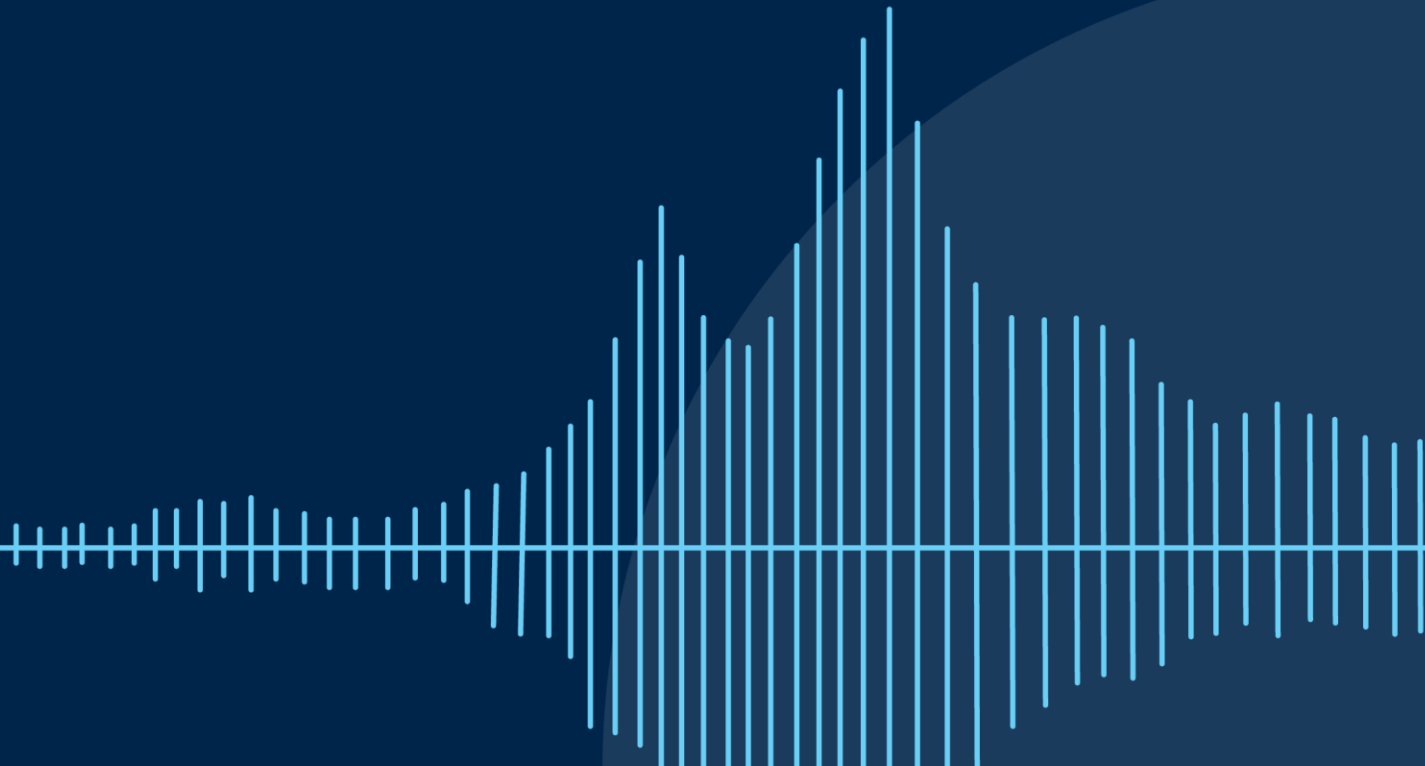




Insulation Review (Board Update)

June 2020

Stuart Dick





Aims of the Session

- Recap of expected outcomes
- Detail external work (standards tender & CAA)
- Early findings (direct responses from airports)
- Timeline



Overview of outcomes

Expected Outcomes	Objective	Resource
EO1: Strengths & weaknesses of insulation schemes	Analysis of existing insulation schemes	SD/Tender
EO2: Recommend noise contours	Analysis of economic, noise contour and product standards	SD/CAA/Tender
EO3: Certified installers (quality management)	Determine if self-certification is effective. Map UK distribution of installers.	SD/Tender
EO4: Products and systems standards & testing standards	Identify all standards for products and testing. Report on benefits.	Tender
EO5: Determine effective installations	Questionnaire/ customer satisfaction data	Difficulties with the delivery of this EO
EO6: Funding	Comparison of national & international funding	SD/CAA
EO7: Regulations	Review building regs. Examine conflicts between insulation and other building requirements	Tender



EO1, 2, 3 & 7: Standards review (tender)

Workstream

Outcome

Review of products and systems standards (ISO, EN, BS)



Develop a technical understanding of product specifications and their ability to collectively reduce indoor noise

Review of standards used to test properties for noise pollution (prior and pre-completion)



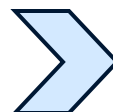
Can recommend most appropriate methods for prior and pre-completion

Reviewing approaches to the way installation is installed e.g. whole house, or specific rooms



Recommend best approach to installation considering build type, year constructed etc.

A review of the competent persons schemes and airports approaches to quality management



Explain whether current certification schemes are robust and what could be improved, if anything

Identify gaps in building regs for insulation, examine conflict with other building requirements



Discuss benefits of introducing regulations for acoustic insulation where relevant



EO2 & 6: CAA noise contours & funding

Workstream

Outcome

Property count
in a range of noise contours
(54 – 69 dB Laeq 16h)



Provides insight for
defining new eligibility
contours

Trade-offs
Funding v Properties



Examines whether number of
properties in a given contour
influences grant funding

Examine populations
impacted by SEL for
night noise

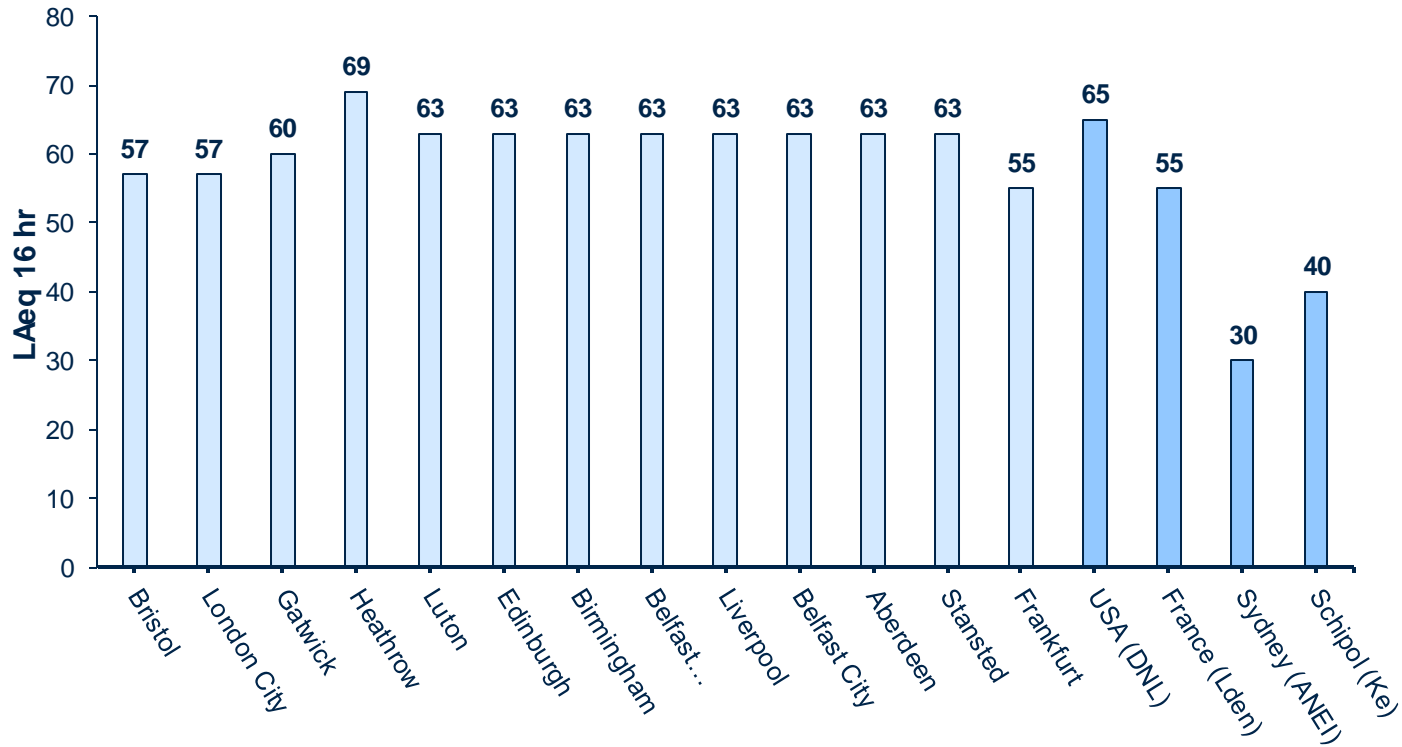


Examines how serious the impact
of night noise is, informing the
levels of insulation required

Airports included: Heathrow, Gatwick, Stansted, Manchester, Birmingham, Southampton, Newcastle, Aberdeen and Edinburgh

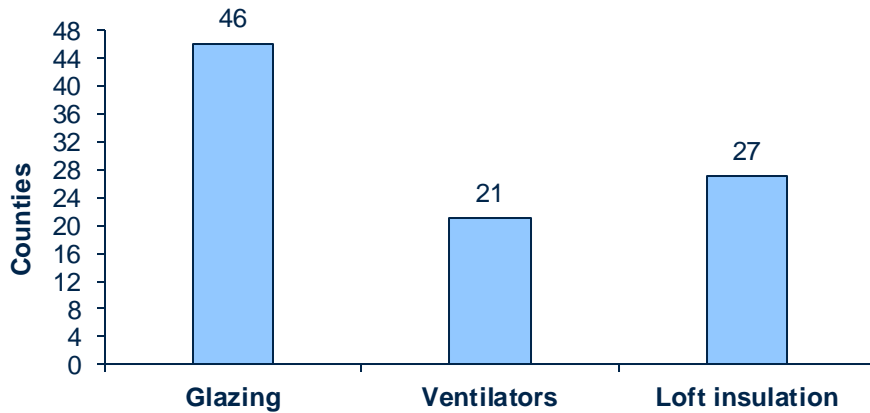
EO1: Existing airport schemes - eligibility

Insulation schemes are eligible within these noise contours



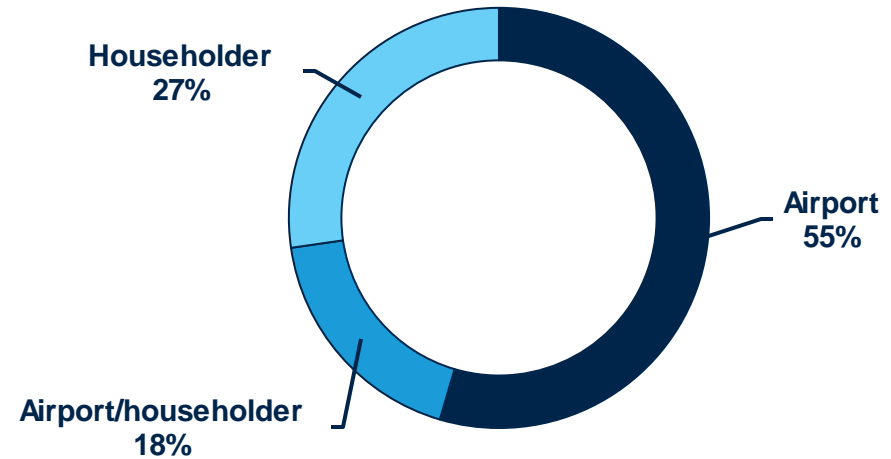
EO1 & 3: Certified installers and installer options

Certified installers over the 48 English Counties



Schemes	}	Assure	NAPIT	CIGA
		FENSA	BESCA	BBA
		CERTASS		
		Exova		

Options for choosing installers

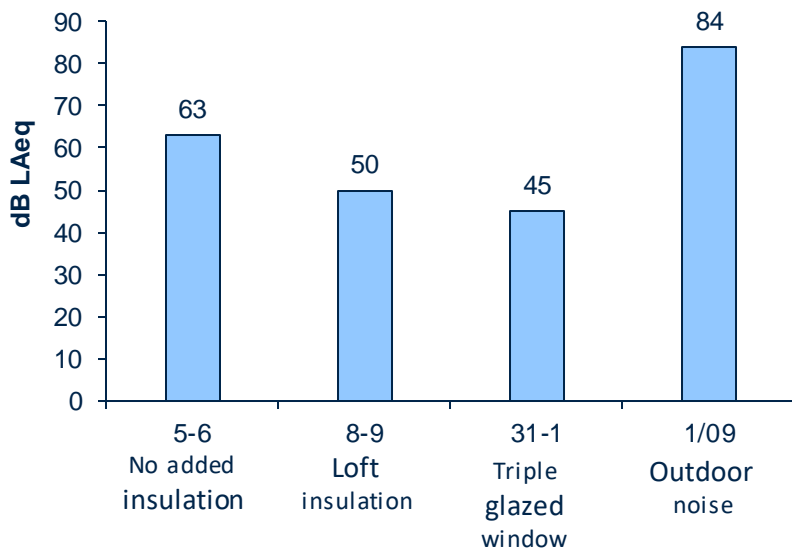


- Most airports prefer to use a designated contractor
- Nearly 50% of airports allow the householder to choose

Source: <https://www.competentperson.co.uk/Default.aspx>

EO4: Systems testing – Whitecrook, Glasgow

Change of indoor noise with added insulation

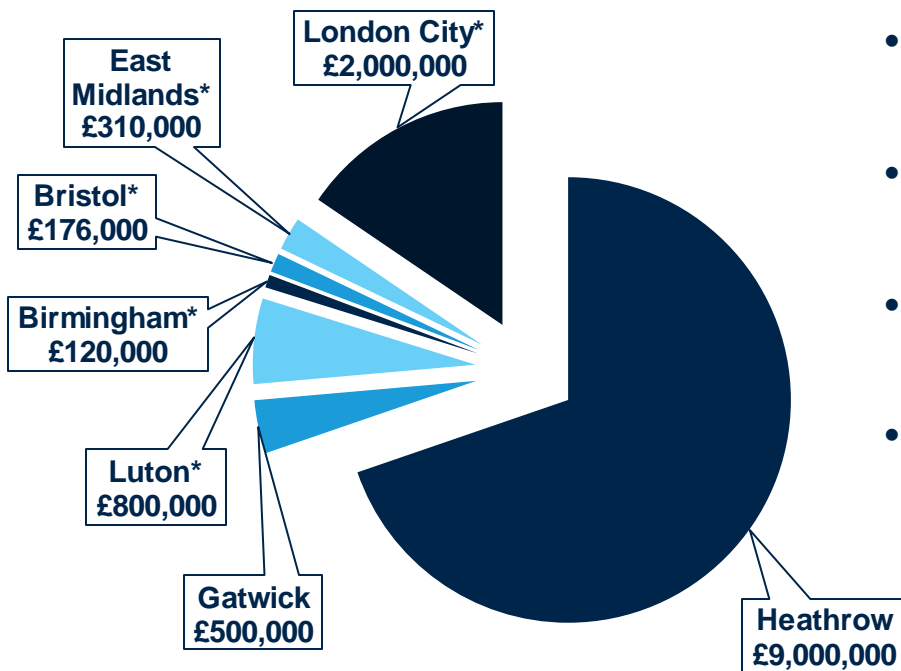


- One bedroom tested August 2016
- Bedroom already had double glazing
- Night noise recorded LAeq (8 hr)
- Decline of indoor noise with added insulation
- More extensive pilot project to begin in Whitecrook funded by airport and council



EO1 & 6: UK airport budgets and funding

Estimated Annual Budgets



- Most UK airports use OPEX to fund insulation schemes
- Bristol uses an airport community fund min donation by airport £100, 000 pa
- Most airports offer £3,000 per household
- London City was the only airport to issue 100% free glazing and ventilators (Tier 1)



EO6: International funding

Airport/Country	Funding Instrument	Regulations	How it Works
France	Noise tax all aircraft	Article 19 finance law for 2003 (n ° 2003-1312 of 30/12/2003)	€0.50 – €40.00 levied per departure. Tax rates vary between airports aircraft type and time.
US	FAA Passenger Facility Charge Programme	Aviation Safety and Capacity Expansion Act of 1990	Collection of up to \$4.50 from each passenger per airport.
Frankfurt	Noise abatement charges	Air Traffic Act	Per passenger or 100kg of freight. Aircraft type and time are factors.

Insulation timeline

Task	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan
Scoping								
Contact Airports								
Contact Experts								
Tender Process	█							
Airport Analysis	█							
Desk Study (Funding)	█							
CAA Work		█	█					
Standards Tender		█	█	█				
Write-up: 1st Draft		█	█	█	█			
Internal QA						█		
External QA						█	█	
Corrections						█	█	█
Publish								█

- External work for insulation standards is an estimated start date. Any further delays would impact on the publication date.

Questions

www.iccan.gov.uk

