

January 2020

Version 1.0

**ACOUSTICS VENTILATION  
AND OVERHEATING**  
Residential Design Guide

# AVO Guide launch

Thursday 30<sup>th</sup> January 2020  
15 Hatfields, London

# How did we get here?

Technical

Contributions

Technical

Contributions

## ANC – NOISE, THERMAL COMFORT & VENTILATION – MEETING 1



AVO - Meeting 21 docs > AVO GPC x

**A.Chilton@maxfordham.com**

14 Oct 2019, 10:14 ☆

**P** to Adrian.Passmore, AndrewL, BarryJobling, DTrew, IMacArthur, Info, me, james.healey, J.Paris, mark.scaife, m.hyden, nick.conlan, stephen.turner, TimminsG, Elena, john ▾

— Hello all,

**T**

— Reminder that the AVO meeting is this thursday at Cundall (Mat, I'm assuming that the fact that you have accepted means we are ok with a room?).

# AVO Group

Adrian Passmore

ARUP

Jack Harvie-Clark



Anthony Chilton

MAX FORDHAM

James Healey



Andrew Long



Mark Scaife



David Trew



Mat Hyden



Barry Jobling



Juliette Paris-Newton



Gary Timmins



Stephen Turner

Stephen Turner  
Acoustics Ltd

Ian MacArthur



Nick Conlan



John McCullough



# The current situation in the industry

- 85% of planning applications assumed:

Windows are **open**  
for the overheating assessment

but

Windows are **closed**  
for the noise assessment

Good practice in the  
design of homes

TM60: 2018

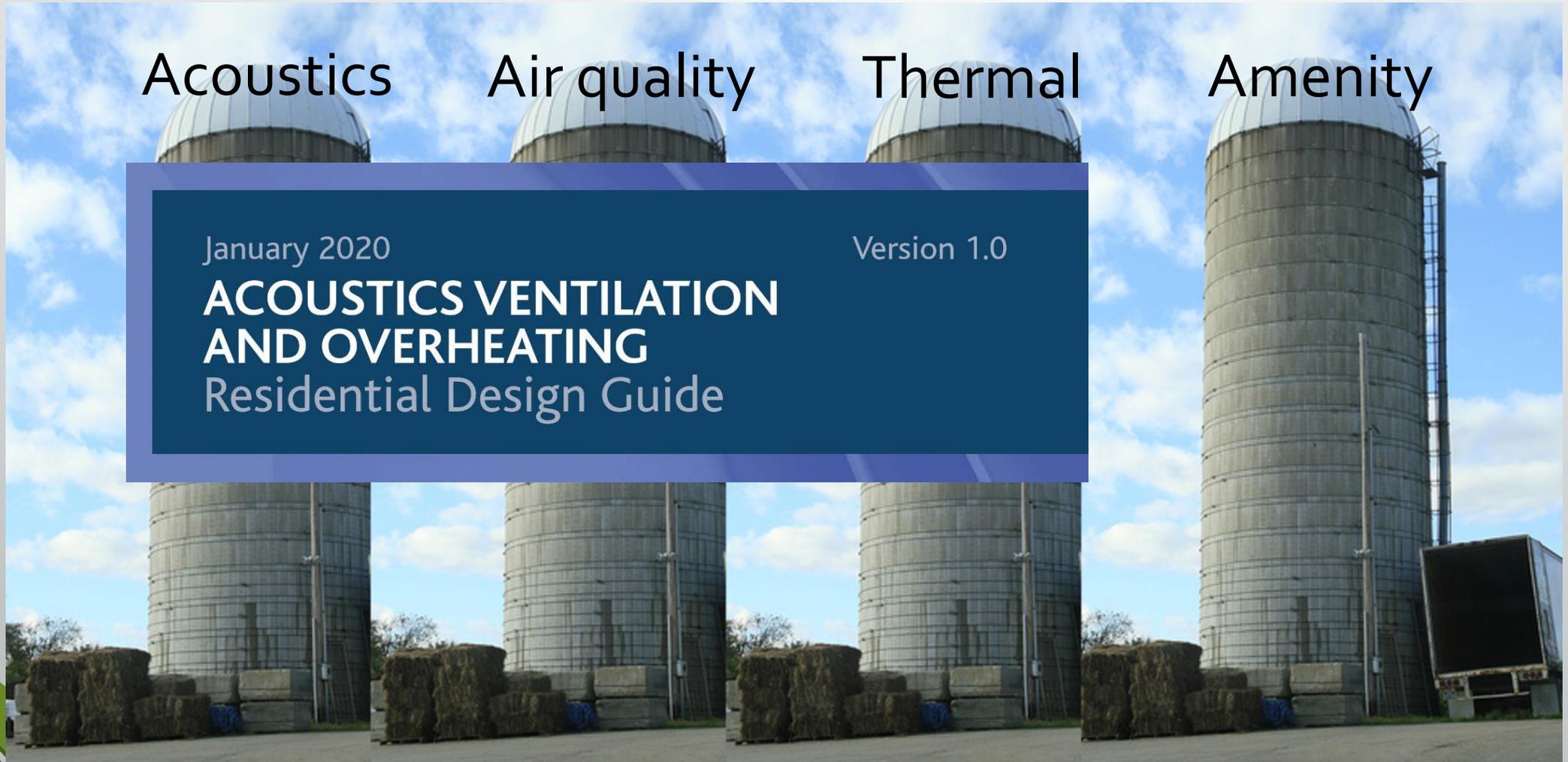


- Integrated design
- Greater collaboration
- Multi-disciplinary approach

[Using planning conditions to improve indoor environmental quality \(IEQ\) of new residential developments](#)

N Conlan, J Harvie-Clark, Apex Acoustics Ltd. Proc. IOA Vol. 40. Pt. 1. 2018

# Breaking out of the silo



Acoustics

Air quality

Thermal

Amenity

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ENVIRONMENTAL  
**NOISE**  
GUIDELINES  
for the European Region

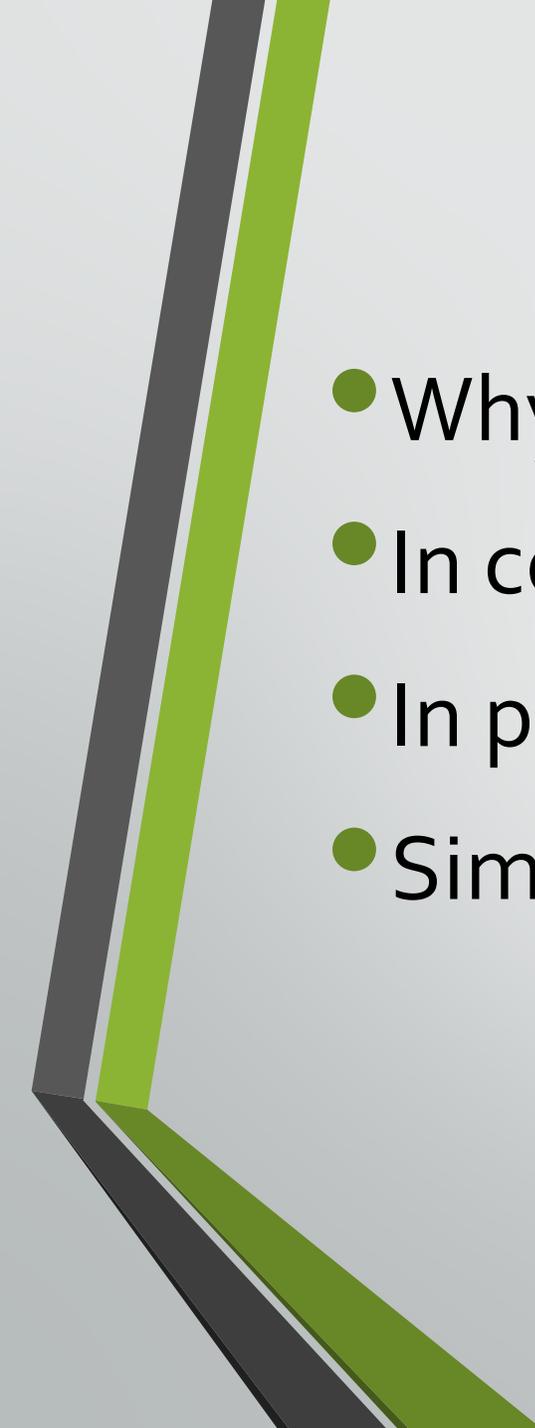


## Road traffic noise

### Recommendation

For average noise exposure, the GDG strongly recommends reducing noise levels produced by road traffic below **53 decibels (dB)  $L_{den}$** , as road traffic noise above this level is associated with adverse health effects.

For night noise exposure, the GDG strongly recommends reducing noise levels produced by road traffic during night time below **45 dB  $L_{night}$** , as night-time road traffic noise above this level is associated with adverse effects on sleep.

- 
- Why has it taken 4 years?
  - In concept: Higher short-term noise levels in summer
  - In practice: Multi-disciplinary, dynamic, subjective
  - Simple in concept, harder in practice.

2016

2020



*Peace,  
Quiet  
and  
Thermal Comfort  
at all  
times*

*30 January 2020*



- Flexible



- Ambiguous





- FAQ

- Future revisions

- 
- Session 1 – Guidance & Criteria
  - Session 2 – Process & Implementation
  - Workshops (x2)