Chartered Institute of Environmental Health

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Dear Anne,

Draft for Public Comment (DPC) – BS8233
Overarching comments from CIEH

I am writing on behalf of the Chartered Institute of Environmental Health (CIEH) to provide you with some over-arching comments from our members on the content of this DPC, which should be viewed alongside the detailed comments we will be making through the online platform. We are choosing to provide these comments because of the limitations of the platform and the necessity for the proposals to be seen in their wider context, something which EHPs can bring in strength because of their holistic training and experience.

CIEH is the professional voice for environmental health representing over 7,000 members working in the public, private and non-profit sectors. Building on its rich heritage, CIEH ensures the highest standards of professional competence in its members, in the belief that through environmental health action people's health can be improved. Environmental health has an important and unique contribution to make to improving public health and reducing health inequalities. CIEH campaigns to ensure that government policy addresses the needs of communities and business in achieving and maintaining improvements to our environment and our health.

BS8233 has traditionally been used to provide guidance and advice on how the noise impacts on a development can be mitigated in line with current legislation, policy and other relevant standards used within the UK. The fundamental basis for the proposed revision of BS8233 appears to be based on measures to address:

- The importance of linking the design of a development to up- to-date health-related standards for noise.
- Incorporating guidance on ventilation of buildings; and
- Using evidence-led health-based standards that address environmental noise transport sources, individually, within the new guidance.

Whilst there is support for evidence-led guidance, and the promotion of health-based standards for protection of public health, the earlier and current versions of BS8233 have been documents that set out previously established guidelines and consequently were used by practitioners to support *implementation* of those guidelines rather than being a vehicle for the creation of new noise guidelines. The status of BS8233 is no more than a guidance document and, therefore, it should not be trying to leverage changes to national policy or introduce new standards that are more appropriate to the province of Government. For reference, a copy of our position paper (June 2025) is attached.

To gauge our members' overall views on the Draft for Public Comment (DPC), we conducted a member survey. We believe you will find it helpful if we were to share some of these results with you. Not only will it provide feedback direct from those charged with the regulatory and development control aspects of noise management, but also, you will be able to see the strength of opinion that sits behind our online consultation response. Most respondents are experienced professionals, with the majority having many years of experience of the practical implementation of noise policy, legislation, regulations and standards. This includes a strong level of understanding of the current version of BS8233, and how it is used to assist reviewing planning applications and noise assessments, and environmental health protection in general.

There were a number of elements of positive feedback about the proposed standard from our members, including the new descriptions for D_{nTw} + C_{tr} insulation standards being praised for being clear, informative, and useful, indicating a well-constructed section of the revised standard. The requirement for Acoustic Design Statements was also welcomed. In the wider context, there was strong support for aligning BS8233 with the Professional Practice Guidance on Planning and Noise (ProPG), the advice in the PPG-Noise, and the requirements of the National Planning Policy Framework (NPPF). It was felt that the proposed new standard should complement those documents. There were also concerns about the ambiguity in noise metrics used, with the introduction observed as misrepresenting the scope of the standard because it removed guidance on indoor criteria and relies instead on noise source-based targets, with no clear method described for determining the values of L_{den}/L_{night}.

On specific proposals:

<u>1. The proposed shift to a two-step process starting with external sound levels</u>

The majority of members who responded are opposed to this proposal because of:

- Complexity and Confusion: Several respondents felt the proposed changes do not simplify the standard and instead introduce unnecessary complexity, especially in worked examples.
- Over emphasis on sound insulation: The proposed approach does not accord with government guidance to promote good acoustic design[1] or Approved Document O which requires that all practicable passive means of limiting unwanted solar gains and removing excess heat have been explored first before adopting mechanical cooling.
- Inappropriate Metrics: There was strong criticism of the use of Lden, which is seen as a strategic metric unsuitable for individual property assessments. It was described as impractical, hard to measure, and irrelevant for evaluating internal living conditions.
- Risk of Misuse: There were concerns that the two-step process could lead developers to default to closed windows and mechanical ventilation, bypassing passive design principles and undermining good acoustic design.

[1] The ProPG guidance is listed in the Government's Planning Practice Guidance on Noise.

- Lack of Evidence: Some argued there was no evidence that current internal/external criteria fail to protect health and instead called for post-completion testing to validate acoustic design.
- Planning Challenges: It was felt that allowing two approaches may create interpretation difficulties for planning authorities and lead to inconsistent application.
- Overcomplication: The shift in approach was seen by some as adding layers of conflicting guidance, making an already complex area harder to navigate.

2. Use of L_{den}/L_{night} metrics

The majority of members who responded were opposed to the proposed use of these metrics because of:

- Measurement Challenges: Multiple respondents questioned how L_{den}/L_{night} can be practically measured or verified, especially at the individual property level. There was concern that local data may be unavailable, making the metrics impractical for real-world assessments.
- Strategic vs. Site-Specific Use: L_{den}/L_{night} were seen as strategic tools used in population-level noise mapping (e.g., the Environmental Noise Regulations maps), not suitable for site-specific residential design. Their use in BS8233 could lead to misapplication of population-level data to individual developments.
- Loss of Detail and Relevance: These metrics are annual averages, which may mask short-term noise impacts that are more relevant to health and amenity. L_{Aeq} and L_{AMax} are preferred for capturing real-time and peak disturbances, especially in bedrooms.
- L_{Aeq} and L_{AMax} Familiarity: The use of L_{Aeq} and L_{AMax} indicators are well-understood by environmental health professionals and have been effectively used for years. They are considered more representative of actual noise impacts.
- Retention of Current Criteria: Some respondents argued that the existing acoustic criteria are sufficient and backed by years of professional experience. They see no compelling reason to change.
- Need for Room-Specific Protection: $L_{Aeq,T}$ and L_{AMax} are seen as essential for protecting bedroom environments from sleep disturbance. L_{den}/L_{night} may not offer the same level of targeted protection.

3. View on removing references to activities and room locations

The majority of members who responded were opposed to this proposal because of:

- Health Protection in Bedrooms: Multiple respondents emphasised that bedrooms are critical for health, particularly in relation to sleep disturbance. Retaining specific criteria for sleeping areas is seen as essential for safeguarding health and well-being.
- Function-Based Design: Different rooms serve different purposes (e.g., rest, work, socialising), and therefore require distinct acoustic standards. A "one size fits all" approach is viewed as inappropriate and potentially harmful.
- Established Practice: Room-specific criteria were described by respondents as logical, well-established, and unchallenged in professional practice. They provide clear expectations for internal amenity and are aligned with existing guidance like ProPG.
- Design Flexibility and Layout: Maintaining room distinctions supports good acoustic design, such as placing bedrooms away from noisy façades. It also helps manage future alterations to properties.
- Respite in High Noise Areas: Some rooms, especially bedrooms, should offer designated quiet zones in noisy environments to ensure residents have a relatively quiet place to rest.

- Purpose-Driven Protection: The core belief from members was that acoustic standards should reflect the intended use of each room, as annoyance and health impacts depend on how well a space supports its function.

4. View on removing guidance for assessing regular individual night-time noise events

The majority of members who responded were opposed to this proposal because of:

- Health Impacts of Night-Time Noise: Respondents consistently highlighted that individual noise events at night, such as train noise or urban disturbances, can significantly affect health, even if they do not cause awakenings. Sleep disturbance is linked to long-term health effects, and this is well-supported by the ProPG.
- Importance of L_{Amax} and SEL Metrics: These metrics are seen as critical tools for identifying and mitigating noise impacts. L_{Amax} is particularly useful in busy urban areas and for community noise assessments. Removing them would be a backward step.
- Loss of Context and Design Insight: L_{Amax} and SEL help designers understand the context of the noise environment, enabling more tailored and effective mitigation. Their removal would obscure important data and hinder good acoustic design.
- Evidence-Based Opposition: The argument put forward by those drafting the proposed revision of BS8233 that there's insufficient evidence linking individual events to health outcomes was refuted by respondents, who cite extensive research and international guidelines showing clear correlations.
- Planning and Complaint Relevance: L_{Amax} values often trigger noise complaints and are regarded as essential for local surveys and planning decisions. Averaging metrics alone hide critical data.
- Protecting Sleep and Well-Being: The consensus was that night-time noise events must be assessed individually to ensure health protection, resident comfort, and effective acoustic design. Removing this guidance would compromise all three.

5. View on whether the proposed revisions to BS8233 buildings and rooms in residential use will help to ensure good acoustic design (GAD) of residential development which promotes good health and well-being, with a high standard of amenity

The majority of respondents did not believe the proposed revisions to BS8233 (buildings and rooms in residential use) would help to ensure good acoustic design of residential development which promotes good health and well-being, with a high standard of amenity as required by the National Planning Policy Framework 2024. This is because of:

- Insufficient Emphasis on GAD Principles: Respondents felt the revised standard neglects key aspects of Good Acoustic Design as outlined in ProPG. The ProPG offers flexibility and holistic design guidance, which the new standard lacks.
- Risk of Circumventing GAD: The two-step process could be misused, with developers skipping proper design steps and defaulting to facade insulation without demonstrating a GAD process.
- Ventilation and Overheating Issues - Limited Design Flexibility: Table 11 offers only two solutions—open or closed windows—which may lead developers to justify mechanical ventilation prematurely. This undermines passive design strategies and could conflict with local planning policies that prioritize openable windows.
- Sustainability Overlooked: It was felt that there is little attention to passive ventilation and sustainable design, despite growing concerns about climate change and carbon footprints.
- Implementation Inconsistency and Confusion: The revised standard may be difficult to apply consistently, especially in non-transportation noise scenarios. Respondents

foresee confusion and uncertainty in assessments and a subsequent need for clear guidance and training.

- Potential Redundancy of the standard: If the standard fails to address all relevant noise sources and lacks practical clarity, it may simply not be used. It is only guidance and therefore there is no obligation for its advice to be followed when implementing Government or local policy
- Overzealous Insulation Requirements: Removing room classifications could lead to excessive insulation demands, increasing development costs at a time when housing supply is critical.
- Loss of Practical Relevance: Without considering individual noise events or maintaining stringent internal noise levels, the standard may fail to ensure the promotion of good health and well-being.
- Hope for Accessibility: There was optimism that the revised guidance can be made clearer and more accessible, supporting a wider range of users.

I hope you will appreciate why the above comments are being fed to you directly rather than through the online platform.

I would be grateful if you would confirm that the above will be presented to the drafting panel of this British Standard who will be reviewing the consultation outcome and to the Committee members.

Yours sincerely

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Encs. i) Position paper prepared by the CIEH Noise Satellite Panel, June 2025
ii) CIEH Formal Comments on the DPC

[redacted]