Chartered Institute of Environmental Health

NOISE MANAGEMENT GUIDE

TECHNICAL GUIDANCE NOTE 1: EXAMPLE PLANNING CONDITIONS

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INTRODUCTION

Scope

This document is intended to provide guidance on the decision-making process applicable when considering noise aspects of planning applications.

This document should be considered in conjunction with 'ProPG: Planning and Noise' and the government planning practice guidance for noise (PPG-N).

This document focuses on the part of the decision-making process relevant to the application of acoustic planning conditions.

Background – The Planning Process

Land use within the UK is subject to strict controls. Almost all land has one or more designated land uses that are described in the planning process in the Town and Country Planning (Use Classes) Order 1987. The current land uses are summarised in the Planning Portal as classes B, C, E, F and Suis Generis. Details on these uses may be found here. Changing a land use normally requires a formal application to make the change (or is otherwise permitted development). New development, engineering works or similar also need a formal application.

Applications are considered by the Local Planning Authority (LPA) and measured against compliance with national and local planning policy (the Local Plan). Where development complies with local plan requirements, planning consent is granted, and a decision notice issued to confirm the decision.

Where a consent does not accord with the national or local plan requirements, the LPA may:

- Refuse the application (s3.7-3.11 of the ProPG details grounds for objection on noise grounds)
- Grant the application with conditions

Planning conditions can only be applied where they meet the pre-requisites set out in the National Planning Policy Framework (NPPF) and, in particular, the relevant planning tests. Before applying a condition, the tests identified in paragraphs 55 and 56 of the NPPF require careful consideration.

> 55. Local planning authorities should consider whether otherwise unacceptable development could be made acceptable through the use of conditions or planning obligations. Planning obligations should only be used where it is not possible to address unacceptable impacts through a planning condition.
>
> 56. Planning conditions should be kept to a minimum and only imposed where they are necessary, relevant to planning and to the development to be permitted, enforceable, precise and reasonable in all other respects. Agreeing conditions early is beneficial to all parties involved in the process and can speed up decision making. Conditions that are required to be discharged before development commences should be avoided unless there is a clear justification.

Planning conditions should avoid duplication of regulatory controls found in other legislation, for example, duplicate licensing controls on hours of use, building regulations..

Example Conditions

The following example conditions are provided to assist local authorities with achieving a consistent and robust approach to noise control through the planning process. The conditions have been framed with good practice and technical resilience as a starting point but may need to be checked by individual LPAs prior to use.

The conditions are offered as a considered approach to achieving some consistency in the application of conditions and the expected compliance. The conditions will not be suitable for all developments, and the reader may wish to modify or update them as needed to fit the precise circumstances of the application under consideration.

There are two types of notes set out below. The informative notes are intended to be provided to the applicant with the condition.

The explanatory notes are to aid better understanding of when to apply the conditions and are intended for internal use only.

STRATEGIC CONDITIONS ON NOISE FOR OUTLINE CONSENTS

1. Prior to development starting on site, details of a scheme for protecting the proposed dwellings and other noise sensitive uses from external [traffic/railway/aircraft] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to achieve good acoustic standards. Once approved in writing, all the noise mitigation measures shall be implemented and thereafter retained.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

A good acoustic design process should be followed in accordance with 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the internal noise criteria are achieved with windows open.

Explanatory Note

Good acoustic standards must be appropriate to the source and will include, but not be limited to, the ProPG and BS4142:2014+A1:2019.

2. No development shall start / The use hereby approved shall not start until an assessment has been submitted for written approval to the LPA which details the levels of internal noise likely to be generated from the proposed use of the site. This assessment shall be used to identify and determine appropriate noise mitigation measures (such as site layout) required to protect the amenity of adjacent noise sensitive properties. The approved noise mitigation measures shall be implemented prior to the start of the proposed use and retained thereafter.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

A good acoustic design process should be followed in accordance with 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved.

NEW RESIDENTIAL DEVELOPMENT EXPOSED PREDOMINANTLY TO NOISE FROM TRANSPORT SOURCES

External Amenity Areas

Where the LA is reasonably satisfied the specified external amenity area levels can be met:

3. Prior to development starting on site, details of a scheme for protecting external amenity spaces (gardens, patios, larger balconies, roof gardens and terraces) from external [traffic/railway/aircraft] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to ensure external noise levels within external amenity spaces shall not exceed 55 dB $L_{Aeq,16hr}$ (0700 – 2300).

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

A good acoustic design process should be followed in accordance with the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved.

Where a development is in a higher noise area, such as a city centre or urban area adjoining the strategic transport network, and a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources, is required to ensure development needs can be met:

4. Prior to development starting on site, details of a scheme for protecting external amenity spaces (gardens, patios, larger balconies, roof gardens and terraces) from external [traffic/railway/aircraft] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to achieve the [specify noise level or, where this is not possible, insert "lowest practicable levels"] in external amenity spaces.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

A good acoustic design process should be followed in accordance with the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the lowest practicable levels in external amenity spaces are achieved.

Explanatory Note

If a noise assessment has been submitted with the application, it would be better to insert the noise level at specified locations used for external amenity that the local authority accepts represents the lowest practicable level. If this information is not provided, insert "lowest practicable levels" as an alternative.

INTERNAL NOISE

Conditions for achieving internal noise levels where the LA is reasonably satisfied the specified internal levels can be met

5. Design and construction of the development shall ensure that the following noise criteria are met with windows open:

1) bedrooms shall achieve a 16-hour L_{Aeq} (07:00 to 23:00) of 35dB(A), and an 8-hour L_{Aeq} (23:00 to 07:00) of 30dB(A), with individual noise events not exceeding 45dB L_{AFmax} more than 10 times (23:00 to 07:00 hours)
2) living rooms shall achieve a 16-hour L_{Aeq} (07:00 to 23:00) of 35dB(A)
3) dining rooms shall achieve a 16-hour L_{Aeq} (07:00 to 23:00) of 40dB(A)

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Notes

A good acoustic design process should be followed in accordance with the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

Any design measures that are used to control the ingress of noise must be consistent and compatible with the requirements of Approved Documents O and F.

Explanatory Notes

The local authority must be reasonably satisfied that this condition can be met through the application of noise mitigation measures that are appropriate to the area.

Site layout and room orientation should be considered as a first preference.
Only when site solutions are not practical should façade solutions be considered. Table B-5 of the Acoustics, Ventilation and Overheating Residential Design Guide (AVO Guide)[1], which is reproduced below, provides information on passive solutions providing noise attenuation.

There is data to suggest that acoustic plenum windows can achieve Rw values up to 42dB when partially open and 33dB when in an open position and other options can also contribute (see Table B-5 of the AVO Guide reproduced below).

[1] Association of Noise Consultants and Institute of Acoustics, Acoustics, Ventilation and Overheating Residential Design Guide, January 2020, p.45.

Table B-5 Examples of passive ventilation solutions providing enhanced sound insulation

Design option	Description and references	Approximate Level Difference (external free field level – internal reverberant level)	Improvement relative to a window providing a similar amount of ventilation
Standard opening windows	Window(s) open sufficiently to provide a ventilation free-area equivalent to 2% of the floor area. [42]	13 dB	0 dB
Open windows with sound attenuating balconies	Window(s) as above. Balconies may have a solid balustrade or be enclosed to a further degree (maintaining an open area for ventilation). Absorption may be provided to the balcony soffit or potentially to other surfaces. [49, 50, 51]	17 – 23 dB	4 – 10 dB
Attenuated or plenum windows	Dual windows (spaced by around 200mm) with staggered openings and absorptive linings to the cavity reveals. Various other configurations also possible in principle. [52, 53]	17 – 24 dB	4 – 11 dB
Attenuated vents/ louvres	Ventilation openings with integral means of attenuating sound. Typically this may be acoustic louvres or acoustically lined ducts/plena. [54, 55]	17 – 29 dB	4 – 16 dB
Attenuated windows or vents/ louvres with sound attenuating balconies	Combined use of balconies to provide screening and acoustically attenuated windows or vents. Refer to above for description of each element.	21 – 39 dB	8 – 26 dB

Internal noise levels where the developer has provided predictions on the internal levels that can be achieved after a good acoustic design process has been followed

6. Design and construction of plots **[insert plot numbers]** shall ensure that the following noise criteria are met with windows open:

a) bedrooms shall achieve an 8-hour L_{Aeq} (23:00 to 07:00) of [insert noise level] dB(A) with individual noise events not exceeding [insert noise level] dB L_{AFmax} more than 10 times (23:00 – 07:00 hours)
b) living rooms shall achieve a 16-hour L_{Aeq} (07:00 to 23:00) of [insert noise level] dB(A)
c) dining rooms shall achieve a 16-hour L_{Aeq} (07:00 to 23:00) of [insert noise level] dB(A)

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Notes

A good acoustic design process should be followed in accordance with the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

Any design measures that are used to control the ingress of noise must be consistent and compatible with the requirements of Approved Documents O and F.

Explanatory Notes

This condition is appropriate where an Acoustic Design Statement has been submitted and the local authority is satisfied that a good acoustic design process has been followed.

The noise levels should not unreasonably exceed the following internal noise levels as this may be deemed to be unreasonable in accordance with the ProPG (refer to the document and footnotes 5 and 7 of figure 2 for more detail):

a) bedrooms shall not exceed an 8-hour L_{Aeq} (23:00 to 07:00) of 35dB(A) and an L_{AFmax} of 50 dB
b) living rooms and dining rooms shall not exceed a 16-hour L_{Aeq} (07:00 to 23:00) of 40 dB(A)

It will always be practical to achieve the above levels. However, these levels may not always be capable of being achieved with windows open. In such cases the development should be designed so that noise levels are minimised as far as practical with windows open. In addition, mechanical ventilation and cooling should be provided, in accordance with the ProPG, where it is justified to do so. Mechanical ventilation and cooling should not be treated as an alternative to passive design measures. They should be installed in addition to minimising noise levels with windows open using passive means, for example building orientation, room orientation, acoustic balconies and facades treatments.

Condition to be imposed where the developer has not provided sufficient information to specify levels and where the LPA cannot be reasonably satisfied that the internal levels can be achieved with windows open

7. Prior to development starting on site, details of a scheme for protecting the proposed dwellings from external [traffic/railway/aircraft] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to achieve the following internal noise limits:

1. bedrooms shall achieve a 16-hour LAeq (07:00 to 23:00) of 35dB(A), and an 8-hour LAeq (23:00 to 07:00) of 30dB(A), with individual noise events not exceeding 45dB LAFmax more than 10 times (23:00 – 07:00 hours)
2. living rooms shall achieve a 16-hour LAeq (07:00 to 23:00) of 35dB(A)
3. dining rooms shall achieve a 16-hour LAeq (07:00 to 23:00) of 40dB(A)

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

A good acoustic design process should be followed in accordance with the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

Explanatory Note

It will be practical to achieve the above levels in most noise exposure situations. However, these levels may not always be capable of being achieved with windows open. In such cases the development should be designed so that noise levels are minimised as far as practical with windows open. In addition, mechanical ventilation and cooling should be provided, in accordance with the ProPG, where it is justified to do so. Mechanical ventilation and cooling should not be treated as an alternative to passive design measures. They should be installed in addition to minimising noise levels with windows open using passive means, for example building orientation, room orientation, acoustic balconies, and facades treatments.

NOISE OF AN INDUSTRIAL OR COMMERCIAL NATURE

New or modified industrial/commercial premises affecting existing premises

8. The rating level of the noise emitted from [any or all of the sources listed below*] located at the site shall not exceed [the existing background level] at any premises used for residential purposes surrounding the site when assessed in accordance with BS 4142:2014+A1(2019).

Reason: To ensure that the amenities of occupiers of other premises in the vicinity are protected.

* Industrial and manufacturing process
* Fixed plant and equipment (mechanical and electrical)
* Loading and unloading of goods (industrial and/or commercial)
* Mobile plant and vehicles (these need to be an intrinsic part of the overall sound from premises or process)

Explanatory Notes

The wording of this condition is general and can be improved in terms of its specificity if an assessment has been carried out in accordance with BS4142:2014+A1(2019). Ideally, the background sound level should be established before the application is determined. Then the rating level can be specified rather than specifying a background sound level.

For larger applications it would be proportionate for a BS4142:2014+A1(2019) to be submitted with the application. Where sufficient information it is recommended that "at any premises used for residential purposes surrounding the site" is replaced with specific assessment locations, for example at 3m from the front façade of [specified address].

BS4142:2014+A1(2019) provides a method for assessing the acoustic impact of noise from defined sources on sensitive receptors.
The scope of the standard should be clearly understood, and the full value of the assessment is relevant only where the source being assessed is within the scope of the document.

Where the BS4142 method is used for assessments outside the scope of the assessment, for example barking dog noise, the potential value will be less, and the risks of successful challenge at appeal increase.

Existing industrial and commercial sources affecting new development

Where the LA is reasonably satisfied the specified external amenity area levels can be met:

9. Prior to development starting on site, details of a scheme for protecting external amenity spaces (gardens, patios, larger balconies, roof gardens and terraces) from external [industrial/commercial] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to ensure that the rating level assessed at external amenity spaces shall not exceed the background sound level.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

The rating level shall be assessed in accordance with the BS4142:2014+A1(2019).

A good acoustic design process should be followed in accordance with the principles set out in the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved.

Where a development is exposed to higher levels of industrial and commercial sound, and a compromise between elevated noise levels and other factors, such as the convenience of living in these locations or making efficient use of land resources, may be required to ensure development needs can be met:

10. Prior to development starting on site, details of a scheme for protecting external amenity spaces (gardens, patios, larger balconies, roof gardens and terraces) from external [industrial/ commercial] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to achieve the lowest practicable rating levels in external amenity spaces.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

The rating level shall be assessed in accordance with the BS4142:2014+A1(2019).

A good acoustic design process should be followed in accordance with the principles of the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the lowest practicable levels in external amenity spaces are achieved.

Internal noise

Conditions for achieving internal noise levels where the LA is reasonably satisfied the specified internal levels can be met

11. Design and construct of the development to ensure that the following noise criteria are met with windows open, after the sound has been corrected for acoustic features (tones, impulses, intermittency):

a. bedrooms shall achieve an $L_{Aeq,T}$ (between the hours of 23:00 to 07:00) of 30dB(A)
b. living rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of 35dB(A)
c. dining rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of 40dB(A)

where T is the operating time of the source or activity that is generating the sound.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

Corrections for tonality and impulsivity shall be in accordance Annexes C-E of the BS4142:2014+A1(2019).

A good acoustic design process should be followed in accordance with the principles of the 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

Any design measures that are used to control the ingress of noise must be consistent and compatible with the requirements of Approved Documents O and F.

Explanatory Notes

The local authority must be reasonably satisfied that this condition can be met through the application of noise mitigation measures that are appropriate to the area.

Site layout and room orientation should be considered as a first preference. Only when site solutions are not practical should façade solutions be considered.

Internal noise levels where the developer has provided predictions on the internal levels that can be achieved after a good acoustic design process has been followed

12. Design and construct the development to ensure that the following noise criteria are met with windows open, after the sound has been corrected for acoustic features (tones, impulses, intermittency):

a. bedrooms shall achieve an $L_{Aeq,T}$ (between the hours of 23:00 to 07:00) of XXXdB(A)
b. living rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of XXXdB(A)
c. dining rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of XXXdB(A)

where T is the operating time of the source or activity that is generating the sound.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

Corrections for tonality and impulsivity shall be in accordance Annexes C-E of the BS4142:2014+A1(2019).

A good acoustic design process should be followed in accordance with the Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

Any design measures that are used to control the ingress of noise must be consistent and compatible with the requirements of Approved Documents O and F.

Explanatory Note

This condition is appropriate where *an assessment has been carried for industrial and commercial noise.*

The following condition can be imposed where the developer has not provided sufficient information to specify levels but the local authority is satisfied that the internal levels are capable of being achieved.

13. Prior to development starting on site, details of a scheme for protecting the proposed dwellings from external [industrial/commercial] noise shall be submitted to and approved in writing by the LPA. The scheme shall ensure that, upon completion of the development, good acoustic design will be used to achieve the following internal noise limits after the sound has been corrected for acoustic features (tones, impulses, intermittency):

a. bedrooms shall achieve an $L_{Aeq,T}$ (between the hours of 23:00 to 07:00) of 30dB(A)
b. living rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of 35dB(A)
c. dining rooms shall achieve an $L_{Aeq,T}$ (between the hours of 07:00 to 23:00) of 40dB(A)

where T is the operating time of the source or activity that is generating the sound.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Informative Note

Corrections for tonality and impulsivity shall be in accordance Annexes C-E of the BS4142:2014+A1(2019).

A good acoustic design process should be followed in accordance with 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017 or later versions) to ensure that the noise criteria are achieved with windows open.

OTHER GENERAL CONDITIONS

14. All recommendations outlined in the Noise Impact Assessment **[report number]** shall be implemented and shall be completed before the use, hereby approved, is first commenced and shall be thereafter maintained, unless otherwise agreed in writing by the LPA.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Explanatory Notes

A general condition that places the onus of describing compliance with appropriate standards on the applicant and submitted noise impact assessment reports.

Typically this is a low risk option for regulators as it draws on the data submitted by the applicant and is therefore unlikely to be challenged.

Note, however, that often (particularly for large sites which are subdivided into development phases) the applicant and the eventual developer may not be the same legal entity.

Planning consents obtained with prescriptive conditions identified in one consultant's report may prevent better acoustic design solutions. Conditions on planning decision notices that prescribe measures can only be changed with a formal application to vary a condition, which may be time consuming and costly.

Verification reporting

15. A noise validation report demonstrating compliance with the noise criteria shall be submitted to and approved by the LPA before any of the dwellings are occupied. This assessment shall be conducted in accordance with 'Professional Practice Guidance on Planning and Noise: New Residential Development' (May 2017) and the approved noise design scheme. Such noise protection measures shall thereafter be maintained and operated in accordance with the approved scheme.

REASON: In the interests of residential amenity and in accordance with **[insert relevant Local Plan policies]**.

Explanatory Notes

Post-completion verification testing offers comfort that the measures identified have been properly implemented. Post-completion testing can relate to any matter subject to planning consent.

The amount of post-completion testing will need to be 'reasonable' to avoid significant costs.

Post-completion testing should be carried out using recognised standards.
Where testing is conducted to verify internal measured levels, care should be taken to ensure that the testing is proportionate and not subject to uncertainties associated with occupation.

Post-completion testing of larger developments may need to reflect a small percentage of the overall development. The relative merit of post-completion testing should be evaluated considering the statistical significance of test methods and number of tests carried out.