

Date: Tuesday 31 October 2017

Re: Submission in relation to the Draft National Planning Framework 2040

To Whom It May Concern:

The Irish Branch of the Institute of Acoustics

Formed in the UK in 1974, the Institute of Acoustics [IOA] has some 3,000 members predominantly in the UK but also worldwide, with some 120 of these being members of the Irish Branch which was established in 1997. The Irish Branch is the only institution specifically representing those professionals involved in the acoustic industry in Ireland. Our members are involved in a wide range of acoustic disciplines including environmental noise, occupational noise, architectural acoustics, building acoustics, electroacoustics, noise and vibration control, hearing, speech, underwater acoustics etc. They are employed by government agencies, local authorities, industry, consultancies, universities and other educational establishments.

The IOA is the professional institute for those involved in any aspect of noise and has a long history of helping develop standards and guidance documents (including Irish guidance) on the measurement, assessment and control of many types of noise issues. The IOA members work for both industry, planning authorities and local interest groups in relation to the assessment of various noise issues and concerns.

A key aspect of the IOA's remit is also the education of acoustic professionals and the wider dissemination of knowledge on the subject to interested parties. For instance, the IOA runs and accredits various courses, which include certificate of competency courses and a post-graduate diploma course, to provide an educational basis for our members. We also participate in open days and training course alongside other organisations in related fields.

The committee members of the Irish Branch of the Institute of Acoustics have taken particular interest in **the Draft National Planning Framework 2040 issued by** The Department of Housing Planning and Local Government.

Some key points have been raised by committee members of the Irish Branch of the Institute of Acoustics and have been set out for your consideration and perhaps inclusion in the **National Planning Framework 2040**:

1. There should be a clear link between Draft-NPF, Noise Action Plans and Development Plans, the Draft-NPF does not indicate the requirement for a clear link.
2. Residential developments proposed within the 60 dB Lday and 50 dB Lnight END noise mapping contours (which may be revised downwards in Round 3 mapping. The IOA suggest the EPA could determine the appropriate levels), where developments within these contours should be required to include a noise impact assessment within the planning application process.
3. It would be important that the framework document would not over-rely on noise maps and noise action planning derived from Environmental Noise Directive work in isolation. While

noise contour maps are a useful reference, the authorities who produce them do recognise that their accuracy is limited and that they were produced for a specific use, therefore the review process in relation to a proposed residential development should be supported with actual site measurements to verify actual site noise levels and to include predictions to estimate likely future noise levels at development sites (typically 15 years forward). Many of the published publically available noise contour maps come with the following caveat suggesting that they are not to be relied upon and their avoidance for determining levels at properties.

Noise maps are a tool intended for a specific purpose. They provide an insight into how environmental noise may be generated from a particular source such as traffic or rail transport. It is important to note that the results are not intended to be a precise calculation of the total noise exposure at any given point, and the temptation to rely too heavily on noise maps to predict the noise level at a property should be avoided.

Extract from: <http://dublincitynoise.sonitussystems.com/noise-maps.php>

4. All planning applications subject to Strategic Housing Development and Strategic Infrastructure Development should be required to carry out a noise impact assessment (regardless of location). Such impact assessments would be required to include provision of 'Quiet Areas' as part of the development.
5. Noise impact assessment to include a variety of measures such as setbacks and separation between noise sources and receptors, good acoustic design of buildings, building orientation, layout, building materials and noise barriers and buffer zones between various uses and thoroughfares. Building ventilation strategies should also be considered in the design process and specific consideration given to buildings that rely on natural ventilation strategies which can be inherently acoustically weak. Guidance documents should set out minimum qualifications (competency) for noise impact assessment projects. A competent person needs to demonstrate both practical and theoretical competence and should participate in continual professional development. Competence may be demonstrated through reference to an appropriate formal qualification in acoustics and/or professional membership of a recognised acoustic organisation (e.g. the Institute of Acoustics, the Association of Noise Consultants, the Acoustical Society of America) and/or appropriate experience.
6. Within the UK, the Institute of Acoustics, the Association of Noise Consultants and the Chartered Institute of Environmental Health have jointly introduced 'ProPG: Planning & Noise' (May 2017), which is intended to provide professional guidance on planning and noise for new residential developments. It seems reasonable that a similar document should be considered for the Republic of Ireland whereby the proposed **Draft National Planning Framework 2040** should specify the development and use of such a document to encourage improved standards of design. Such guidance would encourage better acoustic design for new residential development in an effort to protect people from the harmful effects of noise. While the consultation document mentions the importance of such measures, it does not make any attempt to propose a guidance document which would provide a benchmark for professionals to work to. This would assist planning authorities, airport operators, rail operators, roads authorities, acoustic consultants, engineers, architects and property

development companies to work to a common guidance document which would promote good design and introduce consistency across all Planning Departments.

7. Development of a government expert group where planning departments and local authorities requiring in-house specialist expert advice on matters pertaining to noise and vibration could refer acoustic reports submitted with planning applications. This service would be available to planning authorities and enforcement sections throughout the Republic, allowing acoustic reports to be sent for comment by a government based noise and vibration expert group to supplement situations where there is no noise or vibration expertise in a given local authority. While it is recognised that Dublin City Council do employ qualified noise consultants, this would not be the situation in most other local authorities throughout the Republic of Ireland. In situations where planning documentation requires specific noise and vibration expertise, on projects such as wind farm developments, noise generating industry, entertainment noise, residential development and other such matters, then acoustic reports could be sent to the in-house expert group for review to ensure that all submissions undergo sufficient scrutiny to ensure that noise and vibration is adequately considered.

8. Local authorities should have due regard to the preservation of areas suitable for commercial or municipal developments which require a particular local resource such as water, stone, wind, extensive land banks, etc. Potential developments include quarries, wind farms, roads, industrial/commercial zones, airports, ports, water abstraction points, wastewater discharge points, and industrial or waste management facilities that require large buffer zones. Residential development proposed in such areas may render it unduly difficult to exploit these resources subsequently, due to difficulties in limiting noise impacts at dwellings previously permitted locally. It is suggested that such resources be identified and mapped, and that any proposals for the introduction of noise sensitive receptors to such areas be accompanied by a noise impact assessment to include an assessment of potential inward impacts should that resource be subsequently exploited.

9. That careful consideration would be given to the permission of residential developments in close proximity to facilities which are inherently noisy. By way of an example, Figure 1 shows one such housing estate in the Republic of Ireland which was permitted adjacent an existing well established metal recycling facility. Consequently there is a legacy of on-going local authority time, legal implications and expert opinion being sought (by residents and the operator), all of which could have been easily prevented. In such cases, good planning guidance and perhaps the input of a government based expert group could identify such cases prior to the granting of planning permission.



Figure 1: Source Bing Maps (location undisclosed, located in the republic of Ireland), showing a well-established metal recycling facility adjacent to a relatively new housing estate.

Finally, we would welcome the opportunity to discuss our concerns in more details and/or to offer further advice on these important acoustic issues.

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of the Institute of Acoustics

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