

NOISE

The policy context

Noise – defined as unwanted sound (including vibration) – can cause annoyance, interrupt conversation, disturb sleep and, in extreme physical conditions, cause physical damage to those affected. Assessing the impact of noise can be very complex, not least because of the subjective nature of many of its effects. There are a great variety of approaches to measuring and assessing noise according to the time, source, location and incidence of the noise. There are three categories of noise that are important to consider when undertaking integrated appraisal:

- neighbour or neighbourhood noise caused by people in or around their homes
- ambient – or environmental – noise which is generated by transport and industry
- occupational noise experienced in the workplace

The control of noise is undertaken through a range of legislation and policies. Neighbour noise is tackled by a combination of specific legislation providing duties and powers to district councils to deal with neighbour noise. Noise from transport is tackled using legislation and policies at local, national and international levels aimed at reducing the sound emitted from individual vehicles or aircraft; reducing the propagation of noise; and protecting potential recipients of noise.

Directive 2002/49/EC relating to the assessment and management of environmental noise (“the Environmental Noise Directive”) is to be transposed into national law not later than 18 July 2004. Its objective is to define a common approach intended to avoid, prevent or reduce on a prioritised basis the harmful effects, including annoyance, due to exposure to environmental noise.

It will require designated competent authorities to make, and where relevant, approve noise maps and action plans for agglomerations, major roads, major railways and major airports. These action plans, while aiming to prevent and reduce environmental noise, will also seek to preserve environmental noise quality where it is good.

Existing guidance

There is a large range of guidance and policy on measures to control noise, depending on the type of policy/project involved. The most important are:

Neighbour/Neighbourhood Noise

- The Pollution Control and Local Government (NI) Order 1978 (S.I.1978/1049) - district councils powers with respect to noise.
- The Noise Act 1996 [ISBN 0105543796-4, HMSO]

Ambient Noise

- Guidance on the Methodology for Multi-Modal Studies, 4.3 The Noise Sub-objective [<http://www.dtlr.gov.uk/itwp/mms/vol2/04.htm#4.3>]
- Planning Policy Guidance 24 on Planning and Noise – guidance to local authorities in England. [<http://www.planning.dtlr.gov.uk/ppg/ppg24>]
- MPG 11 – The Control of Noise at Surface Mineral Workings [ISBN 0117527793, HMSO]

- British Standard 4142:1997 describing a “Method for rating industrial noise affecting mixed residential and industrial areas”. [ISBN 0580283003, British Standards Institute]
- Design Manual for Roads and Bridges (DMRB), Vol. 11
- Calculation of Road Traffic Noise 1988 [ISBN 0115508473, HMSO]
- Calculation of Railway Noise 1995 [ISBN 0115517545, HMSO]
- The Pollution Control and Local Government (NI) Order 1978 (S.I. 1978/1049)
 - district councils powers with respect to noise
- The Airports (NI) Order 1994 (S.I.1994/426) – Department for Regional Development powers to deal with aircraft noise
- The Pollution Prevention and Control Regulations (NI) 2003 (S.I. 2003/46)
 - Environment and Heritage Service powers to regulate noise from certain prescribed industrial processes
- World Health Organisation – Guidelines for Community Noise
[\[http://www.who.int/peh/noise/guidelines2.html\]](http://www.who.int/peh/noise/guidelines2.html)

Occupational Noise

- Health & Safety at Work (NI) Order 1978
- The Noise at Work Regulations (NI) 1990
- The Control of Noise (Codes of Practice for Construction and Open Sites) Order (NI) 2002 (S.I. 2002/303)

If it is not clear which of these guidance notes is relevant to the particular policy or project you are working on, then advice can be obtained from the Air and Environmental Quality Unit of Environment and Heritage Service, Tel. 028 90254758, www.ehsni.gov.uk

A comprehensive overview of noise policy in the UK is provided in the NSCA annual Pollution Handbook [ISBN 0 903 474 49 2, National Society for Clean Air and Environmental Protection – admin@nsca.org.uk].

Matters to consider in completing the Integrated Impact Assessment

The guidance above gives an indication of the kinds of noise level exposures generally regarded as unacceptable, and those regarded as desirable in most circumstances. Exceeding these levels should be avoided and in all cases policy makers should seek to limit or mitigate the effects of noise wherever possible. Noise control has synergies with a wide range of policy areas, and these should be exploited wherever possible.

Quantification

There are a number of approaches to quantifying the impact of changes in noise according to the source, the scale and nature of the proposals.

Impact of new transport infrastructure or industrial developments can be quantified according to the number of people/households affected by an increase or decrease of average noise levels measured in dB(A). This approach can also be used to assess the impact of changes to traffic control measures.

A consistent and robust value for the cost of ambient noise for use in cost-benefit analysis has not yet been established. However, there are values available that are acceptable for broad-brush option appraisals.