Over-loud buses
San Francisco Municipal Railway’s new 40 feet diesel buses, made by Neoplan USA, are causing a bit of a headache. Residents are complaining about the noise they make - up to 90 decibels as against the 83 decibels specified in the contract. And as SFMR have ordered 235 buses and want to order another 175, both it and Neoplan are trying to get the problem identified and sorted out. So far, Neoplan has traced the excessive noise to the engine cooling system. On a few buses, it has cut the noise level to 84 decibels by changing the nine-blade fan in the engine cooling system to eight blades, removed some mounting material and inserted more sound-deadening material. But SFMR are accepting these modifications as only an interim solution and for the order of 175 more buses, want a final design solution from Neoplan.

close to worksites will experience some vibration. These vibrations will be temporary and localised in effect. It is anticipated that blasting will not be required during the construction of the light rail network.

Overall, it seems likely that noise and vibrations during the construction phase of the network is not likely to be excessive and anyway is only temporary; moreover, substantial construction projects are simply a feature of modern urban life and complaint is otiose. The real noise and vibration benefit will come if, as proponents of light rail systems contend, trains do take significant numbers of cars off the road, and keep them off the road. If the city’s background roar can be reduced to a background hum, then a major gain for civilised city living has been made.

UK Noise Forum
On the 3rd July, in The House of Commons, Mr Bob Russell asked the Secretary of State for Environment, Food and Rural Affairs what action she intends to take on the conclusions contained in publications issued by the Government and on behalf of the Government which were distributed at the United Kingdom Noise Forum’s inaugural conference held on 20 May; and if she will make a statement.

Mr. Meacher said,
‘The ‘Noise Incidence Study’ (NIS) and ‘Noise Attitudes Survey’ (NAS), are the latest in a time-series of data on the levels of noise, and people’s perception of noise.

The key finding from NIS is that the average noise levels measured during the daytime and evening have decreased to some extent.

The environmental (road, rail and air traffic) noise issues identified within NIS and NAS, will be addressed during the development of the National Ambient Noise Strategy currently being developed. Moreover, the highlighted problem of neighbour noise will be jointly targeted with the planned amendments to the Noise Act 1996, which will make it easier for councils to use additional powers to control domestic noise, and with the ‘Neighbour Noise Communications Plan’. This will involve the characterisation of both noismakers and noise sufferers so that a hard-hitting publicity campaign can communicate how to deal with noise nuisance, and how to avoid creating it.

Additionally, the ‘Review of European Legislation and Practices (2002), has identified a variety of enforcement and control measures that my officials will be exploring in more detail. These include: Integration of local authority efforts—the Amsterdam example given in the report appears to offer benefits, Mediation—mediation in Norway is cited as a model service, Education—further research is recommended into the effectiveness of education programmes, particularly in schools.’
• Acoustical duct lining is both a reasonable and cost effective method of noise control, provided that it is properly installed.

In order to give an airing to the very real concerns, which many have, ASHRAE Sound and Vibration Committee organised a discussion forum at the February 2000 meeting in Dallas to enable participants to share their experiences of the use of fibreglass. An hour-long session brought out the main problems experienced by practitioners.

Many had come across problem installations and others had anecdotal evidence. Some felt that there was always a risk that fibreglass would be declared a carcinogen sometime in the future, so its use should be minimised. Silencer manufacturers recommended that for hospitals, clean rooms, schools etc, fibrous material should have a protective barrier, such as Mylar over the fibreglass, but consultants felt that this degraded the acoustical performance. An alternative is packless silencers, requiring a greater length to achieve attenuation. Active silencers could be completely fibre-free, although hybrid systems are commonly used.

A recommendation for lower design velocities to reduce erosion was countered by the suggestion that higher velocities would eliminate stagnant zones where microbes breed. It was also confirmed that fibreglass should be kept well clear of cooling coils and other potentially wet areas.

A consensus, which developed during the forum, was that correct installation and careful maintenance were essential for systems employing fibreglass internal duct liners. NAIMA has publications on installation, but ASHRAE has not yet produced its own detailed guidance on design, operation and maintenance.

The hygiene protection required for those who work with fibreglass products, causes anxiety in others whose exposure is minimal. So, whilst there is a legitimate undercurrent of doubt about fibreglass, it is clear that it will continue to be used for all but the most sensitive installations, simply because it is so effective in what it does, and at considerably lower cost than other methods.

Information:
www.naima.org
www.ashrae.org

Noise complaints

On the 25th July, in The House of Commons, Mr Vernon Coaker asked the Deputy Prime Minister what guidelines he has sent to local authorities on the procedures for notifying those against whom complaints have been made about excessive noise prior to an investigation being made; and if he will make a statement.

Mr. Meacher replied,
‘There is no formal procedure for notifying those against whom complaints have been made about excessive noise prior to an investigation being made. However, the types of noise complaints that local authorities are called upon to investigate vary considerably and not all will be considered by the investigating officer to constitute a statutory nuisance. It is common for complaints to receive at least some investigation before the person or business against whom the complaint is made is approached or advised of its receipt.

It is not practicable to set out procedures that will satisfy all situations and it is often best that the most appropriate response to a particular complaint is judged by the case officer in the light of his or her knowledge and experience.’