Technical Note

Note: Technical notes are aimed at promoting discussion. The views expressed are not necessarily those of the editors or the Australian Acoustical Society. Contributions are not formally peer-reviewed.

EFFECTIVE NOISE REPORTS AND PRESENTATIONS FOR PLANNING PANELS

Paul Mitchell

Managing Director, EMGA|Mitchell McLennan, St Leonards NSW 2065, pmitchell@emgamm.com

GROWING ROLE OF PLANNING PANELS

In NSW and other states there is increasing use of specialist panels to determine applications for larger scale development proposals. Primary examples in NSW are the Planning Assessment Commission (PAC) and Joint Regional Planning Panels (JRPPs). These are technical bodies designed to make merit based decisions on the facts, including consideration of community views. Such panels are typically composed of experienced professionals, often town planners and public administrators, sometimes assisted by specialist advisors such as acousticians.

This paper provides guidance on preparing reports for and making presentations to such planning panels.

OUTLINE OF ASSESSMENT PROCESS

Applications for large development proposals are made to either local councils or state planning agencies. These organisations arrange for the exhibition of the application and receipt of submissions from interested parties. They are then assessed by the council or departmental planners with advice from internal and external technical bodies such as those dealing with pollution, traffic or ecology. The planners interact with panels at various points commencing with a pre-assessment briefing where issues requiring particular attention in the assessment are identified.

Following exhibition and receipt of submissions from the public and advice from specialist agencies, the planners prepare their assessment reports with a recommendation on how the application should be determined - approval with conditions, deferral or refusal.

There are a number of points in the application preparation and assessment process where technical specialists, like acousticians, should be involved. The first is a pre-application meeting where the proposal is explained in conceptual terms to the assessing planners. Here it is important to explain whether or not noise is likely to be a significant issue. If noise is likely to be a significant issue, then the major noise sources, potentially affected receptors and planned background monitoring locations should all be explained. The aim is to get at least in principle agreement on the methodology. Once the application is sufficiently advanced to determine the likely noise levels that receptors will experience, a further meeting with the assessing planners is desirable to explain potential impacts and how they will be controlled. Again, an in-principle response on the acceptability of these controls and impacts should be sought.

The overall goal during the preparation and assessment process should be to establish open communication with the assessors so that a clear understanding of requirements and likely responses can be obtained. Too often, the first time acousticians interact with assessors directly is after the latter's report and recommendation has been prepared. If the recommendation is for refusal it is difficult to change this as the application may require amendments which would need further assessment as they are unlikely to be accepted at face value.

PREPARING CLEAR NOISE REPORTS

Acousticians often seem to assume that their primary audiences - planners and affected persons - have a technical understanding of noise issues. In my experience this is unwise; town planners are must consider and evaluate a very wide range of policy and technical matters and it is unrealistic to expect them to be expert in them all. A related point is that assessment reports are often voluminous describing the application, regulatory context, submissions received and conclusions on all relevant matters. Thus, to be effective, noise reports must be clear and concise.

Given the above what does a good noise report look like? It would have two main sections. The first provides an overview of the development proposal, its setting, mitigation measures and residual noise impacts to provide readers with a general understanding without getting lost in technical detail. The specific things covered are:

- the setting what the area is like now prior to the development occurring;
- the proposed development and its noise emissions;
- the receivers: where they are and what they do;
- factors affecting transmission of noise between source and receivers;
- noise levels received and their acceptability;
- the need for, type and likely effectiveness of mitigation measures; and
- a conclusion how the noise climate will change as a result of the development.

The second section provides technical details. Descriptions and tables of background noise measurements, and the conditions under which they were recorded. The same for noise emissions or, if they were not measured, how they were derived, how accurate they are and can they be independently verified.

Details of the modelling used to simulate noise transmission to receivers - what assumptions were used about key variables and how accurate are the estimates likely to be at receiver locations? The mitigation measures proposed – are they well proven or novel? Is there a need for post-commissioning verification. And, finally, what is the predicted impact - will the mitigated noise be noticeable or imperceptible?

The key point is to keep these two parts of the report separate. The first outlines the overall picture while the second gives all the technical detail. Two often these aspects are combined and readers soon become lost in pages of table about background noise, noise emissions, meteorology and the like. Acousticians might like to remember that most readers are unlikely to warm to pages of numbers dealing with unfamiliar terms such as dBs, sound power levels, logarithmic scales, temperature inversions and atmospheric stability classes.

APPEARING AT PANEL HEARINGS

To be effective in making your case two things are essential:

- being concise and sticking to the issues- your time will normally be limited (and if its not chances are the panel members have stopped listening!); and
- being reasonable and balanced by acknowledging the concerns of objectors even if you feel their technical basis is weak and never personalise responses - 'he clearly doesn't understand' or 'he is being unrealistic'.

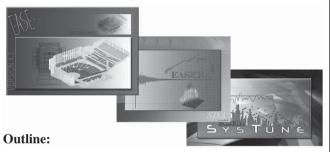
A good approach is to identify the issues, run through them identifying points of difference between you and other experts and conclude with your findings are technically more robust. A final point is to talk to the panel and use graphic aids if they assist. For any communication to be effective any speaker must know who their audience is and address their interests.

CONCLUSIONS

All specialists, not only acousticians, should be mindful that panels deal with a wide range of issues in virtually every application. As such, if the findings of your noise report are buried within a mass of technical information there is a real risk that they will be lost. Ensuring you provide an overview of the whole story; what a noise environment is like now, what change a development will bring, how it will be mitigated and the acceptability of the result is essential. In presentations, define the issues, explain your points of difference and give a professional opinion on the acceptability of the outcome. Keep the sharing of complex tables of numbers to your acoustical colleagues!

Ease Training in Australia

27 February 2012 Empire Theatre, Toowoomba Wesleyan Church Venue



Starts with basic model construction of the Wesleyan Church itself and possibly one other, advanced features and techniques added, closing holes, short cuts, scattering coefficients etc. Progress through modelling in Sketchup and Autocad. Loudspeaker selection, placement and mapping.

Advanced analysis techniques - Auralisation, Aura Response derivation of Impulse Responses - export to Easera.

Final day finishes with measurement and analysis module using Easera & SysTune.

Registration & other details at www.scientific-acoustics.com.au



Cadna



A

State-of-the-art noise prediction software

CadnaA is the premier software for the calculation, presentation, assessment and prediction of noise exposure and air pollutant impact. It is the most advanced, powerful and successful noise calculation and noise mapping software available in the world.

- . One button calculation
- . Presentation quality outputs
- . Expert support



Renzo Tonin & Associates is now the distributor for CadnaA in Australia & NZ.

Contact us for a quote!



p 02 8218 0500 f 02 8218 0501

e sydney@renzotonin.com.au www.renzotonin.com.au