

Managing Queensland's Rail Noise

A key consideration in the development of the project plans was to specify a standard manner to conduct noise assessments of areas found to have excessive noise levels during a preliminary audit.

Statutory requirements have meant that Queensland Rail is required to undertake a study of its entire network (over 2,000 km of track) including all fixed facilities to determine where noise problems occur, their severity, and to determine amelioration options and an implementation program. Queensland Rail turned to the management firm Lambert & Rehbein Pty Ltd for assistance with the development of project plans and day to day management to achieve the statewide audit within an 18 month time frame. Lambert & Rehbein are consultants specializing in project management and have a unique situation where two key staff have previously utilized SoundPLAN extensively.

A key consideration in the development of the project plans was to specify a standard manner to conduct noise assessments of areas found to have excessive noise levels during a preliminary audit. All too often it is found that one acoustic consultant may provide results different to another due to professional interpretation and calculation inconsistencies. Queensland Rail could not afford this outcome and following advice from Lambert & Rehbein adopted SoundPLAN as the standard assessment tool. SoundPLAN

had been previously used by Queensland Rail to model noise barriers on the new Gold Coast rail link and was externally validated and found to be within + 1dB accuracy. Therefore, by establishing strict guidelines on the use of SoundPLAN and supplying reliable source data, Queensland Rail could be confident that all assessments would return comparable and consistent results. This would ensure that all areas of the surrounding environment received similar noise reduction measures where appropriate.

Once all of these details had been resolved, the project team set about dividing the entire network into manageable pieces, or management units, in which the assessment could be adequately scoped, documented and tendered. At the time of writing the project is about 30% complete so it is too soon to praise its success. However, the use of SoundPLAN has certainly ensured that the results obtained will be standard even though assessments are being conducted by 5 separate consulting firms.

For more Information

Brent Woolgar, Lambert & Rehbein
Tel: + (617) 38463351.

