















# Noise Monitoring in Rail Better, safer, faster, smarter.

Nitty-gritty technical challenges, like scouring the globe to source the best product for a given solution, or inventing one that's even better.

That's just the way we're wired. That's why, when we say we'll deliver a solution, we deliver. First time. And that's how we save you time, trouble and money – when you're dealing directly with the industry's brightest minds, you get the answers you need, faster.

No excuses. No cost blow outs. Just a solution that works.

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#### **NOISE MONITORING**



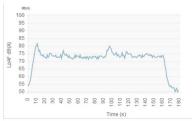




















## THE PROBLEM

Managing exceedance of noise limits in the rail industry is problematic due to new housing developments, rail maintenance schedules and deterioration of rolling stock.

#### QUICK FACTS

- Portability
- Class 1 self-calibrating microphones
- Solar powered
- 3G/4G communication to Web server or client systems
- Able to profile quiescent conditions
- Able to identify rolling stock wheel and bogies problems

### **OUR SOLUTION**

ARCS have developed a noise monitoring system that interfaces to our web or client server and provides profiles for noise under different rail operating environments.

The system is portable and accesses tag readers and CCTV to provide noise profiles mapped against the CCTV images or rolling stock and tag information. The system can be used to capture noise benchmarks or to identify wagons with defective bogies and bearings among other things.

#### **OUR APPROACH**

The ARCS group collaborated with noise monitoring specialists, Savery & Associates to produce a versatile noise monitoring system.

The ARCS group's knowledge and skill in asset monitoring, we are able to produce a range of profiles for ease of operating and exclusion or inclusion in real time alerts including profiles such as "normal" quiet noise levels on the rail reserve and also "normal" operating noise levels.

Our back end systems integrate with existing client systems to provide real time data to maintainers, asset owners and environmentalists.

ARCS have incorporated the use of self-calibrating class 1 microphones, algorithmic analytics, CCTV and tag reader to provide our clients with the best information, as fast as possible in the most user friendly way.

Noise monitoring can accurately provide real time information on rolling stock to identify any potential problems and prevent damage to the rolling stock and the railway.

Helping our clients run their railway better, safer, faster and smarter.