

Device/SaaS Solutions

A big data solution system, used to measure vibration on railway tracks to detect and report damage at specific locations nationally. The analysis is carried out on the fly with exceedance reported via HTTP (or direct connection via TCP). The box also included GEO positioning.

Benefits

- Improves safety for passengers and staff
- Saves money by identifying potential problems before they occur



Who uses it?

The product provides Network Rail, and Train Operating Company (T.O.C.) an approved solution.

Any plugins?

Yes, an engineer could perform additional tasks, tweak configuration and carry out additional reporting via an application on their mobile or laptop – hardwired to the device or connected via wifi.

What is it?

The safety of train passengers and staff is at the heart of this development. This device was developed to transmit real time signals about the health of the train track back to a monitoring device which in turn alerts train operators to when the track needs maintenance or replacement. It also saves train operators money as it cuts down the amount of essential maintenance required on their rolling stock. Bad stretches of track can often cause damage to a wheel base which then must be fixed or replaced.

What type of system is it?

The system was developed in two parts. Part 1. The server houses the data solution, reporting and member based interface platform.

Part 2 is a bespoke device created using C on a Linux OS that measures vibration. We created our own binary based data format to handle file size across communications. Analysis is carried out on the fly with exceedance reported via HTTP (or direct connection via TCP). The box also included GEO positioning.

