

### CASE STUDY: WHEEL DEFECT DETECTION AT DEPOT

Customer	De Lijn Antwerpen
Location	Antwerpen, Belgium
Duration	Oct 2008 – ...
Application domain	Asset Management- Railway

Wheelsets of tram vehicles are subject to a high wear and tear, caused by the contact forces between the wheel and rail surfaces. Early detection of wheel wear can decrease the cost of wheelset maintenance, representing 40% of the vehicle's total maintenance cost and prevent damage to the rail infrastructure.

A monitoring system was installed at the entrance of the Antwerp tram depot, in order to identify trams with defected wheelsets. Defect such as flats and cracks are detected, based on the vibrations caused by the wheels.

A specific requirement in this project was to store the vehicle identification number together with the wheelset measurement results in a database, with direct access of the maintenance crew.



<b>Contact</b>	www.aptrail.com	E-mail info@aptrail.com
<b>APT</b>	Troonstraat 98 B – 1050 Brussels Belgium	T. +32-(0)16-23 20 40 F. +32-(0)16-23 89 10
<b>Dynamic Engineering</b>	3466 Bridgeland Drive St-Louis, MO 63044-2606 USA	T. +1-314-770 2900 F. +1-314-291 8595