

CASE STUDY:
Balfour Beatty, Siemens, IAD Rail Systems

SUMMER 2007



Point Condition monitoring on rail network

The challenge

Points are the most maintenance critical asset on the rail network in terms of operational impact. Performance monitoring for predictive maintenance is critical for eliminating service delays.

Remote condition monitoring is of great value in moving from inspection and reactive maintenance to a predictive maintenance regime. However eliminating cables is vital for reliability and cost reduction

The Senceive Solution

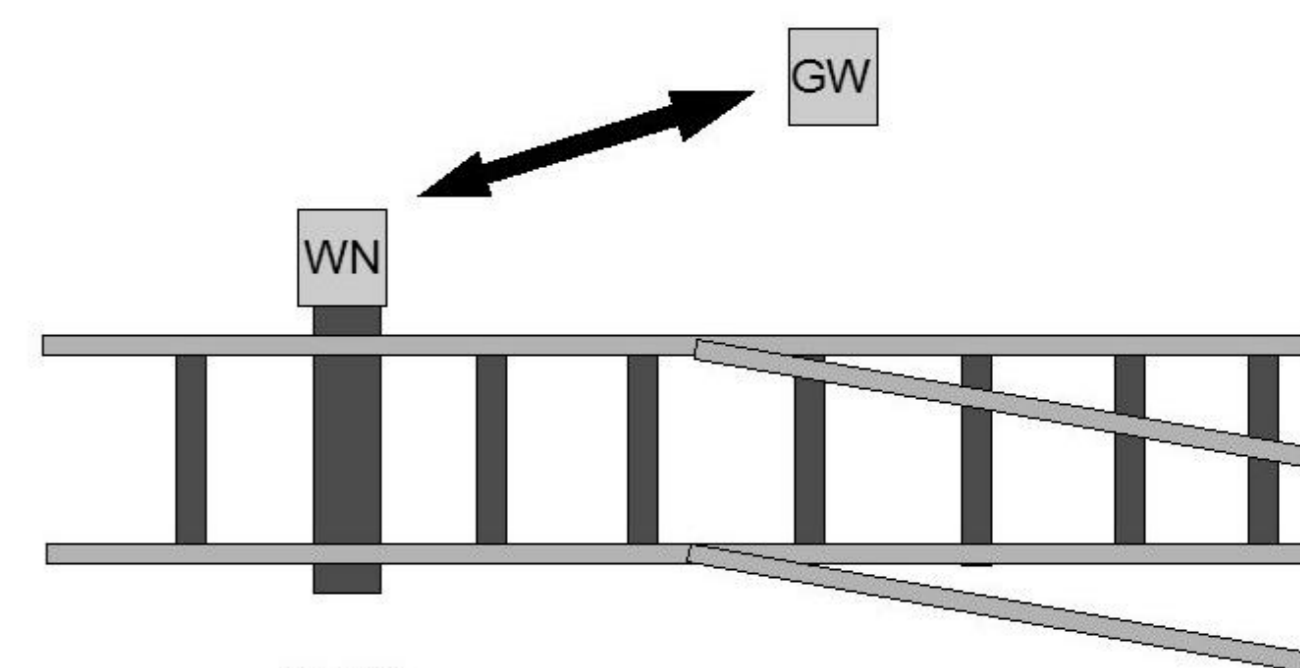
Senceive undertook three assignments for remote point condition monitoring. This included laboratory demonstrations of wireless transmission of data from Balfour Beatty and Siemens Transmittion condition monitoring solutions.

We also undertook a feasibility study in conjunction with IAD Rail Systems for wireless communications integrated into their HPSS point range, leveraging the integrated sensors built into there systems.

Our Findings

We demonstrated a practical wireless solution for Remote Condition Monitoring of Points, eliminating cables, and bringing data back in real time. This also offered a very attractive option for HPSS with its integrated sensors.

It was also recognised by Network Rail, that with wireless mesh installed on clusters of points, that there is great potential in readily extending to the monitoring of other components, for example the strain on tie bar nuts.



WN = Wireless Node GW = Gateway

