

DELIVERING SIGNIFICANT TIME SAVINGS AND OPERATIONAL EFFICIENCY AT EURAILSCOUT WITH THE ZKL 3000 RC

BACKGROUND

Eurailscout is a service provider for infrastructure managers such as ProRail. They use measurement and inspection trains and handheld equipment to provide insights into track maintenance requirements. Working safely is their guiding principle 24/7. They have customers located in the Netherlands, Denmark, Germany, France as well as other European countries, amongst others.

The superstructure, track bed, points, rails, and overhead lines form a complex system in which the individual components interact with one another. To maintain these components properly, it is necessary to subject them to regular, comprehensive inspection and analysis.



PROBLEM

Eurailscout's measurement and inspection trains operate throughout the Netherlands, with one train specifically measuring the condition of the rails using ultrasonic technology to detect incipient cracking.

On behalf of infrastructure manager ProRail, certain suspect areas are manually re-measured. This requires specific track sections to be taken out of service allowing Eurailscout's ultrasonic technicians, accompanied by a safety officer, to carry out inspections and complete measurement points on the track. Additionally, three to four extra safety staff are deployed to manually insert and retrieve safety measures on track.

Due to the high volume of train traffic during the day, the majority of these inspections (approximately 95%) are carried out during the night. The available working time is limited to four hours per night shift, usually between the times of 1.15am and 5.15am, allowing measurements and inspections to be carried out. Given the limited timeframe, operational efficiency and time management are paramount to successfully completing all measurements and inspections.

SOLUTION

In October 2025, a 12-month pilot was launched using Dual Inventive's ZKL 3000 RC track circuit operating device. These devices are semi-permanently installed in the track and can be activated and deactivated remotely within seconds via the secure MTinfo 3000 application. This gives track workers safe and rapid track access optimising resource deployment and significantly increasing operational efficiency.

For this pilot, Eurailscout identified track sections in Weesp and Woerden. These areas are vast and contain numerous repetitive measurement points requiring deployment of approximately five to six ultrasonic technicians, supported by a safety officer per shift to manually re-measure these points.

By taking a possession remotely with a touch of a button allows work to commence instantly, resulting in a time saving of 30 minutes at both the start and the end of the shift.

Using the ZKL 3000 RC results in 1 hours' time savings, increasing effective net-working time by 25%.

And that's not all. The number of completed measurements has also increased significantly. Prior to deploying the ZKL 3000 RC, an average of nine measurement points per shift were completed by the ultrasonic technician.

During the pilot period, an average of 12 measurement points per shift were inspected using the ZKL 3000 RC. If this increase is extrapolated to comparable track sections, it is expected that there will be an increase of at least 33% in the number of measurement points completed per shift. This enables Eurailscout to deliver the same workload with fewer staff, freeing up capacity is to deploy ultrasonic technicians at other locations.

Ronald de Groen, Work Planner at Eurailscout said:

"Given the limited time available for carrying out our work on the track, it is essential to work as efficiently as possible and cover as many measurement points as possible. That is why, since October 2025, we have been deploying around 20 ZKL 3000 RC devices for the manual re-inspection of suspect sections."



At the start of the pilot, the main objective was to save time by reducing the duration needed to take the possession, enabling more maintenance work. At the midpoint of the pilot period, we can already confirm that this objective has been achieved.

Another positive finding is that we have achieved these results with fewer staff. Previously three or four additional safety officers were required, however, this is no longer necessary thanks to the use of the ZKL3000 RCs..”

CONCLUSION

The number of measurement points completed per possession has increased significantly, while the work has been carried out with fewer staff. These are the tangible results following the six-month pilot on the Weesp section.

Eurailscout has since deployed ZKL 3000 RC devices on the Woerden section where there are many repetitive measurement points checked manually. Similar results to those achieved on the Weesp section are expected here.

De Groen, said: *“I would like to explore the capabilities of the MTinfo 3000 platform in greater depth. In addition, there are plenty of ideas for the future deployment of the ZKL 3000 RCs – for example, opportunities around adjacent line open working and options for daytime work on open track, which would help reduce the pressure on night-time operations.”*



Jorn Sprangers, Director of Sales & Marketing at Dual Inventive said: *“It’s great to see that the ambitions we set out together at the start are now actually being realised. The ZKL 3000 RC has proven its added value for many years amongst international railway contractors and infrastructure managers. Eurailscout, however, represents a new and slightly different type of user. That is precisely why it is so encouraging to see that they, too, can convert the extra networking capacity into more measurements per shift, without compromising the safety of the ultrasonic inspectors. That is exactly what matters most to us.”*

De Groen, added: *“We’re really pleased with the ZKL 3000 RCs – the devices run like clockwork. The pilot has been going well from the start; creating projects in MTinfo 3000 is straightforward, communication with the team at Dual Inventive has been excellent, and we’re delighted to have achieved significant efficiency gains over the past six months.”*