The Spitze ballast-cleaning train is used extensively to deal with contaminated ballast. Running at 3m/s, the train lifts a length of the track, extracts, then washes and replaces the ballast. The track is then lowered back in to place.

This exercise is also a good opportunity to deploy a geosynthetic to combat the contamination problem and extend the maintenance interval. On this occasion, RK4 - a textile/grid composite, was installed to stabilise the ballast/subgrade interface and reduce the upward movement of subgrade fines.

Using the 30m long by 3.2m wide composite, avoided the complication of controlling two separate products and the result was a faster installation.

Site: Mantgum, Friesland, The Netherlands
Designer: ProRail
Contractor: Spitzke
Product: GEOfabrics RK4
Product functions: Filter/Separator with Ballast Confinement