



DR. SPANG

INGENIEURGESELLSCHAFT FÜR BAUWESEN, GEOLOGIE UND UMWELTTECHNIK MBH

## DEVELOPER

DB Netz AG, Münster

## PROJECT

Slope slippage at the cutting for the northern portal of Winkhauser tunnel, Brügge

- Remedial measure after a landslide
- Special inspection of the terrestrial body at km 21.760 on the one-track, non-electrified track Hagen - Oberhagen - Dieringhausen, DB track section no. 2810
- Bedrock slope approx. 12 m high
- The cutting at the northern portal of the Winkhauser tunnel has an incline of approx. 70 to 80%.

## OUR SERVICES

- Geotechnical inspection
- Project and structural engineering planning (service phases 1-7) for the stabilization
- Specialist support
- Environmental screening
- Preparation of nature conservation documents for the purposes of approval planning
- Landscape management support plan
- Species protection examination

