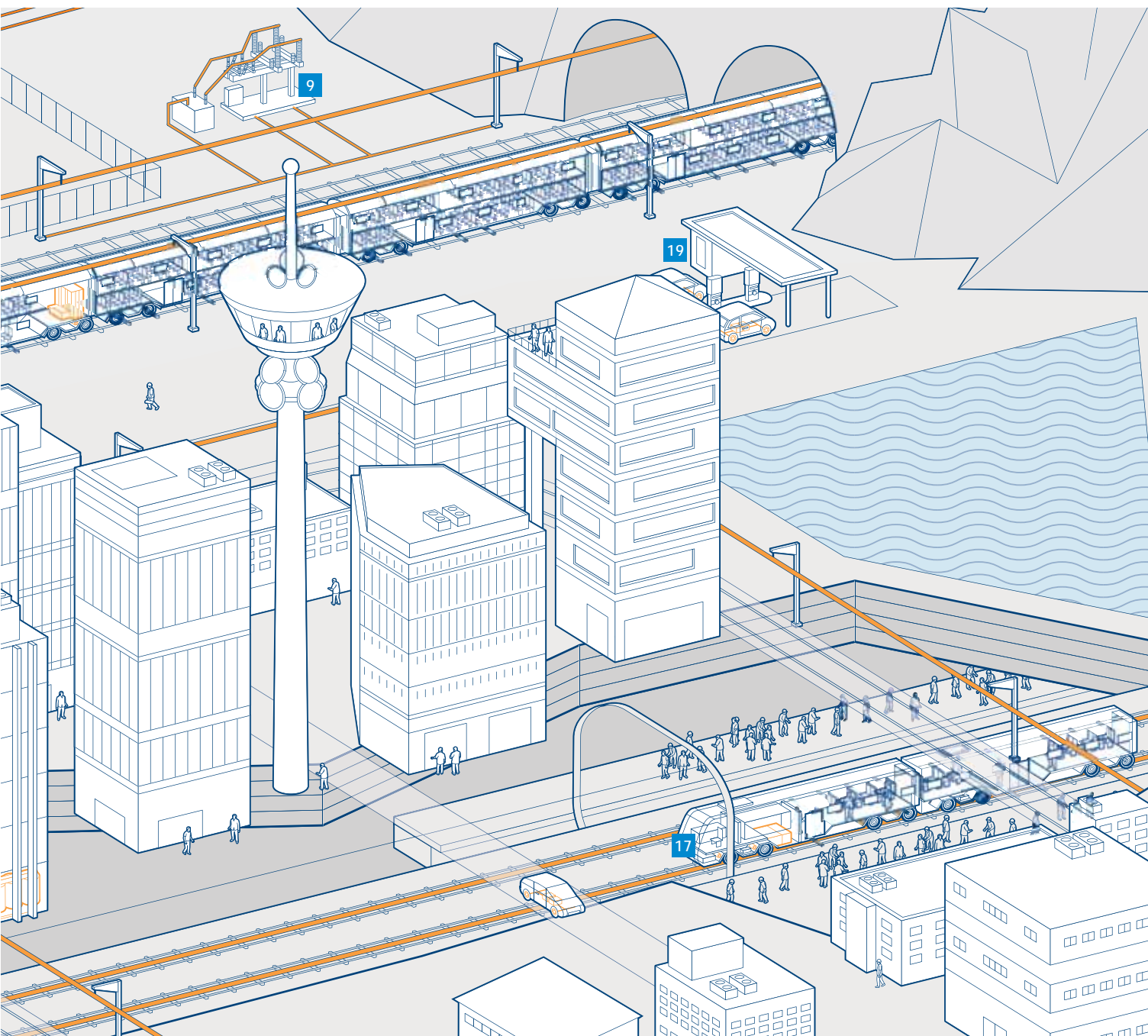


ABB, railways and transportation



As a major player in the power and automation sectors, ABB supplies many technologies that serve the rail industry. FACTS devices support both supplying and rai-side grids and help maintain stability and power quality → 1. High- → 2 and medium-voltage switchgear → 3, frequency converters → 4 and transformers → 5 convert and supply power for the railway's overhead lines (OHL) → 6 and control and monitoring systems → 7 (including substation control and operation centers → 8) permit the optimal operation of these assets. Compact autotransformer modules → 9 support the OHL supply in long distance applications. DC electrifications are served by traction

power substations with transformer-rectifier units → 10.

ABB equipment can also be found onboard trains. The company supplies traction transformers → 11, motors and generators → 12. It also manufactures converters to supply the train's traction and auxiliary power → 13. The company's portfolio furthermore includes low-voltage products, medium-voltage circuit breakers as well as semiconductors and surge arresters. For diesel trains, the company supplies turbochargers.

ABB technologies and equipment serve in different types of rail applications, ranging from freight → 14 through high

speed → 15 to suburban railways → 16, metros → 17 and tramways → 18.

Furthermore, ABB is not just a manufacturer but also provides service, maintenance and retrofit. In the broader area of transportation, the company is involved in marine applications and charging stations for electric road vehicles → 19.

Discover more about these topics in the pages of this edition of *ABB Review* and on www.abb.com/railway.