

SWISS FEDERAL RAILWAYS (SBB)

## VALIDATION SMARTRAIL SR40 BUSINESS CASE



Client	Swiss Federal Railways SBB
Processing period	January 2019 - April 2020
Project costs	approx. 5 billion CHF

With the implementation of the smartrail 4.0 program, railways in Switzerland are striving for future-oriented planning, management and automation of traffic services. R+R has examined the expected costs and cost savings.

Important and essential systems of the railways technical infrastructure will reach the end of their service life in the next few years: interlockings, control technology, trackside systems, radio data transmission and the Traffic Management System (TMS). In addition, there are fundamentally new possibilities due to technological

developments, such as reliable and exact localization or Automatic Train Operation (ATO), which offer new possibilities for further automation and optimization for the production of railway services. In August 2017, the FOT commissioned the SBB to start the "smartrail 4.0" (SR40) program together with the industry, in order to design an overall architecture for the holistic development of the automation and optimization potential. A business case was created for this in 2019. Together with Emch+Berger, R+R validated the business case in two iterations. R+R examined above all the costs and cost savings.