

# ETCS Gotthard Base Tunnel, Detailed Design and Realisation Train Control and Signalling System

Assistance of detailed design, realisation and commissioning of the new train control and signalling system for the Gotthard base tunnel on behalf of AlpTransit Gotthard AG.

The project is carried out by a consortium under the lead of Emch+Berger AG Bern. The works includes all signalling related systems on an ERTMS-basis in the perimeter of the project such as control and communication system, interlocking, ETCS/RBC and is embedded over special interfaces into other neighbouring signalling systems (conventional signalling systems).



#### Client

AlpTransit Gotthard AG, Lucerne

**Period:** 2009 - 2017

#### Delivered services

- Supervising the contractor
- Assistance to the Client (ATG)
- Technical support
- Project management
- Verification of the RAMS process
- Cost controlling

#### Specifications

- Two separated running tunnels: 57 km
- Train speed: 80-250 km/h
- Headway: 3 min
- Train control system: ETCS level 2
- RBC with GSM-R interface: 3
- Interlockings: 4
- Balises: 370
- Central Control System: 1