Furka Tunnel Update Project

Client
Matterhorn Gotthard Railway, Brig

Project Status
Completion of sub-project SP1 in 2015, Implementation of SP2 from 2016 to 2022

Original works
Construction period for the 15.4 km long Furka Tunnel between 1973 and 1982

Costs for Furka Tunnel Update
CHF 190 million (price base 2013)

Services by IUB Engineering Ltd.
Overall project and construction management for the civil and electrical works in the implementation phase of sub-project SP2 of the Furka Tunnel Update Project

Description
After approximately 30 years of operation, the main objectives are as follows:
- Refurbishment of the tunnel structure (collecting and draining of the mountain water, including local re-profiling to ensure the necessary clearance profile, renewal of the entire tunnel drainage system)
- Renovation of the railway infrastructure (conversion of the superstructure from ballast bed to a fixed track system with lower tunnel floor, replacement of the entire cabling in the shoulder strips, replacement of the power catenary by an overhead conductor rail)
- Implementation of measures for safety upgrade [installation for self-rescue and tunnel ventilation equipment].

The majority of the works will be carried out at night during the scheduled gap of railway services, whereas the railway operation must be guaranteed during day time. Only for installing the fixed track two complete shutdown intervals will be needed.