SHAFT ACCESS SYSTEM OF A HIGHWAY TUNNEL

DATAEAGLE in emergencies

Application

Since its extension in 2013, the Pfänder tunnel has been in operation with two tubes. By 2020, a traffic load of 46,000 vehicles per day is expected. In the shaft access systems, serving for investigating supply air and exhaust shafts in the Pfänder tunnel and carrying out rescues from the tunnel in the event of an emergency, our customer STB Beck GmbH relies on the proven radio technology of Schildknecht AG.

Challenges

The particular challenge consisted in implementing a safety critical radio transmission via a travel distance of up to 320 m through the lift shaft to the moved basket of the shaft access control system. In case of rescue the system is required to work reliably for example for transporting rescue service personnel into the tunnel.

Solution

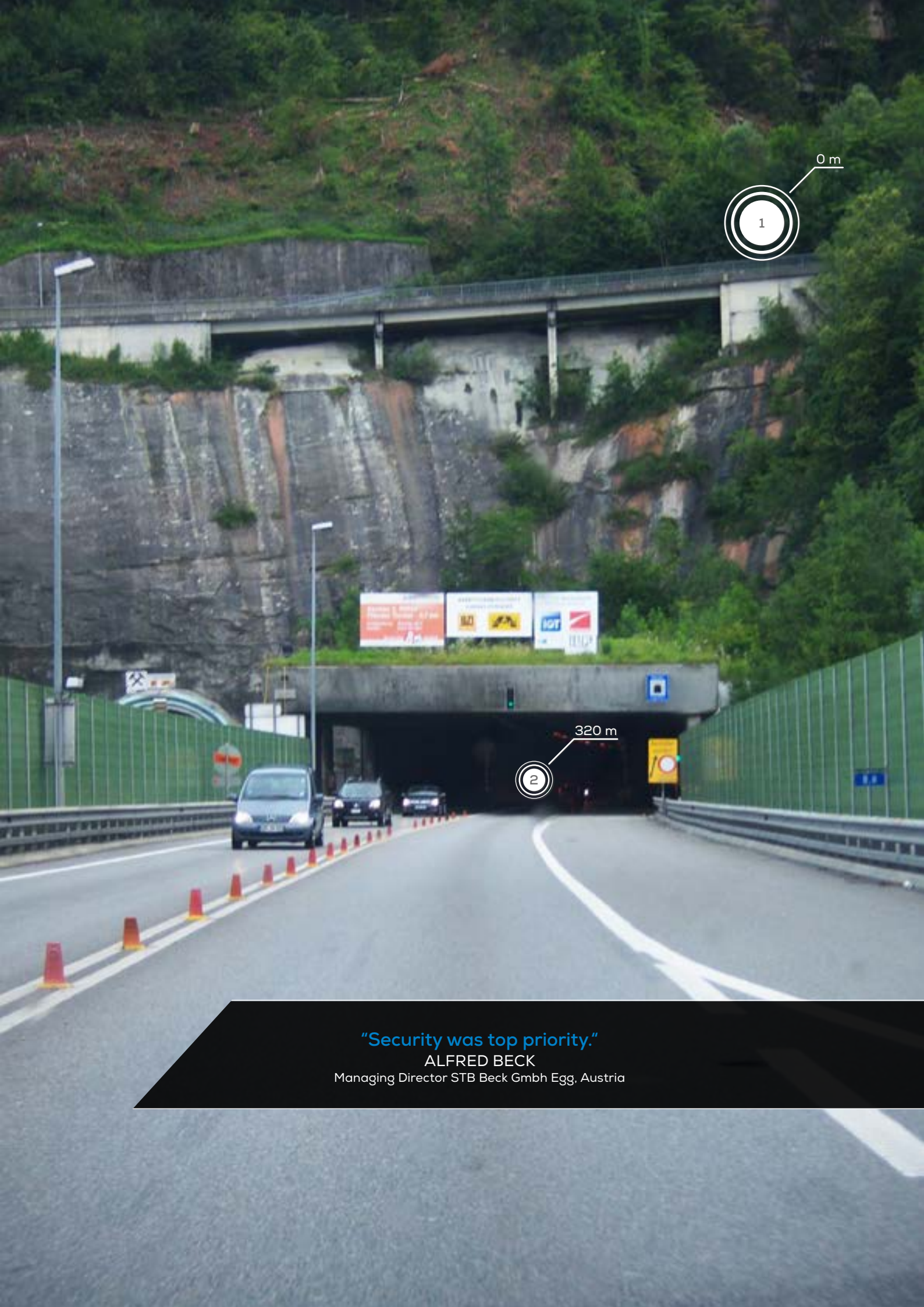
After installing the DATAEAGLE 3000 system the lift could be put into smooth operation with special functions such as e.g. access control and hooking and unhooking the lift car. The proven Bluetooth technology provides for trouble-free radio connection here despite interfering transmitters in the environment.

Result

After successful conversion of the control technology by STB Beck GmbH, the shaft access system of the tunnel has been running successfully for several years now without interferences and failures. Therefore, DATAEAGLE radio communications systems are planned to be applied also in further systems with a shaft depth of up to 700 m in the future.

1. Access to the shaft access system.

2. DATAEAGLE Classic 3000 applied at Pfänder tunnel.



"Security was top priority."

ALFRED BECK

Managing Director STB Beck Gmbh Egg, Austria