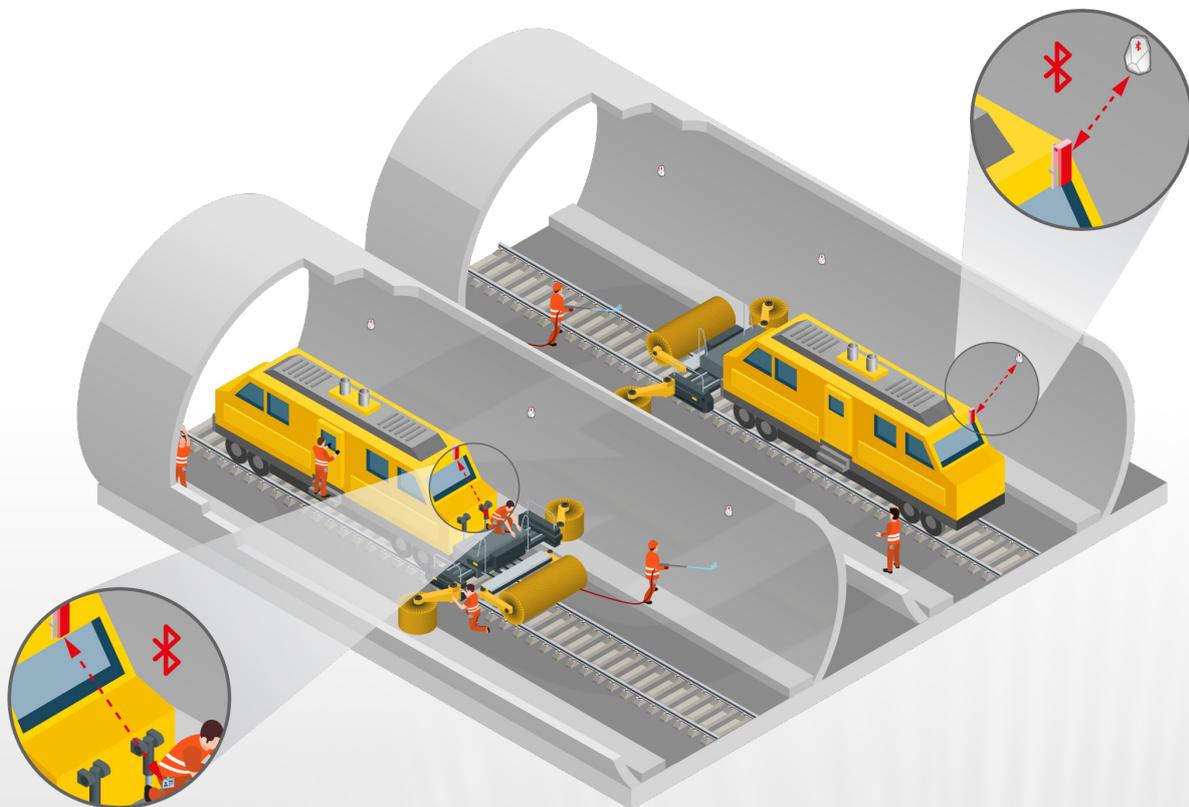


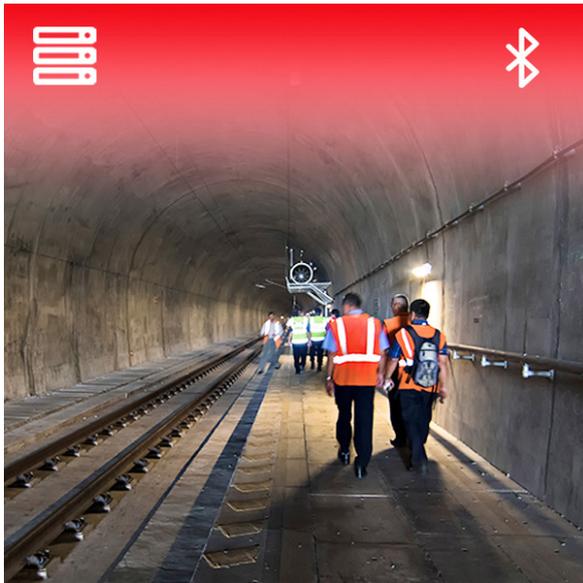
USE CASE

Tracking of Cleaning Vehicles and Personnel in a Tunnel



AT A GLANCE

- server-based real-time localization of cleaning vehicles and personnel I
- location overview including status information and movement history



PROBLEM DEFINITION

Tunnels are subjected to intensive cleaning and technical testing at regular intervals. The cleaning of tunnel walls and floors with special vehicles reduces the risk of fire and considerably increases the brightness and thus the safety in the tunnel. However, the fact that the exact locations of vehicles and employees are unknown often prevents efficient tunnel cleaning. Delays in the cleaning process can result in longer traffic disruptions and total closures. If accidents or hazardous events occur during maintenance or cleaning work, it is often not possible to locate the cleaning personnel quickly, which can lead to life-threatening situations.

SOLUTION

Real-time localization of vehicles and employees leads to increased personal safety and minimized traffic disruption. With the help of a tracking system, it is possible to determine exactly where the individual cleaning vehicles

are located and how many and which persons are in the respective work area. The management has access to the current locations and can continuously monitor and control all movements and status information of the vehicles (e.g. delays, downtimes, maintenance intervals).

TECHNICAL IMPLEMENTATION

Bluetooth Low Energy (BLE) beacons are installed in the tunnels. An infsoft Locator Node is attached to each cleaning vehicle. This enables determining the location of the vehicles by receiving the beacons' signals and transmitting them to the infsoft LocAware platform®. Here, the data is processed and the positions of the vehicles are provided via web services.

The cleaning staff carries beacon badges. The badges communicate via Bluetooth Low Energy with the Locator Nodes attached to the vehicles, which send the data to the infsoft LocAware platform®, where the position of the employees is calculated. The management gets access to the data via app or browser application and sees the location of the employees and vehicles on a map. Furthermore, it is possible to assign additional status information, which can also be searched for. Historical data can be retrieved via infsoft's Analytics Engine. Meaningful key data such as route information (live and historical), number of trips and meters or hours driven can be collected.

Imprint

© infsoft GmbH 2018. This content is protected by copyright. All rights to content and design are with infsoft GmbH. You may not copy, republish, modify or transfer this work without prior written and agreed consent of infsoft. Our content is regularly edited and carefully checked. However, we do not accept any liability with respect to the correctness, completeness and current status of the information offered here. All mandatory legal details can be found under: www.infsoft.com/company/contact



infsoft GmbH
Ingolstädter Str. 13
85098 Großmehring
Germany

Contact
Phone +49 8407 939 680 0
Fax +49 8407 939 680 12
contact@infsoft.com
www.infsoft.com