

#### **Opportunities**

- The development of new materials (lighting system, etc) will increase safety in case of accidents;
- > Improved coordination between all safety operators involved will reduce risk of casualties.

#### Challenges

Stringent legal safety requirements will increase investments needs (new or upgrading of tunnels).

# SAFETY IN RAILWAY TUNNELS



## Objective

By being in a closed area, railway tunnels present a higher risk for the safety of train passengers and on-board staff during operations. Fire, derailment, long stops and other accidents require preventive safety measures to minimise the risk and increase the comfort of passengers. In addition to the Railway Safety Directive (EU) 2016/798 applying to all infrastructures, specific requirements for tunnels are included in Regulation (EU) 1303/2014 on Technical Specification for Interoperability for Safety in Railway Tunnels (TSI SRT). The TSI SRT establishes safety specifications and recommendations for all tunnels.

## Involvement of Infrastructure Managers

The management of safety in tunnels has an impact on nearly all aspects of the rail infrastructure. Infrastructure Managers (IMs) are actively engaged in the promotion of safety in tunnels with different activities, from tunnels planning and building (e.g.: new construction materials and techniques, lights, ventilation and all other components having an influence on tunnel safety) to prevention, mitigation, evacuation and rescue procedures. IMs also promote national and cross-border coordination with Railway Undertakings (RUs) and emergency response services to ensure that European countries adopt a coherent approach ensuring the best balance between investments and risk mitigation.

### EIM in action

- EIM's Working Group on Safety in Railway Tunnels (SRT WG) discusses issues on tunnel safety and follows the workstream of the EU Agency for Railways (ERA);
- > EIM experts are also actively engaged in the ERA Working Party for the TSI SRT:
- > EIM promotes the dialogue between IMs, Railway Undertakings, and emergency response services to ensure that European countries adopt a coherent approach between risk mitigation, investments and feasibility of projects.

