



pre-conditions

[Approaching Train]

- The train's ground devices detect the approach to the level crossing.
- The LCCS is operational and ready to receive requests from the TCS.
- Traffic lights and barriers are in a deactivated state.

[Barriers Working]

- The barriers' sensors are operational and communicating with the LCCS.
- The level crossing is in a safe state.
- The TCS is actively monitoring the train's approach to the level crossing.

[Train Exit]

- The train has successfully passed through the level crossing.
- All engaged trains have left the crossing zone.
- Traffic lights and barriers are in a safe state, ready to be lifted.

post-conditions

[Approaching Train]

Traffic lights are turned on, followed by the activation of barriers.

- The train's braking operation is initiated by the TCS.
- The LCCS acknowledges the TCS's request and confirms the safe state of the level crossing.

[Barriers Working]

- The LCCS continuously reports the safe state to all rains.
- The TCS cancels brake state.

[Trains Exit]

- All trains have left the crossing zone.
- Traffic lights are turned off, and barriers are lifted.
- The LCCS changes into a deactivated mode.

