

Railway transport



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Description

The main scenario for communication within the railway transport system is the following (see Figure 1):

- BS sectors are installed along the railway lines.
- CPEs are installed in the head and last railcars. By default, CPEs with omnidirectional antennas are used, however, a scheme with directional antennas is also possible. The use of directional antennas will increase the processing time during the planning stage, but will reduce the total number of used BS sectors.
- One of the BS is used as an aggregation node, but it is possible to have a separate aggregation node. An InfiniMUX switch is installed at the aggregation node and the backbone links - main and backup, connect it with the control center.

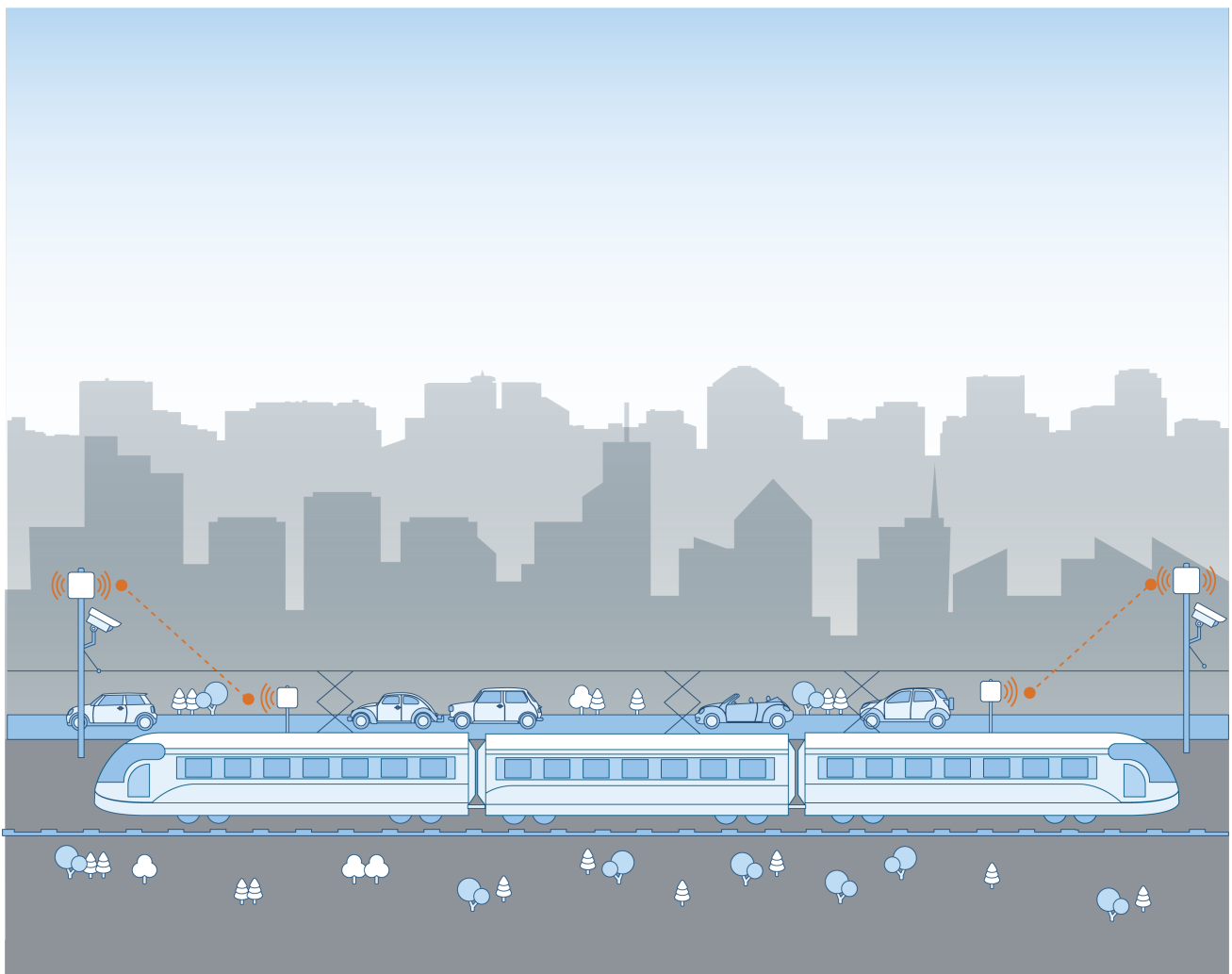


Figure 1 - Communication with railway trains

The specific feature of such scenarios is the high maximum speed of the train, which will require careful BS location planning and careful wireless devices' configuration.

Configuration

Title

For railway transport the following settings are recommended:

- joining of all BS sectors into a single MINT area using the InfiMUX installed on the aggregation node;
- mobile mode;
- MultiBS function enabled;
- Global function enabled.

Completed projects

The following projects were implemented by Infinet in accordance with the above scenario:

1. [High capacity connectivity for the Kazakhstan Railway Network.](#)