Train Application Example
Internet in Trains

Internet is everywhere, and of course we need it at a lot of branches of our daily life. The "Internet of Things" strictly consist of the capability to access the Internet at every time.

Owing to the construction of contemporary railway vehicles and also the high driving speeds, the connectivity of current devices is not comfortable enough at all stages of the journey.

The operational communication of the vehicle will be realized by GSM-R connection at the route or via WirelessLAN at stations, but the higher amount of information and the need of real-time information for train status, infotainment services and passenger information systems drives these technologies to the max.

To fulfill the requirements, trains can be equipped with external antennas for LTE connections and voice repeaters. Internally the data connection will be established via WirelessLAN.

With usage of different providers and frequencies an independent and high performance connection is possible, also with suitable providers by crossing borders to different countries at calculable costs.

Application Areas:

+ Internet access for passengers
+ Passengers Information Systems
+ Infotainment services
+ Status information of the vehicle
+ Video Surveillance

Configuration:

Flexible hardware for modular extension with various interfaces such as:

+ WiFi as LTE/UMTS or WLAN
+ GSM-R
+ GPS
+ 10Gbit Eth @ SFP+
+ 1GBit @ M12

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