REAL-TIME PASSENGER COUNTING IN PUBLIC TRANSPORT

// SMART CITY

WIRELESS DATA CONNECTION
WIRED DATA CONNECTION

SATELLITE GNSS
4G LTE
WiFi
4G LTE
TICKETING SOFTWARE
RMS
INTERNET
VIDEO SURVEILANCE SOFTWARE

IP CAMERA
467 CITY CENTER
PASSENGER INFORMATION SYSTEM
TICKETING TERMINAL
RUT955
COUNTING SENSORS

TRANSPORT PLANNING AND OPTIMIZATION SOFTWARE
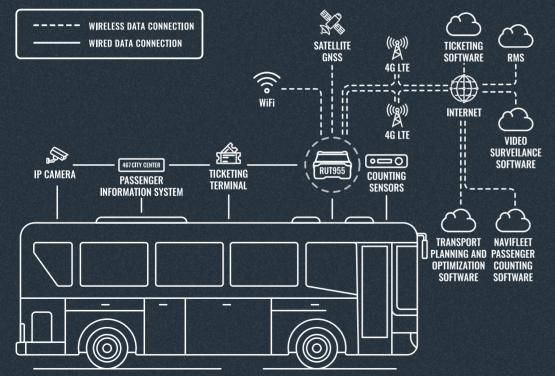NAVIFLEET PASSENGER COUNTING SOFTWARE

// CHALLENGE

So, we established that real-time data is vital in making timely decisions to optimize the operation of public transport. However, the question is what kind of data is important, and how to collect it and share it in real-time to increase effectiveness?

The most important factor in optimizing transport frequency is the number of passengers. Having real-time data as opposed to data from a short window is superior as it allows knowing what is exactly happening at a given time and make adjustments immediately, like adding an additional bus to the schedule to avoid overcrowding, hence improving customer experience. But how does this happen in real life?

Implementing a system that is capable of collecting and sending data in real-time in a constantly moving vehicle requires not just sophisticated counting equipment and cloud-based application, but also - a reliable connectivity solution.

// SOLUTION

The NaviFleet APC solution uses of Teltonika RUT955 router for the network. Passenger Counting Sensors are connected over the Ethernet interface and use NaviFleet APC firmware for real-time data collection. NaviFleet APC firmware is compatible with the most well-known passenger counting sensors.

NaviFleet APC Firmware integrated with RutOS OpenWrt transmits passenger counting information to NaviFleet Could Server Software over Wi-Fi or 4G for network continuity. Transmitted data includes accurate GPS tracking information, geofencing data, driving mileage, driving and stop time, and passenger flow data.

Advanced NaviFleet APC Firmware can connect additional devices, such as video IP cameras, breath analyser, Passenger Information System, and ticketing terminals.

// BENEFITS

Cost-efficient - combining NaviFleet APC with RUT955 allows offering a solution at a very competitive price point among others.

Easy management of the whole solution - cloud-based management platform offers easy captive portal management, connections to counting sensors, and location tracking.

Multiple connectivity options - RUT955 combines reliable and secure LTE Cat 4, Wi-Fi, Ethernet, and GPS.

OpenWRT based RutOS - allows to conveniently create different useful applications and comply with the increasing market requirements.

RUT955

EcoTelematics Group