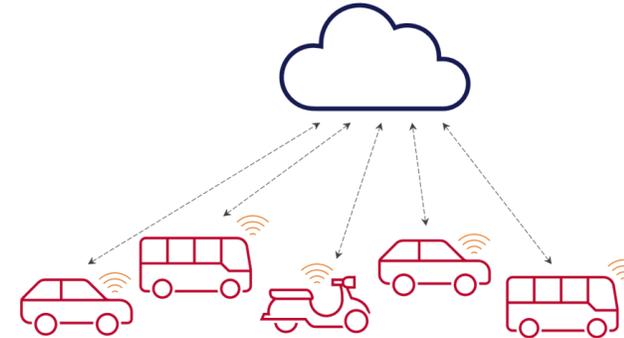


# FEV Signature Solutions

## Fleet Remote Monitoring & Control

FEV.io

**Boost fleet efficiency with smart telematics, seamless management, and real-time insights, cutting downtime and driving performance**



### FEV offers

- ▶ Cloud-based all-in-one platform with integrated telematics control unit for remote monitoring and control of fleet operations – offered as software package, turnkey solution, expert know-how, and consultancy
- ▶ Safer, smarter, and more efficient fleet management with lower costs and higher reliability, including
  - Real-time telematics & analytics for vehicle and driver performance
  - Secure cloud connectivity with encrypted data transfer and storage
  - Custom dashboards for fleet and driver management for operational efficiency
  - Software Update Management System (SUMS) with OTA updates
  - Telematics Control Unit (TCU) for direct cloud-enabled monitoring and control
- ▶ Usable for any business or public entity that needs to monitor, control, and optimize vehicle operations
- ▶ Complies with evolving regulations such as UNECE WP.29 and Euro 7 and standards such as ISO 24089:2023

### Why FEV

- ▶ Over 40 years of automotive engineering excellence, trusted by global OEMs and Tier-X suppliers to deliver innovative, production-ready solutions with deep domain expertise
- ▶ Complete lifecycle support from concept to series maturity, including design, simulation, prototyping, testing, industrialization, and implementation
- ▶ Customer-centric solutions—transparent and customizable, enabling you to extend, integrate, and scale your own development

# Selected reference projects

## CLOUD-BASED FLEET MANAGEMENT, BMS & CHARGE STATION MANAGEMENT SYSTEM

### European truck & bus OEM

#### Fleet management solution for test and validation processes

- › Data engineering initiative with tooling and robust data handling capabilities
- › Since 2022

#### FEV responsibility

- › Log analysis from CAN & LIN buses (CANoe, CANalyzer)
- › C#, ASP.NET development for toolchain components
- › Web interface for vehicle data & performance monitoring
- › SQL database for data, performance & health metrics
- › Cloud backend implementation for data engineering with Python

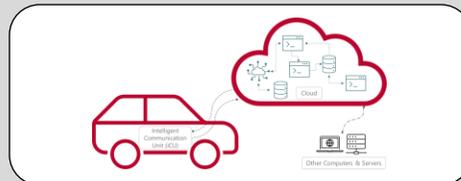
### EU-Funded project

#### Cloud-based solution for battery telematics and OTA updates

- › Albatross - Design and development of intelligent connection unit & cloud system
- › Completion in 2024

#### FEV responsibility

- › BMS connection via CAN
- › Vehicle-cloud communication (MQTT)
- › Cloud storage for battery data
- › Remote monitoring
- › OTA firmware & software update



### Turkish charging service provider

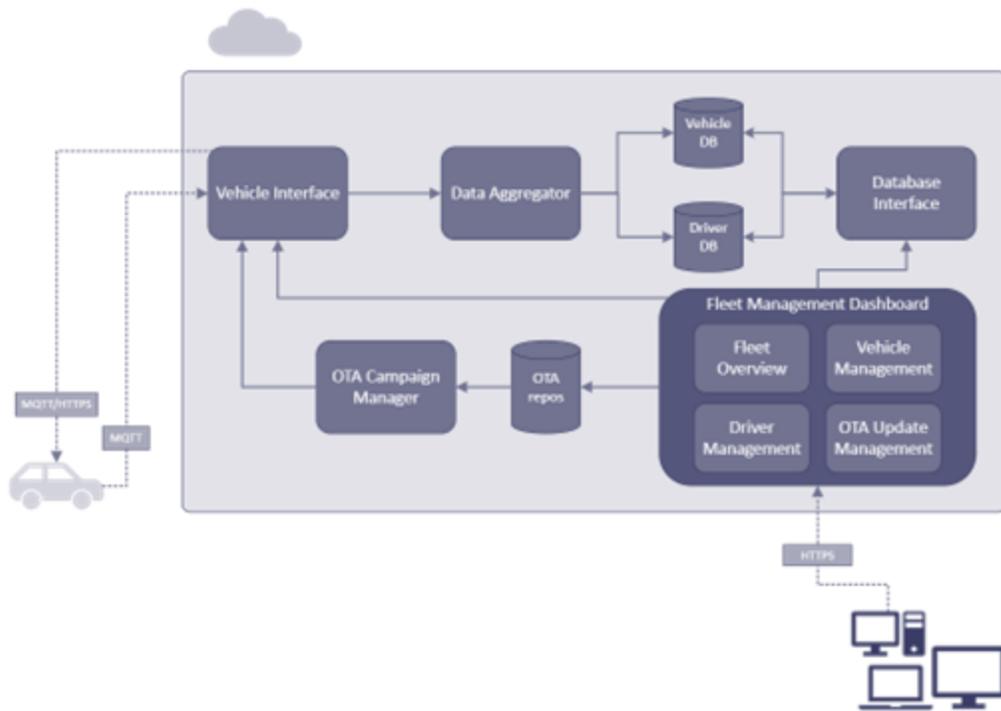
#### Charging station management with user and access management

- › Enhancement of performance, stability, and maintainability of the EV CSMS
- › Completion in 2025

#### FEV responsibility

- › Tracking and managing charging stations with features of remote start/stop, diagnostics, and real-time comm.
- › User management with roles & access control
- › Interactive dashboards & mobile support
- › Cloud backend with auto-scaling & multi-tenancy
- › REST API & task queue system

# FEV system architecture for fleet monitoring, control, and OTA updates



## Telematics

Continuous vehicle data and secure vehicle-cloud communication enable predictive maintenance, operational transparency, and smarter fleet decisions.

## Fleet Management

Central dashboards optimize routes, utilization, and planning, helping reduce operating costs and increase fleet productivity.

## Driver Analytics & Management

Monitoring driver behavior and performance metrics and providing actionable insights to improve safety and compliance.

## Remote Monitor and Control

Real-time fleet visibility and remote commands help detect issues early, resolve faults faster, and maximize vehicle uptime.

## Software Update Management System

Secure over-the-air updates keep vehicles compliant and reduce workshop visits, ensuring continuous improvement and minimized downtime.

# FEV unified dashboard interface for real-time fleet tracking, performance insights, and seamless update management

- ▶ Multiple dashboard views - gives you the exact operational insight you need:
  - Map View - Real-time vehicle locations
  - Fleet/Vehicles - Vehicle list & status
  - Drivers - Driver profiles & performance
  - OTA Updates - Remote software upgrades
  - Health Status - Vehicle diagnostics & alerts
  - Settings - Customize dashboard preferences

Map View

Fleet/Vehicles

## Fleet Overview

Vehicle

Drivers

## Drivers

Driver

## Driver Profile

# Get in touch with us for further information



[www.fev.com/en/  
signature-solutions](http://www.fev.com/en/signature-solutions)