

# Unibuss:

Optimising electric vehicle operations  
with Consat Telematics



### Project at a glance:

- **Partner:** Unibuss and Consat Telematics
- **Location:** Oslo, Norway
- **Completion date:** Ongoing collaboration, 2025 status update
- **Objective:** Support Unibuss in optimising electric vehicle operations with advanced charging management and traffic management solutions.

### Functionality:

- Full control of charging infrastructure and energy delivery
- Real-time deviation management for bus and charger systems
- Route-specific automated deviation detection and logging
- Integration of charging and operations for efficient dispatch
- Onboard computers connected to Traffic Studio for AVM, planning, dynamic passenger information (DPI), and voice communication
- Automatic Passenger Counters (APC) for capacity planning and service efficiency
- Charging management solution implemented depot for efficient electrical vehicle operation

### Benefits :

- Effective deviation management and simplified reporting
- Reliable electric fleet operations
- Reduced manual effort
- Optimised energy consumption and lower operational costs

Unibuss is the largest electric bus operator in Oslo, dedicated to providing sustainable, electric mobility solutions to the public. With a total fleet of 259 electric buses distributed across three depots, the operator plays a central role in the region's transition to eco-friendly urban mobility. At the heart of their operations lies the Stubberud depot—the largest electric bus depot in the Nordics and one of the biggest in Europe—housing 120 electric buses and 130 charging points. As Head of Business Development and Digitalisation, Rune Bakken leads innovation initiatives to improve operational performance and customer satisfaction.

Consat Telematics supports Unibuss with key solutions for monitoring, managing, and automating electric bus operations. As electrification introduces greater system complexity compared to traditional diesel fleets, Unibuss relies on robust digital systems to maintain performance and reliability.

**“With Consat, we now have full control. We can see whether the chargers are functioning and delivering the power they should. That level of control is crucial for reliable operations.”**

-Rune Bakken, Head of Business Development and Digitalisation, Unibuss



### **The situation:**

Unibuss, a public transportation operator in Oslo, serves passengers through its Transport as a Service (TaaS) model, integrated with public transportation authorities such as Ruter. Electric operations come with challenges that diesel fleets never faced. From charger software to operational control systems, an electric bus fleet requires seamless coordination across many components. As Rune Bakken explains, “With diesel, you just needed a pump to fill up the tank. Now it’s much more software-dependent.” This complexity increases the risk of disruptions and places higher demands on visibility, control, and real-time responsiveness.

To align with their focus on electric mobility and sustainability, Unibuss sought a reliable solution for optimising electric vehicle performance, managing energy consumption effectively, and improving overall fleet efficiency.

### **The solution:**

With Consat’s Charging Management System, Unibuss now has full insight into their charging network. They can detect whether chargers are functioning correctly and delivering the energy needed. This visibility is critical to ensuring that every bus is road-ready. An upcoming feature aims to extend this by automatically identifying energy anomalies, allowing timely interventions to keep schedules on track.

Consat also implemented Traffic Studio, which connects onboard computers to provide advanced traffic monitoring (AVM), traffic planning, dynamic passenger information, and voice communication capabilities. Integrated Automatic Passenger Counters (APC) improve capacity planning and service efficiency.

In parallel, Consat and Unibuss are developing a new deviation management solution. Moving beyond the traditional green/yellow/red status indicators, this next-generation tool uses route-based triggers and live data to detect and log deviations. This automated process reduces manual work, improves response times, and enhances the overall quality of public transportation service.



## Summary

Through their collaboration with Consat Telematics, Unibuss is pioneering a smarter approach to electric bus operations -- one that balances scale with reliability. From real-time charger monitoring and APC integration to automated deviation detection, the solutions in place today are shaping the future of public transportation in Oslo.

### Value for the customer

- Real-time insights into charger functionality and energy delivery
- Automated deviation detection based on live operational data
- Reduced administrative overhead and quicker issue resolution
- A scalable system to support Oslo's growing electric fleet
- Greater reliability and passenger satisfaction
- Improved capacity management and service planning

### Consat Telematics solution areas

- Electromobility: Smart charging integration and charger monitoring
- Vehicle and Fleet Management: Real-time tracking and operational diagnostics
- Traffic Control and Monitoring: Route-based deviation alerts and handling, AVM and planning tools
- Passenger Information: Dynamic onboard and external updates
- Driver Assistance: Systems to support safe and predictable service



### Traffic Control and Monitoring

Manage daily operations with real-time information and data insights.

### Vehicle and Fleet Management

Vehicle telematics integrated into public transportation for complete control.

### Passenger Information

Enhance the travel experience for all public transportation users.

### Driver Assistance

Enhance hiring appeal while supporting the driver in their daily work.

### Electromobility

Seamless integration with existing public transportation operations, providing a unified view of the entire fleet.

### Data Insights

Offering valuable insights for continuous improvement in public transportation operations.

# Bringing intelligent public transportation to life

Consat Telematics is dedicated to reducing the environmental impact of public transportation through cutting-edge innovation and widespread implementation. Aspiring to global leadership in executing electrification and digitalization within public transportation, we serve diverse markets and organizations.

Our promise is a user centric, modular, and adaptable intelligent public transportation solution that never compromises on quality, reliability, and security. By placing our customers at the core, we ensure that more organisations can receive better data to monitor, manage, and improve their operations.

**Contact for more information or a demo:**

[www.consat.com/telematics/](http://www.consat.com/telematics/)

