



Our groundbreaking success in accurate arrival predictions



Europe's complex rail network, international train connections, and unpredictable events make precise planning difficult. Train operators face unforeseen waiting times, and infrastructure companies struggle to efficiently plan personnel and maintenance.

RailNetEurope (RNE) required a system for precise ETA calculation within the **European rail network**, as previous models failed to meet the required accuracy standards. The main challenge was integrating diverse, often unstructured data sources, such as real-time information from various networks, historical timetable data, and external factors.

Special challenges

- **Comprehensive data processing**: Information such as schedules, operational data, and real-time updates is centrally collected and processed.
- **System integration**: Seamless connection to RNE's Train Information System (TIS) in accordance with TAF/TAP TSI standards.
- High prediction quality: The solution ensures precise and reliable ETA calculations.
- Flexible application: Optimized for national and international passenger and freight trains.

The solution

Evolit and Evol.X have developed an AI-based ETA (Estimated **Time of Arrival)** solution that accurately predicts arrival times specifically for the European rail network. Using machine learning, it processes various data and accounts for external influences.

Outcome

Data integration: Central processing and updating of schedule, real-time, and external data.

Machine learning: Continuous optimization of ETA predictions through historical and real-time data.

Advanced forecasting: Al identifies complex patterns, offering greater precision than statistical models.

High prediction accuracy: KPIs monitor and calibrate the models for precise and RNE-compliant forecasts.

System compatibility: Direct integration without infrastructure changes.

Precise ETA calculations result in... over 95 % prediction accuracy

Benefits for end user

Freight companies: Minimization of downtime and optimized supply chains thanks to precise arrival forecasts.

Passengers: Improved travel experience through accurate information on connections and delays. **Train operators**: More efficient network utilization and targeted maintenance based on ETA data.

Infrastructure managers: More effective rail network planning and management through reliable forecasts and real-time data.

Ready for the future of rail transport?

Take the next step and let's shape the rail transport of tomorrow together. Contact us today to learn how our solution can sustainably improve your operational processes.

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