

SOFTWARE SOLUTION FOR PASSENGER RAIL

Delivering more flexible, resilient and efficient mobility





T- HASTUS

The passenger rail industry faces an increasing number of challenges to plan and deliver services in a mobility landscape that is complex and ever-changing. Greater flexibility, resilience and efficiency are the keys to ensuring passenger rail remains the backbone of mobility as it integrates more than ever with other modes. Operators now rely on innovative solutions harnessing artificial intelligence to not only implement key strategies and gain a holistic view of resources, but also to manage these resources as efficiently as possible to increase rail resilience.

The HASTUS software solution optimizes rail planning and operations by exploiting the full potential of data. It helps you implement innovative strategies such as integrated planning, digitalized crew scheduling and dynamic resource management so that you can deliver the highest-quality service while controlling costs.



Key benefits

- -\- More flexible rail services, with no compromise on robustness and compliance
- --- Improved control over operation costs and resource allocation, supported by proven optimization solutions
- --- Enhanced quality of service for passengers
- ---- Staff empowerment and improved work-life balance
- -¦- Seamless data exchanges and IT integration
- --- Evolutive platform, in sync with industry challenges and technical innovations such as cloud hosting

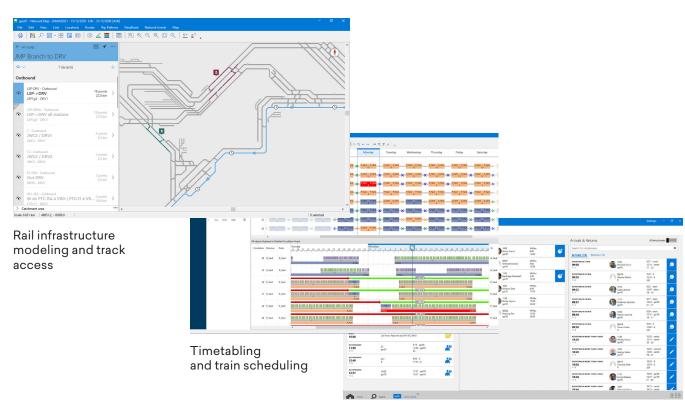


OVERVIEW

GIRO supports more than 100 rail operations worldwide, including urban (metro, LRT, tram) regional, commuter and national, long-distance operators.

Our rail clients include:

- SNCF (France)
- RATP Group (Paris)
- Eurobahn (Germany)
- MTA (New York)
- LACMTA (Los Angeles)
- SMRT Trains (Singapore)
- Queensland Rail (Australia)
- Yarra Trams (Australia)
- METRO S.A. (Santiago, Chile)



Workforce management and daily dispatch

Key features

- -- Fully integrated, modular solution from planning to operations for timetables, track access, rolling stock and workforce
- Industry-recognized optimization engine that ensures robust, efficient deployment of resources and adapts to changing business goals and constraints
- Flexible rules-and-validations engine that ensures compliance with complex processes, work agreements and rail regulations such as workforce qualifications and fatigue management
- -- Seamless interface with systems such as train control, maintenance, HR, payroll and passenger information (from standard or custom formats)
- -- Available in different architectures, in the cloud or on-premises

PLANNING

Infrastructure modeling
Routes and stations definition
Track access management
Capacity planning
Replacement bus services
planning
Manpower planning

SCHEDULING

Timetabling & conflicts validation
Track occupations
Service adaptations
Track works management
Train plans optimization
Maintenance scheduling
Workforce duties and rosters
optimization

OPERATIONS

Trains & units assignment
Workforce management
Personalized rostering
Qualifications control
Leave management
Automatic work distribution
Dispatching & Time attendance
Payroll pre-processing
Web portal & Mobile communications
Disruption-management support

OPTIMIZATION

Resource-specific algorithms Flexible rules modeling From planning to operations Scenarios comparison Multiple-level KPIs

INTEGRATION

Modular architecture Centralized database Open data model Dynamic integration tools Cloud-compatible

ANALYSIS

On-time performance Ridership analysis Multimodal synchronization



