

DATA-DRIVEN SOLUTIONS FOR OPERATIONAL EXCELLENCE

INNOVATION GUIDED TOURS

Tuesday 6 June, 14:00 - 15:00

This tour will focus on innovative software platforms designed to optimise the planning and scheduling of transport services and respond promptly to issues that can disrupt operations. Exhibitors will present their software solutions supporting complex public transport operations, powered by artificial intelligence and advanced algorithms.



GOAL SYSTEMS GOALBUS.OPS and GOALBUS.DRIVER (Otto)

Introducing the ultimate SaaS product designed to optimize rostering data for urban transport companies.

Integrated with GoalDriver or other planification tools, our solution allows for easy editing and reassignment of day-to-day data, providing a general view before the assignment's dates. It treats tasks in detail and offers bidirectional integration in real-time with the planification tools. Furthermore, all the rules defined are validated by the agreements and internal regulations of the transport companies themselves. The solution continuously learns and improves efficiency using Machine Learning and generating detailed KPI reports.

Otto offers control over driver arrivals and departures, calculation of overtime, and access to a mobile application that contains the details of their assignments and tools, that also allows them to make easy modifications and notifies them of any changes in their daily allowance. The app also enables direct communication with the operations manager.



Ander Tellería Chief Product Officer ⊠ marketing@goalsystems.com

Siemens Mobility

Train2Cloud and Siemens Xcelerator

Train2Cloud is an innovative, wayside centric CBTC concept. The idea is to run the wayside CBTC system consisting of ATP, ATS and interlocking sub-system, in a commercial off the shelf (COTS) hardware "CBTC rail data center", on the customer premise.

The centerpiece of this concept is to use powerful COTS multicore servers and run a software safety platform on top of it. The architecture is supported by a high-performance IP based communications network enabling also the use of high throughput 5G networks.

Benefits of the Train2Cloud CBTC concept are:

- Future proof due to usage of high performant multicore COTS HW with HW independency
- Centralization of all signaling applications (mixed SIL) in one or more (redundant) rail data centers
- Reduction of field elements, element controllers and cabling
- Reduced space for indoor HW and CO² footprint
- Simplified obsolescence and spare parts management
- Hot geographical redundancy for emergency scenarios.

The "CBTC rail data center" in our Train2Cloud concept is complemented by elements of our Xcelerator portfolio. This will help our customers unify fragmented sub-systems, exchange data in a more standardized way to provide benefits such as higher availability, punctuality, and utilization of trains and rail infrastructure.

SIEMENS

Alexander Spyra

Business Development Mass Transit 🛛 alexander.spyra@siemens.com

Smart Motors DAVANA, the digitalization platform

DAVANA is the Digitalization platform designed to be the most complete, customizable, and friendly one, so to channel any operator's Digital strategy. Capable of integrating any type of solution whether it is technological heritage, new developments or third-party elements, and of having all Digitalization solutions and elements on a single interface.

DAVANA is not about collecting data, but what we do with them, and it is specifically about the ability to create value for the organization by improving processes, replacing them, or implementing new strategies through the use of those data. Digitalization is not a process or a project, but a way of designing operations and solving the problems we come across. That is the reason why we understand that DAVANA has to provided as a Platform As A Service and the consulting services in Digitalization are central elements to ensure success in transition and constant improvement.

smart motors® works efficiently, solving the challenges we face in a smooth way to deliver results with the highest impact, at the lower cost and in minimum time. If something is solved, we find it and integrate it.



Marc Gispert Segura Chief Executive Officer ⊠ marc.gispert@smartmotors.org

Optibus Optibus Platform

Using its powerful technology, with Optibus you can model your transportation network at the most granular level. We can model any rule and preference, exactly the way it is. This doesn't just generate a quality schedule for your fixed routes, it also highlights the business key performance indicators and cost data you need to make optimal schedule and cost decisions.

Our algorithms are truly powerful. It takes minutes (or fractions of minutes) to create and evaluate complex scenarios that used to take hours or even days. With speed at your side, you can run many "whatif" scenarios in minutes, with ample time to evaluate all options. You can even do this daily, responding to changes in your fixed routes with optimal vehicle and crew schedules.

Optibus is a SaaS platform, which means no IT effort, no hardware and continuous feature improvements. With a modern user interface that's easy to use, training won't take long and work will immediately become more efficient.

optibus

Craig Nelson VP Sales, Europe - Cities ⊠ craig.nelson@optibus.com

GMV Intelligent Transportation Systems ITS SUITE

ITS SUITE is the modern platform for Public Transport, which provides within a Single Sign On (SSO) in a cloud-native web environment access to a range of PT applications such as Fleet Management, Planning & Scheduling, Real Time Regulation and Control, Content Management for Passenger Information, Account Based Ticketing (ABT), Eco-Driving & Vehicle Health Monitoring, Real Time Video Surveillance, Business Intelligence, 2-way voice & data communications with drivers, real time alert & incident management, etc.

ITS Suite has been developed using the latest software technology, guaranteeing a very high degree of robustness and scalability. It's architecture is based on microservices deployed in containers and orchestrated by Kubernetes, thus ensuring high availability, vertical & horizontal scalability, resilience and load balancing.

It's modular and open architecture by default allows its integration with third party systems based on its compliance with various sector standards (SIRI, ITxPT, GTFS, TransXChange, NeTEx and CAN bus among others) as well as ad-hoc protocols based on customer demands.

A responsive web interface guarantees seamless access from any browser and any device, in a workspace totally configurable by the user in any number of screens and following a professional UI based on Material Design.



Iker Estébanez Head of International Business Development ⊠iestebanez@gmv.com

GIRO

AI-Powered Schedule-Reliability Algorithm

GIRO has developed an advanced AI-powered schedule-reliability algorithm by co-innovating with leading public transport experts and academic researchers. Our innovation helps create high-quality schedules by evaluating the risk of delay for each planned trip. Authorities and operators can build more reliable schedules, which they can operate exactly as planned.

The algorithm lets operators optimize resources to control costs, while maintaining service quality. Public transport users win with more reliable service, which helps improve public perception and increase ridership. The algorithm is especially useful in locations where traffic congestion, peak demand events, or periodic severe weather have been known to lead to significant variations in travel times.

