



# LIVE DISPATCHING

Effective Traffic Management in Real Time

**TPS.live for operational train planning and capacity management supports railway companies in implementing short-term changes to existing timetables.**

Our software solution has been designed for ad-hoc train disposition. If, for example, disruptions occur during train operation, TPS.live allows to make changes in real time. The system ensures that unexpected events, such as a broken switch or signal, have as little impact as possible on the entire railway operation. All dependencies are taken into account for the planning process. In addition, the system provides an exact overview of the current train positions and forecasts their further run.

TPS.live detects possible conflicts in the entire network and automatically calculates the optimal disposition measures. These can also be adjusted manually, if necessary. As a result, dispatchers can immediately react to current events without losing time, for example by advising trains to wait for each other, by rerouting them or by scheduling track changes.

## USING AUTOMATION

Timetable-based and forecast-based conflict detection and resolutions can avoid delays and reduce the need for manual intervention by dispatchers. This improves both train control and train operation.

## CLOSING AUTOMATION GAPS

Dynamically calculated train forecasts based on real-time data bridge the gap between trackside and on-board train control: The time specifications of the trackside automatic train operation (ATO-TS) are being provided to the on-board systems (ATO-OBU).

## INTERFACES SIMPLIFY INTEGRATION

TPS.live can be easily integrated into existing IT infrastructures via interfaces. For example, a link to your passenger information system will pass on expected delays to your passengers. Customer-specific functions can be integrated this way, too.

# TPS.live at a glance



QUESTIONS?  
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- » User-friendly web interface
- » Integration of infrastructure data, timetable data and real-time data
- » Creation of a detailed timetable on the basis of the framework planning and for previously unplanned trains
- » Continuous rescheduling of encounter traffic
- » Connection to CTC
- » Online conflict detection based on real-time train positions
- » Improved network utilization by integrating technical information from internal and external sources
- » Manual, semi-automatic and automatic conflict resolution

## OUR REFERENCES

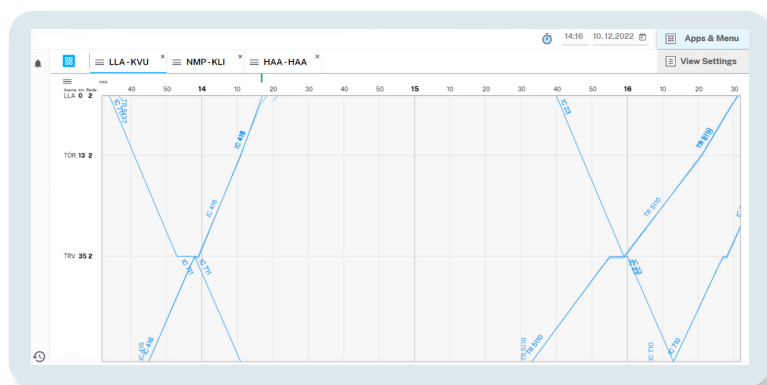


CSX Transportation is one of the largest North American railway companies with a focus on freight transport. The rail network covers a total of 34,000 kilometers.

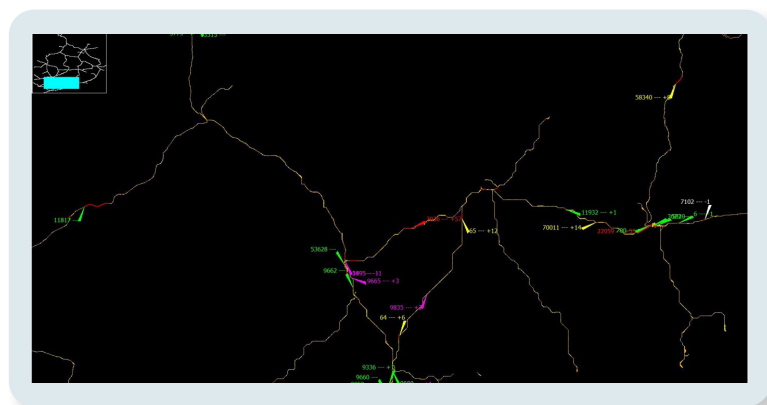


Network Rail, our long-time TPS customer, manages the British rail infrastructure and owns almost all the stations on the route network.

## USER INTERFACE



By means of the graphical timetable, TPS.live users can visualize conflicts in ongoing railway operations. The system can either solve the problems automatically or support the dispatchers by suggesting options.



TPS.live provides a map to show users the current train positions on the network. The further train runs and expected arrival times, too, are being forecast. Factors such as the maximum speed of the trains, minimum stopping times, the dependency on other route occupancies, etc. are also included in the calculation.

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