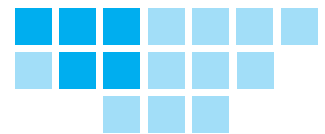


IVU.rail at DB Regio



Photo: DB Regio

STANDARDISED PLANNING AND DISPATCH FOR ALL DB REGIO AG NETWORKS



INITIAL SITUATION

With a market share in German passenger rail transport of over 59 percent and an operating performance of 427 million kilometres driven in total per year, the DB Regio AG is the clear market leader in Germany. Besides the Interregio Express, the Regional Express and the regional rail, DB Regio operates 13 suburban rail lines, among others in the cities of Munich and Berlin, as well as in other metropolitan areas such as Rhein-Main and Rhein-Neckar.

Since 2002, the suburban rail lines in Munich and Rhein-Neckar have already been planned and dispatched with IVU.rail, while other operating regions continued to use other solutions in part.

OVERVIEW

Employees	Approx. 17,000 train drivers and conductors
Vehicles	More than 4,000 traction units
Transport services	2021: 1.121 billion passengers 427 million kilometres driven 21,968 trains/day
Operations	Regional passenger rail transport
Objectives	Standardised planning environment for all operating regions Integrated and cross-resource production planning
Special features	Planning and dispatch of all transport networks in one system Central technical operations Central functional management
IVU products	IVU.timetable, IVU.run, IVU.duty, IVU.vehicle, IVU.crew

OBJECTIVES

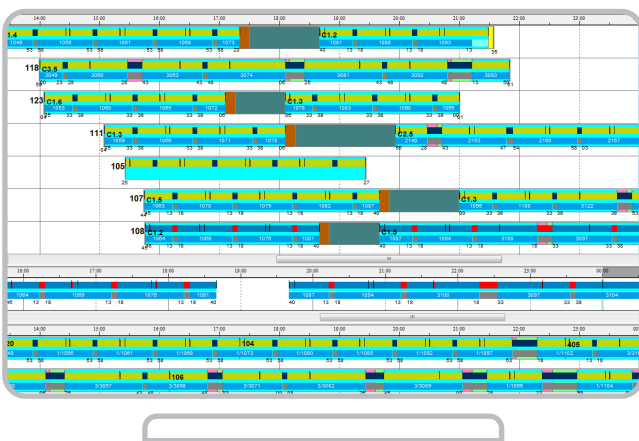
It was important for DB Regio that all regional rail networks of the transport operator, including suburban rail, be combined into one system. The goal was to establish common planning, dispatch and accounting processes and to thereby reduce the costs for technical operations, maintenance and training.

The system should make the entire process of resource planning more efficient and enable the planners and dispatch managers to quickly respond to short-term timetable changes and unplanned orders for special transport services.

SOLUTION

After an international tender, DB Regio decided on the integrated planning and dispatch system IVU.rail. The standard system replaced the different systems already in use in the company step by step by mid-2021. DB Regio can carry out its entire resource planning and dispatch more than 16,000 vehicles and 17,000 employees in rail operations with a standardised system.

During implementation, IVU.rail was supplemented with important new developments and numerous interfaces to the peripheral systems in the DB Group. DB Systel took over system operations and hosting for the up to 1,500 users who work on the system simultaneously and around the clock. In the comprehensive roll-out, data was transferred from the old systems, fare and rule systems were collected in detail, and thousands of users were specifically trained.



Included in the planning: With IVU.pad.employee, the drivers always have access to duties and requests.

DB Regio profits above all from the consistent process sequence and from the standardised data storage for planning and dispatch in the IVU software. IVU.rail's intelligent algorithms accelerate the planning process and ensure optimal deployment of all resources. Automatic consistency checks ensure that the saved rules are observed at all times.

In the future, IVU.rail's duty optimisation will also enable the planners at DB Regio to optimally cover all vehicle workings and occurring activities. Flexible configuration of duties enables the quick and simple recognition of potentials for efficiency gains and cost reductions.

Additionally, DB Regio plans to optimise its duty schedules with the help of the automatic personnel dispatch, and thereby to accelerate the allocation of personnel. In doing so, the dispatch managers can themselves determine how the different optimisation goals should relate to one another. This allows legal, fare-related and technical guidelines for personnel deployment to be saved in the system.

Numerous monitoring functions ensure that the dispatch managers at DB Regio always have potential rule violations or other important key figures in view.

OUTCOME

Thanks to a fully integrated system, all planning and dispatch-related data, from timetable planning to dispatch, can be displayed in a consistent state and transparently at all times. All of DB Regio's rail transport networks now work with the same system since the conclusion of the project.

“The conclusion of this very ambitious project at DB Regio is a milestone in the digitalisation of our core processes. The fact that we now work with the same system in our transport networks makes consistent planning and dispatch, from vehicle scheduling to personnel deployment, easier.”

Oliver Terhaag
Production Managing Board | DB Regio AG