

# IVU.rail for SBB Cargo

# **EFFICIENT PLANNING AND DISPATCHING WITH STANDARD SOFTWARE**



#### **INITIAL SITUATION**

SBB Cargo, the freight transport division of Swiss Federal Railways, handles almost a quarter of all freight transport service in Switzerland. In the highly cost-sensitive logistics sector, optimum planning and utilisation of resources deliver crucial competitive advantages. Extremely volatile planning conditions (such as changes to customer orders or train path availability at short notice, adverse weather conditions etc.) make planning more difficult. Changes can occur until just before the actual day of production - with impacts on vehicle and staff deployment that have to be communicated reliably and promptly. SBB Cargo previously used several different systems for this highly complex task: two for staff roster planning and one for vehicle planning and dispatching.

### **OVERVIEW**

Employees	About 2,400, including 2,000 planned staff, 150 planners and dispatchers
Vehicles	500 engines
Transport services	> 30 million train-km, 700 trains per day
Divisions	Freight transport
<b>Objectives</b>	Replacing the diverse system landscape with an integrated standard system
	Reducing IT operating costs
	Simplifying and standardising processes
	Automating and optimising resource planning and dispatching
Special features	Extremely volatile planning conditions

# **IVU.RAIL IN USE** AT SBB CARGO

IVU.rail.timetable **Network** planning

IVU.rail.timetable Timetable planning

Duty schéduling

IVU.rail.duty

I**VU.**rail.run

Vehicle

working

scheduling

IVU.rail.crew

Roster

layout

IVU.rail.crew Personnel diapatch

IVU.rail.crew Payroll accounting

IVU.rail.vehicle Vehicle dispatch

IVU.rail.vehicle Vehicle monitor



#### **OBJECTIVE**

In launching an invitation to tender for a new system for planning and dispatching of its resources, SBB Cargo pursued four main objectives: the existing diverse planning and dispatching systems were to be replaced by an integrated standard system. At the same time, SBB Cargo targeted a substantial decrease in maintenance expenditure and IT operating costs. In addition, in-house planning processes were to be simplified and adapted to the standard product to be used. Process automation and the use of optimisation components were to accelerate planning and improve the quality of planning outcomes. One particular focal point here was the reduced use of resources through optimum planning and utilisation of vehicle and staff.

## SOLUTION

SBB Cargo opted for the integrated planning and dispatching software **IVU.rail**. The key factors were the high level of standardisation of the system and the available optimisation components. Alongside the launch of IVU.rail, the long-established planning and operating processes were streamlined and reformed – consequently, the entire planning processes is supported by a single software package in every phase.

Annual planning

Short-term planning

Production

Shift classes

The timetable is subject to frequent changes – IVU.rail provides support in all phases of planning.

SBB Cargo also uses the wide-ranging optimisation tools of IVU.rail. For example, **automatic staff dispatching** allocates all duties automatically while ensuring that the applicable statutory and in-house working-time regulations are adhered to.

The integrated **employee portal IVU.crew.mobile** also facilitates communication between dispatchers and staff. Employees can enter their preferred duties or apply for time off, for instance.

#### **RESULT**

The introduction of IVU.rail has enabled SBB Cargo to plan and dispatch vehicles and staff in a fully **integrated process** from a long-term and short-term perspective. With features such as standardised interfaces, automation and optimisation, IVU.rail helps to ensure optimum utilisation of resources and to adapt planning to changed transportation requirements, even at short notice. The automated functions of IVU.rail provide the support required for planning based on identical templates to be performed just once instead of starting from scratch every working day. With the employee portal, all relevant information is available and up to date, even when changes are made at short notice. Printouts and notices are no longer required, and staff roster details can be viewed via

"A crucial factor in choosing IVU.rail was the high level of standardisation of the system, which largely met our requirements even in the basic version."

the browser, e.g. on a tablet, at any time.

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