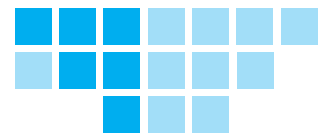




INTEGRATED PLANNING AND DISPATCH IN REAL TIME



INITIAL SITUATION

Owing to its central location with seven neighbouring countries, the Hungarian rail network is an important hub for freight and passenger transport in central Europe. With approximately 1,000 traction units and 3,000 locomotive engineers, MÁV-START is the largest subsidiary of Hungarian State Railways and runs the bulk of the passenger rail network in Hungary. In addition, 3,000 train conductors and 3,000 office-based employees ensure smooth processes.

Until 2008, Hungarian State Railways planned and dispatched vehicles and personnel largely without system support. As a result, they were no longer able to cope with the increasing competition and the more stringent requirements that the company needed to fulfil. Thus, there was an urgent need for modernisation.

OVERVIEW

Employees	9,000, of which 3,000 locomotive engineers, 3,000 train conductors, 3,000 office-based employees
Vehicles	Approximately 1,000 traction units
Transport services	130 million passengers annually on a nationwide rail network of 7,400 km
Operations	Passenger and freight transport
Objectives	More efficient planning and dispatch through the introduction of an integrated IT system Simplification and automation of processes
Special features	Introduction of a standard product Integration of real-time data in vehicle dispatch Payroll interface for central processing of personnel data
IVU products	IVU.timetable, IVU.run, IVU.duty, IVU.vehicle, IVU.crew, IVU.pad

OBJECTIVES

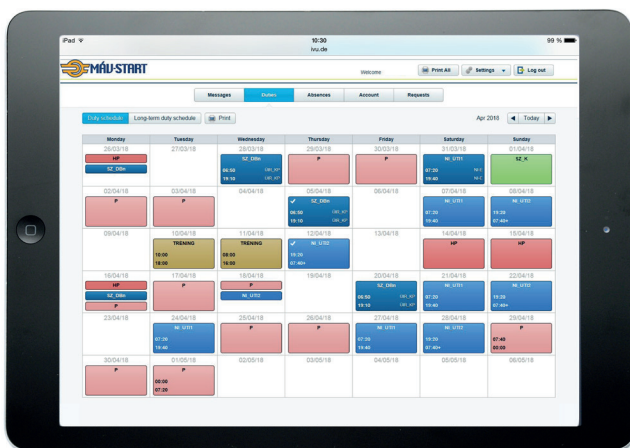
MÁV was particularly keen to introduce an integrated system to replace conventional paper- and Excel-based solutions. The aim was to achieve standardised and consistent planning and dispatch of vehicles and personnel – while reducing redundant process steps at the same time.

One requirement was that the future system should support dispatch managers in the event of operational disruptions, which occur on a daily basis, so that measures could be taken at an early stage and quickly. A further requirement was that the planning process should be simplified and thus the complexity for the planners reduced significantly.

SOLUTION

After thorough market research, MÁV-START commissioned IVU and its Hungarian project partner Soring to introduce their standard product IVU.rail for the integrated planning and dispatch of all operational resources.

As part of the project, IVU engineers designed the integration of real-time data in vehicle dispatch, which is an important part of the standard product today. In this way, dispatch managers are aware of the current run position at all times – and can therefore respond early to disruptions and delays and reschedule following trips in advance.



Involved in the planning: The mobile employee portal allows drivers to access their duties at all times.

The payroll accounting interface integrated in IVU.rail allows the planning, dispatching and invoicing of all

9,000 employees, from train drivers to service personnel, in a central system.

IVU.rail's intelligent suggestion system helps MÁV-START planners to create stable and needs-based duty rosters and weekly schedules. The system automatically takes the statutory and operational rules and qualifications applicable for each personnel group into account. In addition, the newly created service models observe employee-specific travel times and interconnected work involving various units and multiple employees. The mobile employee portal IVU.pad.employee allows each employee to make direct contact with dispatch. They can use it to view duties and current information online and submit holiday requests, for example – even on the go.

OUTCOME

Thanks to the introduction of IVU.rail, MÁV-START can now carry out its planning and dispatch of approximately 1,000 traction units and 9,000 employees via a fully integrated system. The central system significantly reduced the number of interfaces required and considerably simplified operational processes. The introduction of new personnel planning provided MÁV-START with more options, such as additional account display options and roster layout rules or a more flexible payroll interface. Thus, Hungarian State Railways is well prepared for competition and future challenges.

“By introducing the standard railway product IVU.rail, MÁV was able to standardise and modernise their internal processes – thus making them more efficient. At the same time, the standard product's wide range of parameters and customisability ensured that even MÁV's complicated regulations could be well implemented.”

Gábor Jandrasics
Managing Director | Soring