Zeitschrift: Swiss express : the Swiss Railways Society journal
Band: - (2006)
Heft: [3]

Rubrik: Notepad extra

Hupac NEWS - Hugh Edgley

*The **Shuttle Net** expands and **e-train** is introduced*

To meet rising demand for alpine transit Hupac, the Swiss intermodal operator, is responding with an expanding network on its main traffic axis between Germany and Italy plus the axis between Benelux and Italy. Also the further expansion of the Italian gateway connection via Busto creates new opportunities for traffic to the south and east of Milan.

Since early in March of this year Hupac have been running a daily connection between Busto-Arsizio and Mannheim-Handelshafen as part of its Shuttle Net. This has been made possible by a new operational concept of the Busto-Frankfurt FIT shuttle, which now makes an intermediate stop at Mannheim. Peter Howald, who is the Director of Intermodal Services at the Hupac Group, has commented *"Traffic in the Rhein/Main area is showing strong growth. The connection from/to Mannheim was set up to complement the already established traffic to Italy via Ludwigshafen."* Hupac has also created greater capacity for traffic between Belgium and Italy as a direct shuttle started running between Antwerp and Padua from the middle of this April. For the growing transport market between Belgium and north-east Italy there are now three departures per week in each direction giving shippers attractive schedules and a Day 3 arrival. In addition a daily shuttle train between Genk and Busto, without an intermediate stop in Frankfurt, started at the end of April. With the discontinuance of the wagon groupage to-and-from Frankfurt additional capacity has been freed-up which will be absorbed by the growing market in the South of Belgium.

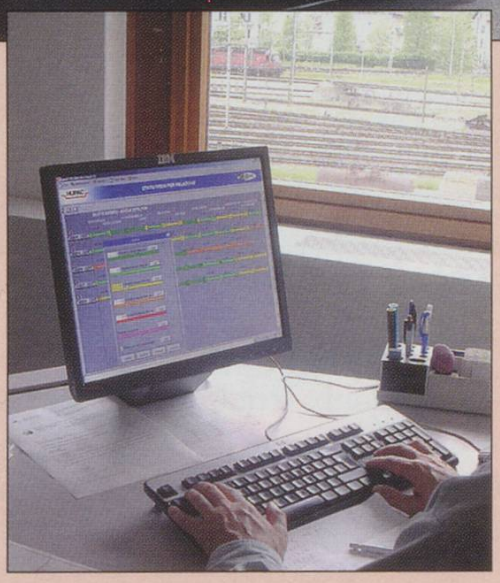
Hupac's transalpine trains run on the principle of integrated end-to-end traction responsibility by the railway companies involved. The main freight carrier for the Busto to Mannheim/Frankfurt train is Trenitalia Cargo. The Belgian rail company Dillen & Le Jeune Cargo (DLC) takes responsibility for the traction of the shuttle train between Genk and Busto whilst SBB Cargo handles the Antwerp to Padua shuttle.

In addition to this major expansion of its services Hupac has introduced a new satellite-based positioning system for real time train monitoring. It is claimed that the system, named e-train, stands out with respect to similar existing systems in Europe due to its characteristics of "pro-activity" and "automaticity", which it is claimed will benefit both productivity and customer service. The e-train system is based on innovative hardware components using GPS/GSM technology. A pro-active information system matches the effective running data of every individual train with the selected timetable. Hupac director Bernhard Kunz explains "We receive high value qualitative information in real time without having to make costly enquiries with the various rail companies. E-train automates manual processes and frees resources, to the benefit of our customers."

A hardware component installed on each train comprises a GPS satellite reception card, a GSM telephone card to communicate position and the latest-generation battery to provide energy to the two cards. This equipment is enclosed in a box that can be easily mounted on any wagon for combined transport.

The hardware unit is in continuous communication with a train-positioning signals

management software, which represents trains graphically on territorial maps adapted to the characteristics of the Hupac network. According to Hupac's IT Director Aldo Croci *"The absolutely most innovative element of e-train is the concept of controlling the train progression. The few satellite tracking systems existing in Europe are based on the train-mounted unit emitting its position at p redetermined time frames. An enormous volume of information with little value is being created since it is all disjointed from the train timetable, which instead is the item that most concerns the customer."* Croci goes on to note that *"E-train instead is based on the concept of pro-activity and automaticity: the system signals possiblevariations in the timetable with respect to the timetable foreseen for each train, allowing Hupac personnel to determine the timely progression of traffic and to provide information to the customer in case of delay."*



As each train departs, Goal, the central software system controlling e-train, sends the appropriate timetable to the train-mounted unit together with the control points, including the theoretical arrival and departure schedules. Throughout the journey, the satellite unit checks the train movement and sends the information regarding the real transit at every point of the travel plan, including any changes in the schedule. This information is automatically integrated into the Goal system. Hupac personnel obtain in real-time the global view of train progression, saving time and costs in requesting this information from railway companies. Furthermore, there are alarm systems in case of trains running with substantial delays that give automatic notification to the parties concerned.

The e-train project was implemented by Hupac in collaboration with Fela Management, a Swiss company leader in Europe in the production of satellite positioning systems, and with ICM, a company which specialises in the consultancy for satellite tracking systems. Having passed all operational tests, e-train became the day-to-day tool for controlling Hupac trains at the start of 2006.

Hugh wrote this article for Swiss Express based upon information supplied by Hupac.