

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

Rubrik: Notepad extra

Nutzungsbedingungen

Die ETH-Bibliothek ist die Anbieterin der digitalisierten Zeitschriften auf E-Periodica. Sie besitzt keine Urheberrechte an den Zeitschriften und ist nicht verantwortlich für deren Inhalte. Die Rechte liegen in der Regel bei den Herausgebern beziehungsweise den externen Rechteinhabern. Das Veröffentlichen von Bildern in Print- und Online-Publikationen sowie auf Social Media-Kanälen oder Webseiten ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. [Mehr erfahren](#)

Conditions d'utilisation

L'ETH Library est le fournisseur des revues numérisées. Elle ne détient aucun droit d'auteur sur les revues et n'est pas responsable de leur contenu. En règle générale, les droits sont détenus par les éditeurs ou les détenteurs de droits externes. La reproduction d'images dans des publications imprimées ou en ligne ainsi que sur des canaux de médias sociaux ou des sites web n'est autorisée qu'avec l'accord préalable des détenteurs des droits. [En savoir plus](#)

Terms of use

The ETH Library is the provider of the digitised journals. It does not own any copyrights to the journals and is not responsible for their content. The rights usually lie with the publishers or the external rights holders. Publishing images in print and online publications, as well as on social media channels or websites, is only permitted with the prior consent of the rights holders. [Find out more](#)

Download PDF: 30.12.2025

ETH-Bibliothek Zürich, E-Periodica, <https://www.e-periodica.ch>

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 predetermined 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 possible variations 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.

