

LINEAS IMPROVES PROFITABILITY, EFFICIENCY AND PRODUCTIVITY WITH DELMIA QUINTIQ



With DELMIA Quintiq’s planning solution in place, Lineas can control its complete production chain using a single, integrated and transparent planning system – for all its resources: station staff, train drivers, locomotives and rail paths.

The solution enables control over all planning horizons from long term to day of execution.

The customer

Lineas (formerly SNCB Logistics) is an independent freight rail operator. Headquartered in Brussels, it is active in Western Europe. The company handles rail freight production in Belgium and its surrounding countries.

Lineas has interests in Cobra and Sibelit (international corridor companies) and offers crossborder rail transport all over Europe, together with the continent’s major rail operators.

LINEAS Fast facts

Business:	Independent Belgian freight rail operator
Ownership:	Privatized in Feb 2011
Location:	Brussels, Belgium
Staff:	1,850 full-time employees, of whom over 200 are drivers
Markets:	Local market and Western Europe
Distance covered:	5 billion ton-km in 2013

The challenge

The rail freight industry had historically been losing money. To be competitive and profitable, Lineas needed to restructure itself completely.

Lineas' rail cargo-planning challenge was highly complex. For the long- and short-term planning of all its locomotives, drivers, local station staff and rail paths, the company had to take into account constraints such as maintenance rules, route and traction knowledge. Different working time directives and regulations for the various personnel types also had to be factored in.

What made planning even more complicated was the fact that the company's planners had, for historical reasons, been using separate planning systems for locomotives, train drivers, station staff and rail paths.

To control its entire production chain, Lineas wanted to replace these systems with a single, integrated solution that would offer company-wide transparency. It wanted a solution that would enable total resource planning: from station staff and train drivers to locomotives and rail paths, and across all planning horizons, from long term to day of execution.

The choice

Initially, Lineas published a tender. Based on criteria such as speed of the system's deployment, user friendliness and return on investment, the company's managers opted for the collaborative solution proposed jointly by DELMIA Quintiq and Ab Ovo, DELMIA Quintiq's implementation partner.

"Lineas was going through profound restructuring and was aiming for significant improvement in quality and productivity. We had already achieved significant results in these areas, but to have more impact, we needed an integrated IT system that would allow us to perfectly synchronize planning of all processes as well as our resource utilization. Moreover, this system had to be integrated and implemented very quickly," says Geert Pauwels, CEO of Lineas.

"After an intensive selection process, we decided to choose Ab Ovo and DELMIA Quintiq. The proven, state-of-the-art DELMIA Quintiq software in combination with Ab Ovo's specific rail planning and scheduling expertise perfectly matched our business requirements."

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– Geert Pauwels
CEO, Lineas

Implementation

Together with Ab Ovo, DELMIA Quintiq collaborated on a tailored solution that was called IRON. The solution was implemented on schedule and within budget.

The first solution, to assist with long-term planning, was up and running within 10 months. Six months later, the short-term planning solution was implemented. The last solution – to enable swift responses to disturbances on the day of operations – was launched a few months later.

Overall, the system integrates planning and scheduling across all Lineas' line locomotives, shunting machines, drivers and ground operators. It also integrates existing planning methods with new processes required by Lineas, and helps the company's different planning departments work effectively together.

The system also supports many other important business functions by interfacing with other Lineas' systems – for human resources, asset management and order management – and the national railway management system run by Infrabel (the Belgian railway infrastructure manager).

The results

Today, Lineas' planning system has about 150 primary users and 60 auxiliary users. Soon, this will grow to 200 primary users and 100 auxiliary users.

The implementation of an integrated planning system allows the firm's managers to plan based on actual demand and get a precise and transparent view of required resources.

Overall, the system has contributed to the improvement of Lineas' profitability, efficiency and productivity. With the solution, Lineas is already seeing impressive results that include improved punctuality, better operational performance and optimized decision making.

Rail freight planners need to be able to see all of their resources in the same place at the same time. All locomotives, drivers, rail paths and station staff need to be visible within a single planning solution. The solution models Lineas' unique constraints such as route knowledge and certification of individual drivers, track access and locomotive compatibility,

labor regulations and driver shift preferences. As such, the system helps the planners make the best decisions for scheduling and re-scheduling resources.

Moreover, the software platform also permits Lineas to include key performance indicators (KPIs) in its planning. Thanks to this new KPI-driven planning, operational performance has improved.

“This initiative is only one step in a line of measures that Lineas is undertaking to improve the safety, quality and productivity of its freight services. The DELMIA Quintiq software platform is proving to increase our competitiveness and is supporting our mission to become Europe's most reliable rail operator,” says Pauwels.

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