

# HOW EURAILSCOUT INCORPORATES ALL EUROPEAN LABOR RULES WITH DELMIA QUINTIQ RESOURCE PLANNING



EURAILSCOUT



# The customer

Using testing trains and other state-of-the-art testing equipment, Eurailscout inspects and analyzes over 100,000 kilometers of track and 8,000 switches across Europe. Railway operators rely on the company to detect hidden rail defects and flag them to be fixed before they become problematic or dangerous. Precision in assessment is critical in laying the groundwork for preventive maintenance planning. This can help rail operators save up to 20% in maintenance costs.



<b>Ownership</b>	Dutch-French joint venture
<b>Services</b>	Track, rail, switch, overhead line, signaling and consultancy
<b>Resources planned</b>	100 staff, 14 rail inspection trains and an assortment of hand trolleys and switch inspection measurement vehicles
<b>Countries of operations</b>	Eurailscout operates in six European countries (Germany, France and the Netherlands included)

## The challenge

Eurailscout was relying on Excel sheets for the planning of its resources — a highly complex process that puts a strain on the planners. The straightforward system was not modelled to its business and did not take into account the unique rules and constraints of Eurailscout's operations.

Eurailscout is the first line of safety enforcement for the tracks of the six countries it operates in. Its inspection work needs to be carried out with great accuracy. An internal crack as tiny as 1mm on the track could cause a train to derail. Faulty switches are responsible for up to half of rail service disruptions in Europe every year. Europe's transportation artery moves a huge number of passengers and cargo between cities, large economic hubs and across borders throughout the continent. Any disruption would cause dire consequences to human lives, productivity and the economy.

The data gathered by Eurailscout during track inspection is analyzed to draw up customized maintenance plans for network operators. This process is dependent on the effective and efficient deployment of Eurailscout's personnel, testing trains and supporting equipment to where they are required. It's not as simple as it sounds as there are many factors to consider:

- The correct match of differently skilled people to highly technical machinery
- The right resources to be assigned to different tasks
- Adherence to local labor laws and other rules and regulations across several countries in Europe
- The narrow windows of track possession time

Deploying the right people and the right equipment to the right spot at the right time was challenging enough, but there was a bigger problem lurking underneath. The limitations of Excel planning made it difficult to detect all the possible rule violations. There was little transparency of rule violations — it didn't drill down deeply enough to show the number of shifts and working hours, and whether there was sufficient rest time in between shifts.

Besides that, Eurailscout was seeking to improve the communication and collaboration between the different departments handling crew planning, train planning and data processing. Lack of shared insight in planning and planning consequences resulted in poor visibility of resources and suboptimal decisions. Laborious information input to its planning system magnified the risk of making costly mistakes.





## The search

Eurailscout needed a solution to help it detect violations of labor rules before they could happen. It wanted to know the required analyzing capacity in advance so that it could put enough resources on standby to immediately analyze data when it comes in. An effective allocation of resources would ensure inspection jobs are completed within the allocated timeframe. This would help them keep their customers, the infrastructure managers, satisfied.

The software had to complement the company's homegrown system, which contains work orders and is used to send path requests to the infrastructure manager. The planning solution should be able to:

- Synchronize data from the different planning teams to generate an integrated plan for work orders, inspection trains, equipment and workforce, which includes drivers, shunters and analysts throughout Europe
- Generate plans that comply with local laws and regulations
- Provide insights into planning decisions across multiple sites and planning horizons, from tactical to operational scheduling of equipment and crew
- Minimize disruptions to daily operations

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"We needed a solution that could provide us with the visibility required to make efficient and compliant plans that will help us deliver a high service standard to our clients."

- Michael van Milt,  
Chief Financial Officer at Eurailscout,  
2015

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"Eurailscout required a solution that could integrate easily into its existing platforms to enhance workforce scheduling and resourcing. DELMIA Quintiq stood out from other technology providers in ensuring more accurate workforce plans that are compliant with European labor laws."

- Willem Jan Groenewoud,  
Chairman at Ab Ovo International,  
2015

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## The DELMIA Quintiq solution

Eurailscout selected DELMIA Quintiq to provide its planning team with transparency of resources and plans. DELMIA Quintiq was the only solutions provider to meet all the requirements of fully integrated and collaborative planning. The project started in April 2015 and was completed within budget and on schedule 10 months later. It was implemented by Ab Ovo, a solutions provider in advanced planning and scheduling.

The 100%-fit solution can be fully configured to provide planning support in matching the most suitable employees and equipment to specific tasks while taking into consideration labor rules. Violations are immediately flagged. The software's optimization technology offers different resource allocation scenarios and predicts the potential consequences of each. Insights into current resource usage are used to provide strategic foresight of capacity. This planning support frees up the planners' time, so that they can focus on what truly matters — fine-tuning plans to achieve the desired levels of work quality, speed and customer satisfaction.

EURAILSCOUT

# Results

Just three months after DELMIA Quintiq went live, Eurailscout started to see visible results. The integrated solution supports planners in scheduling resources and managing disruptions. DELMIA Quintiq allows planners to measure plans against different KPIs and predict the impact of decisions on its operations and business.

With optimized planning, Eurailscout is able to assign resources to fulfil the required tasks while following all the labor rules. By meeting all service level agreements and providing high quality analysis Eurailscout also ensures a better chance of having its contracts renewed. The railway operators serviced by Eurailscout are able to deliver safe, excellent service to their customers with minimal disruption.

Challenges	How DELMIA Quintiq solved them
Eurailscout relied on Excel spreadsheets and manual input, which resulted in poor visibility of resource usage and possible labor rule violations.	DELMIA Quintiq pulls data from the different planning teams onto a single platform to provide end-to-end, real-time visibility across all resources, allowing people and machinery to be matched to the right tasks and locations. With input of labor rule constraints into the system, planners are immediately alerted to violations.
Manual planning was time-consuming and did not leave much room for alternative plans.	Resources are matched to work orders and what-if scenarios show the potential outcomes of different plans. Planners are freed from mundane work and have time to focus on higher level tasks.
Eurailscout operates in six countries with different rules and regulations.	Input of constraints into the system ensures that no rules are broken.
The three planning teams (crew, train and data processing) were working separately.	The flexible DELMIA Quintiq planning platform provides visibility of all resources, operations and decisions, thus fostering easier communication and more open collaboration between different planning departments.

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"Based on our experience in delivering integrated solutions to our clients in the rail sector, our technology was selected to help create a collaborative environment for Eurailscout's planners."

- Arthur Torsy, General Manager of EMEA at DELMIA Quintiq, 2015

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## Is DELMIA Quintiq the right solution for your planning challenges?

If you have a resource planning puzzle you can't solve, we can help. DELMIA Quintiq is used to plan schedules for more than 100,000 workers around the world and uncover hidden optimization potential that increases customer satisfaction and improves the bottom line. Our customers include VolkerRail, DB Schenker Rail, Green Cargo, NTV and Thalys. To find out more, visit our website or email us.



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