

## 25% more efficiency with the same sized crew

### RWE Rhein-Ruhr Netzservice GmbH (RRNS)

*"Thanks to PTV's IT solutions, the same number of personnel and the same sized fleet can still manage the amount of transport, even though it has increased by 25%."*

Harald Breuer, Manager of transport services, RRNS



#### The task

A high level of reliability and service with over 8,000 delivery addresses keeps everyone busy at RWE Rhein-Ruhr Netzservice GmbH (RRNS). The many varying goods, which mostly require specialist vehicles, mean planning is a complex issue. In order to be more efficient with better performance and transparency, RWE decided on PTV's logistics solution. It supports planners from order management to central planning, surveillance and invoicing.

As internal service provider for RWE Rheinland Westfalen Netz AG, the RRNS provides transport services for construction, operation and maintenance of the electricity, gas and water networks. A whole range of special

conditions must be taken into account: The entire personnel requires particular knowledge of planning, performing and securing loads when transporting goods which are typical for the power supply company. The loads consist of very different materials, from screws and cable drums or even highly sensitive electro-technical equipment. This includes transformers, converters and circuit breakers, which have to cover legal requirements to be correctly transported (legislation on hazardous goods and disposal). The vehicles used range from cars to 40-tonne articulated lorries. Some are suitable for off-road terrain and have special constructions attached, for example a crane for power line construction in difficult landscapes. A

round-the-clock service and a four-hour delivery guarantee in the case of disruptions in the supply area complete the range of services.

The supply area served by RWE Rheinland Westfalen Netz, together with the external customers' logistic points, includes the area in south Lower Saxony to the Luxembourg border. The logistics headquarters is in Pulheim-Brauweiler, near Cologne in Germany. Two handling centres in Münster and Trier guarantee complete coverage and on-time transport processes. There are 8,000 delivery locations, 5,380 building sites, 1,245 handling points, 685 transformer stations, 250 customer depots, 150 subdepots and 19 vehicle depots.



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### The solution

These conditions mean that RRNS's tasks are a real challenge. Because factors such as delivery time, use of the most up-to-date technologies and service quality define customer satisfaction, a power supply company's logistics must fulfil the latest requirements. Flexibility and the ability to exchange information as quickly as possible along all levels of the supply chain are a prerequisite for success.

In order to gain a high level of delivery with low costs, deliveries are bundled. Deliveries to receivers should be coordinated in time and/or quantity so that storage processes and the related activities in a warehouse are kept as low as possible. The handling centres

accelerate the delivery process with low storage.

In central planning the vehicles are to be utilised as much as possible and different loads and services should be taken into account. A share of the materials amongst several vehicles is often not possible. At RRNS plans are made cooperatively and using several vehicles, i.e. the fleet is equally available for all planners. The fleet is also a mixed fleet, which is made up of internal vehicles and largely vehicles from external specialised forwarders. The receivers are combined to areas, from which the planners can process "their own" areas. Each of the planners has a current status on-screen

and can see which of the vehicles is free or in use. The digital map displays also provide an excellent overview of trips, areas and orders. The customers order the required services online. The extra requirements are also specified here, so that the most suitable vehicle can be identified. The data are sent from the ERP system to PTV's transport management system.

The logistic solution with components for geocoding and checking addresses and for calculating distances have been extremely helpful. "The map display, with help from the addresses geocoded by the PTV xLocateServer is a great assistance, particularly in new



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development areas. We can define the delivery points using coordinates. It doesn't matter if the delivery point exists on the map or if it is in the middle of a field - it can be located on the map and transferred to our drivers," explains Harald Breuer, Manager of Transport Services at RRNS. "With the help of the PTV xDimaServers we can simulate trips and exactly calculate offers, without the customer having to be planned in the trip planning software first."

The module Order Management organises the basic order data and transfers the orders to the order processing system or to the following processes. After transport or service processing, the module provides the costs

for invoicing. In the dispatch module, the data are entered for warehousing and operational transports. They are transferred to route planning and then to the vehicle technology and invoicing.

When the order data has been entered, it's the turn of the planners. PTV Intertour/Dispatch is at hand to help here. The software enables them to efficiently distribute all transport orders amongst the vehicles - utilised to the best extent. The suggestion function is helpful here: The dispatcher can select the required trip allocation from the suggestions. All restrictions are automatically checked by the system.

Courier, express and parcel service providers are also used for transportation.

This kind of transport plays an important role when optimising processes. "Due to the large distribution area of the transport services, deliveries with a low volume and weight used to be included in the master trips. This often leads to very uneconomical distribution of deliveries, as even the smallest of parcels was transported using semitrailers," remembers Harald Breuer. "Now the CEP services are included in planning, which allows low-cost processing for the transport services. A data transfer from the internal dispatch client to the account on the CEP service's dispatch platform is implemented by this process."

The system also supports dispatchers after trip planning. The plan data is



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matched with the actual data from vehicle technology. The dispatchers receive a message, if the trips do not match, they can react and replan, if necessary. The system therefore provides a simple way of reacting to unforeseen circumstances.

The actual trip is specified by the operative dispatcher. With the help of the module Controlling, key parameters such as costs, efficiency or resources can be defined and monitored. These performance parameters are permanently monitored and matched. A message is provided, if they deviate from the preset values. In this way, everyone involved in the process quickly receives the required information and can immediately see the

extent to which planned and agreed targets and results are kept.

#### **The result**

Harald Breuer is thrilled: "Thanks to PTV's IT solutions, the same number of personnel and the same sized fleet can still manage our level of transport, even though it has increased by 25%." The solutions have more than paid for themselves.

Since March 2010 RNNS has also been using PTV Map&Market to display goods flows and to tailor distribution areas. In future PTV Intertour/Strategy will ensure optimised master trips. A first strategic plan with the software already showed a

potential saving of around ten percent of costs, time, kilometres and CO2 emission. Harald Breuer is convinced: "I estimate that the investment we have made for the two additional planning tools will have paid for themselves in a year at the latest."