

Collecting and distributing milk in the deep North

TINE plans and saves with PTV Intertour

In Northern Europe, trip planners have to contend with special conditions caused by local topography, among other things. This is a particularly steep challenge in collecting agricultural products that also fluctuate with the seasons. A look at TINE BA, Norway's biggest and most important dairy producer, illustrates the sheer complexity of the task. Since 1999 TINE Midt Norge has been using PTV Intertour to schedule its milk pick-ups in Central Norway. .

User: **TINE BA**, Norway's biggest and most important dairy producer

Task: Collecting milk in five different regions on the basis of pumping stations and milk distribution planning

Solution: Milk collection planning with PTV Intertour and distribution planning with PTV Intertour/Strategy

"Collecting milk in Norway is a complex business. The stop-off points – farms – are generally located on farm roads that you can't reach with a regular tractor-trailer combination. That is why the trailers are parked at pre-defined pumping stations. The actual pickup trip is done by a milk tank truck, which returns to the trailer after the trip, and pumps the milk into it. The entire combination then returns to the central milk processing plant," explains project manager John Alan Haugen. "We've saved a lot of time during new routing, started deploying our vehicles far more effectively, reduced the total number of kilometres driven, cut travel and waiting times and needed to invest less in new tanks and trucks."

Routing throughout Norway

TINE has centralised its organisation and all regions use the software for their planning processes. "Since PTV Intertour was more stable, more intuitive and produced better results than its competitors, TINE decided to go with this software," reported Haugen, adding, "Not to mention it was the only program with pumping stations. PTV had even already designed an interface to Itentia's enterprise resource planning system Movex."

Each of the five regions runs the software independently because each region faces different challenges.

The routes in Northern Norway, for example, are longer, while multiple assignments are more common in the south, and yet other regions prefer using hauliers. The regions also differ in terms of the density of agricultural businesses and dairy processing plants. The software considers these restrictions when optimising the trip structure and also factors in seasonal variations in milk production.



The Strategy module plans the distribution of dairy products to retailers as well as schools, hospitals and other major consumers. This add-on is suitable for creating ideal and optimised precombined trip plans for regularly occurring deliveries. That allows the company to save time and kilometres and to maintain its operations with fewer vehicles.

Enormous potential for savings

"The program offered the best payoff in milk collection," said CEO Egil Sørset. "In re-routing several regions, we managed to cut our costs by seven to eight percent per year. TINE West slashed its annual costs by around six per cent. If we had stayed with manual routing, we would never have trimmed these costs so quickly." He also believes that the decision to integrate PTV Intertour with TINE's CITRIX environment helped the project managers enormously. It allowed the PTV consultants in Karlsruhe to provide direct assistance without having to travel to Norway.