



GEFCO

TRANSPORT PLAN RE-ENGINEERING WITHOUT BRANCH CLOSURES



Aims:

- to revamp the transport plan in order to optimize cost, quality and delivery time components
- to avoid any branch closure and ensure the business remains stable
- to get buy-in from the operational teams



Solutions:

- optimization model of the transport plan
- deployment of an interactive decision support system (IDSS)



Result:

- reduction in the number of daily trucks used and thus the number of km travelled (by 11%)
- increase in the tonnage share over 24 hrs. (by 35%)
- €2M financial savings made on the transport component
- "network" culture enhanced

"The EURODECISION experts helped us make a clean break with our former practices and did so with the backing of the operational teams" Pierre-Yves Laval, Network Manager France, GEFCO

"The joint work carried out with EURODECISION enabled us to develop the right structure for the new transport plan. Introducing transverse management to our network has resulted in significant optimization, while the economic impact of this transformation proves that we took the right decision." Stéphanie Rahni, Groupage Manager, GEFCO

In 2013, GEFCO France, a major freight transport player, conducted a study as part of its national road freight business restructuring initiative, which concluded that considerable savings were to be made by re-engineering its entire transport plan. As the existing transport plan (900 daily linehauls) was geared to finding optima at group branch level, re-engineering the plan in its entirety would quickly lead to optimizing costs, lead times and service quality. The Overland Department responsible for managing the "Road transport" business with 36 regional branches was unimpressed by the available proprietary integrated software packages. It sought a partner that could rework its existing mathematical models to GEFCO's

specific requirements. It decided to commission EURODECISION, the data science/OR specialist and supply chain optimization expert to carry out the assignment.

The decisional mathematics consultants developed a model to build an optimized shipment transport plan that would factor in demand, site location and their typology, in conjunction with the teams on the ground. This model that would be geared to GEFCO's road transport business specifics also had to ensure that business at regional branch remained stable. Following discussions with the project coordinators and branch managers, many operational constraints and optimization criteria were incorporated.

The mathematical model has been embedded in an interactive decision support system (IDSS). Accordingly, once the head office had approved the initial transport plan at national level, the IDSS was used to adjust the plan to regional requirements. It enabled local users to interact on the solution to incorporate the regional players' industry expertise interactively and in real time. The process, which made for factoring in local off-the-record constraints, made it easier for the teams on the ground to buy into and master the solution. Additionally, the operating teams really appreciated it, thanks to its very short computing times; the IDSS enabled them to simulate and compare change scenarios as local optimization features.

The simulations made using the IDSS supported GEFCO in its aim to adapt the big bang approach to rolling out its new transport plan and pursuing its transformation project. Transferring the design and control of transport and consignment plans to a newly-created centralized network coordination structure was therefore part the project. The decision turned out to be beneficial because within a few months, the annual transport purchasing savings made by reducing the number of trucks was already running into millions of euros, without compromising on quality. By way of example, the 24h delivery service rate improved by 35%.

The move to centralized management (while emphasizing the involvement of the regional branches) and the lower cost of the transport plan were crucial for GEFCO. As a result, the company has seen its profitability rise, which contributes to sustaining its business.

