

## SUMMARY

In roadtransport competition is fierce nowadays. There is a surplus of capacity because of the many companies operating in this marketsegment. To survive the companies have to take new strategic decisions. One of these strategic decisions handles about choosing the right logistic concept of transportation. Transportation of goods can be carried out directly from customer to destination or via depots. Making this strategic decision is difficult for a company.

Companies therefore are in need for a tool to support this strategic decision. The goal of this study is to design and make this tool. The solution is found in the design and implementation of a simulation model. This simulation model makes it possible to evaluate different logistic concepts for road transport.

As an experiment to test the model, a logistic concept is chosen for the road transport company Pax Transport B.V.. Direct transportation of goods is set out versus transportation via depots. In this case the concept with the depots performs relatively better from logistic point of view. Savings are achieved by reducing the total distance and reducing working hours. The concept with depots also reduces the number of trucks needed to transport the goods and the goods are faster at their destination.

It is recommended that before drawing final conclusions on the concepts, costs aspects and aspects of concepts outside the implemented system have to be considered. Further examination of the vehicle routing and scheduling in case of transportation of goods via depots is needed.