Summary

This report contains a study into the possibility of using simulation to investigate the effects of changes in the business process 'Individual Inspection' of the Dutch national vehicle authority Rijksdienst voor Wegverkeer (RDW). Individual Inspection is a business process that takes place at different inspection stations in the Netherlands. The RDW offers different services to customers, for example: inspection of vehicles, identification of vehicles and giving export papers.

In this report the business process is modeled and simulated. From the modeling and the results it has become clear that simulation a useful tool is to examine effects of changes in the business process in advance.

The model is made using a Process Description Language. This language has two different implementations with which a model can be used for simulation.

This report contains a paper with a comparison between three different implementations, two in Java and one in Delphi. The implementation in Delphi is slower when a model reaches a specific size. For the model of the business process Individual Inspection the implementation in Java is chosen.

The advice for the RDW is that it is possible to use modeling and simulation to gain insight into effects of changes of the business process Individual Inspection. The Process Description Language should be used to model the process. The model can be implemented in DSOL (Java) or TOMAS (Delphi) and the choice between these two frameworks should be left with the modeler.