

SUMMARY.

This document is concerned with the study of a Rail terminal using simulation. A simulation program is useful to evaluate alternative conceptual designs. For instance, it can be useful to analyse the possible behaviour of the set of the different terminal design utilities, like the behaviour of the unloading equipment, transport systems and storage places.

In the second Chapter, the importance of the containers is studied. These are the elements, which make up the ECT (European Combined Terminals). Then, the next Chapter explains several reasons why of the ECT, Delta Container Division is situated in Rotterdam, exactly on the Maasvlakte area.

After that, the four terminals, which constitute the Delta Container Division are studied in detail. The way terminals work and the equipment used in these terminals has been expounded in the fourth Chapter. Also a brief explanation of what the Terminal of the Future can consist is done. In this so called FAMAS project a terminal concept is developed based on existing ECT terminal technology in collaboration with Delft University of Technology. In Chapter fifth some logistic characterisation and also some train concepts are explained.

The Chapter six is related to the use of the simulation and the utilities that a simulation model can provide to Rail terminal problems.

The software chosen for the simulation is Must. In Chapter seven a brief description of Must is done. Special type of attributes and components (queues and sets) are explained here.

Before the simulation program is created, the components and attributes that build up the system must be specified. It is done in chapter eight. The process description of such components and the Units containing such descriptions are explained in this chapter. After this, the verification and the simulation results are shown and commented. The program is provided in appendix 0.

Finally, the conclusions of this study are specified in Chapter nine.