## Organisational Dynamics Written Exam

1 February 2007 15:15-18:00

This final exam is open book, thus you are allowed to use the course materials (reader, assignments, lecture slides) during the exam.

Consider the following description of a transport company.

The company fulfills delivery orders of customers to transport goods to both Western and Eastern Europe. All communications with customers are realized through the Sale Person (SP), an employee of the company.

The SP takes orders from a customer and communicates them to the Load Manager (LM) who decides if the order can be fulfilled by the company. If the decision is positive, the LM informs the Fleet Manager (FM) who then assigns a driver to the order. If the delivery is related to Western Europe, then Driver 1 will be assigned to the order, otherwise – Driver 2. If the decision is negative, LM informs SP about the impossibility of the order fulfillment; then the SP communicates this information further to the customer.

During the delivery the driver, the FM and the LM interact with each other. The driver updates the FM about the delivery situation and the FM provides advices to the driver, when problems with the delivery appear. For bigger problems the LM is also consulted by the FM.

When the order is fulfilled the driver communicates this back to the FM who forwards the information to the LM. The LM informs the SP who then informs the customer. The LM also produces a report for the managers in the Strategic and Planning Department (SPD) which consists of four managers and a secretary. The LM communicates the report to the secretary of the SPD who then forwards it to the managers.

Furthermore, the customer has the possibility to request for information about the current delivery status. This request is propagated through SP and LM and reaches FM, who obtains the necessary information from the driver. FM communicates the requested information to LM who delivers it to the SP. The SP forwards the information to the customer.

## Assignment

Create a structural model of the organization described above and identify the dynamic properties (i.e., OP, GI, GP, RI, TP, RP) of the behavior of the organization. Your solution must at least include:

- a) the organization structure in diagram format,
- b) the behavior of the organization, in terms of its dynamic properties,
- c) a proof tree for the organisational property OP1 given below.

## OP1

If the customer generates a request for information on the delivery status of an order, then at some point in the future the customer will receive an answer for his request