

# 1: Van Merksteijn

## Functional Requirements

ID	Requirements	Comment
1	<b><u>Environmental Information</u></b>	
1.1.0	<b>Water level</b>	
1.1.1	System displays real-time water level	
1.1.2	System alerts users when water level is lower than certain level	
1.1.3	System calculates and displays predicted water level for next several weeks	Based on past data, weather forecast
1.1.4	System alerts users when predicted water level is lower than certain level	
1.1.5	Systems allow users to set alarm actions to be activated under specific conditions	Such as alerts when water level lower than X meter
2	<b><u>Operational management</u></b>	
2.1.0	<b>Operational plan</b>	
2.1.1	System allows users to create and save operational plan, route	Such as, Enschede to Hengelo: Vessel, Hengelo to Almelo; Truck
2.1.2	System allows users to modify/adjust the operational plan	
2.1.3	System allows users to view the operational plan	
2.1.4	System calculates and suggests optimal transportation plan to transport destination	Based on water level, road conditions and other various information on the transportation route
2.2.0	<b>Cargo management</b>	
2.2.1	System calculates possible load capacity based on water level and vessel information	
2.3.0	<b>Ship information</b>	
2.3.1	System displays real-time status of each shipment	

3	<b><u>Costs management</u></b>	
3.1	System calculates expected transportation cost based on operational plan	Based on transportation method, fuel type, environmental factors
4	<b><u>Storage management</u></b>	
4.1	System allows users to manage inventory information for their warehouses	
5	<b><u>Data sharing &amp; Collaboration</u></b>	
5.1	System provides communication channel for inter-organizational communication	