

8: Nobion

Functional Requirements

ID	Requirements	Comment
1	<u>Environmental Information</u>	
1.1.0	Water level	
1.1.1	System displays real-time water level/depth	
1.1.2	System alerts users when water level is lower/higher than certain level	
1.1.3	System calculates and displays predicted water level for next several weeks	
1.1.4	System alerts users when predicted water level/depth is lower/higher than certain level	
1.1.5	System displays water temperature	
2	<u>Operational management</u>	
2.1.0	Operational plan	
2.1.1	System suggests changes in loading and transportation routes as water levels drop and rise, malfunction on route	
2.1.2	Systems provide information on potential disruptions through predictive analysis based on historical data and current conditions	
2.1.3	System allows users to create and save operational plan, route	
2.1.4	System allows users to modify/adjust the operational plan	
2.1.5	System allows users to view the operational plan	
2.2.0	Ship information	
2.2.1	System displays an overview of available ships and its information (Possible load capacity, etc.)	
2.3.0	Bridge and lock information	
2.3.1	System displays real-time waiting time at the locks	

	and bridges	
2.3.2	System alerts users when there is a malfunction with bridge and lock	
3	<i>Data sharing & Collaboration</i>	
3.1.0	Communication channel	
3.1.1	System provides communication channel for inter-organizational communication	
3.1.2	System provides communication channel for emergency communication with government and carriers	
3.2.0	Information hub	
3.2.1	System provides information hub to share information from government	

Non-Functional Requirements

1	<i>Reliability</i>	
1.1	System provides long-term, accurate water level forecasts with over 70% accuracy	