



Effect corridorplanning on emissions

RIJKSWATERSTAAT & SYSTEMS NAVIGATOR

Corridor management – context

- From local management to corridor level
 - Planning locks/bridges jointly
- Goals
 - More efficient use of waterways & infrastructure
 - Provide reliable information
 - Sustainability & modal shift
- E.g. using corridor planner ('trajectplanner')
 - Route- and objectplanning
 - Datadriven: real-time sailing information (AIS)
 - Eventbased simulation environment
- Potential of the corridor planner
 - E.g. Requested Time of Arrival (RTA) at objects
 - Ship speed can be adjusted on that
 - Lower waiting time, but same (or lower!) traveltime
 - Decreased fuel use, emissions and costs





Corridorplanner – quantifying effects

- What is the effect of using (and improving) this corridorplanner?
 - E.g. emissions, traveltimes
- Modelling it in a microsimulation tool: SIVAK
 - Traffic flows around objects, KPIs (emissions, traveltimes)
 - Flexible simulation period (days – years), using historical data
 - But... only individual objectplanning
- First step: speed adjustment in SIVAK to reduce waiting times at objects
 - But without planning multiple objects together
 - First results: emission reduction of 5%-13%
- Currently exploring integration options corridorplanner & SIVAK
 - Towards planning multiple objects

