



# Active Traffic Management

Or how to get Inland Navigation Ready for the Physical Internet

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Waterweg



Hasselt, March 12th 2026

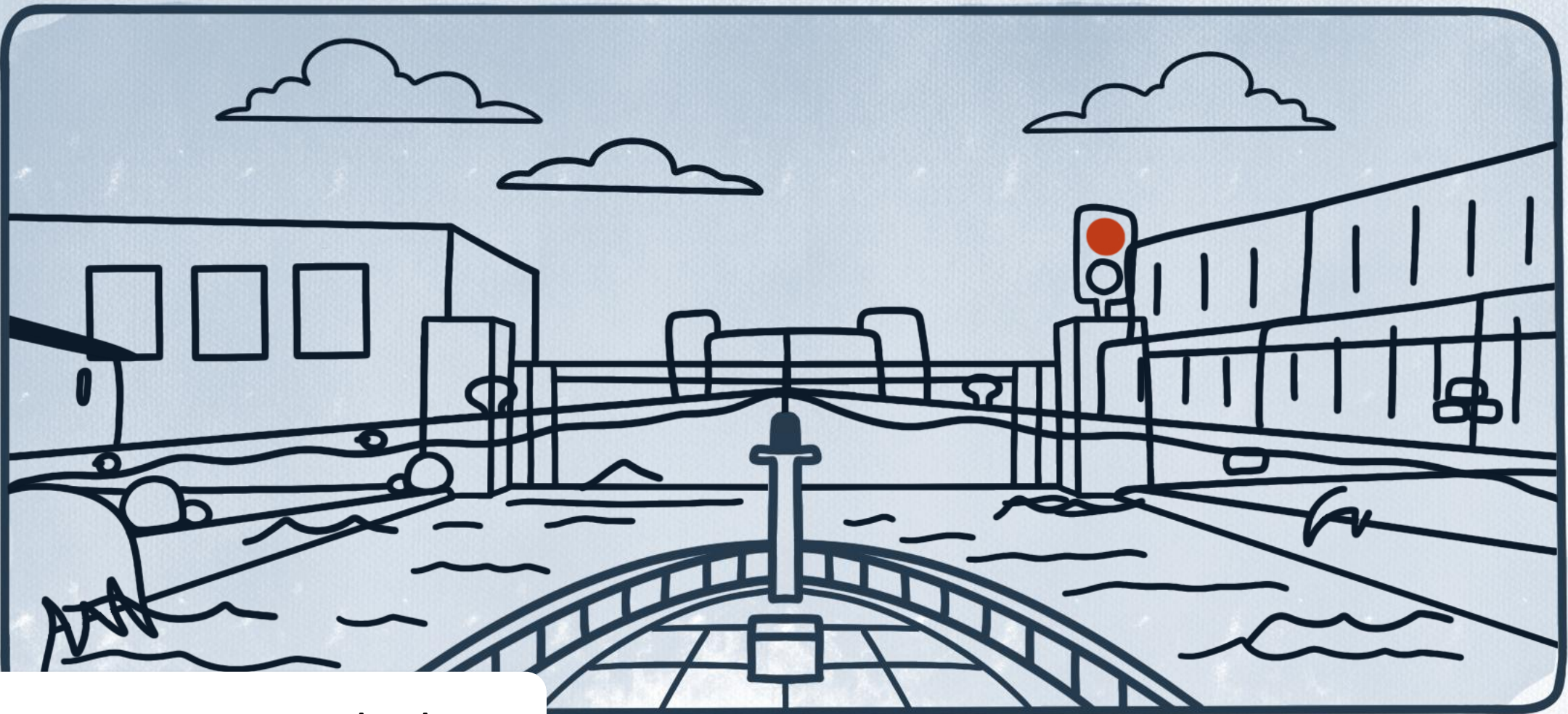
# IWT Traffic Management Today

## Skipper POV



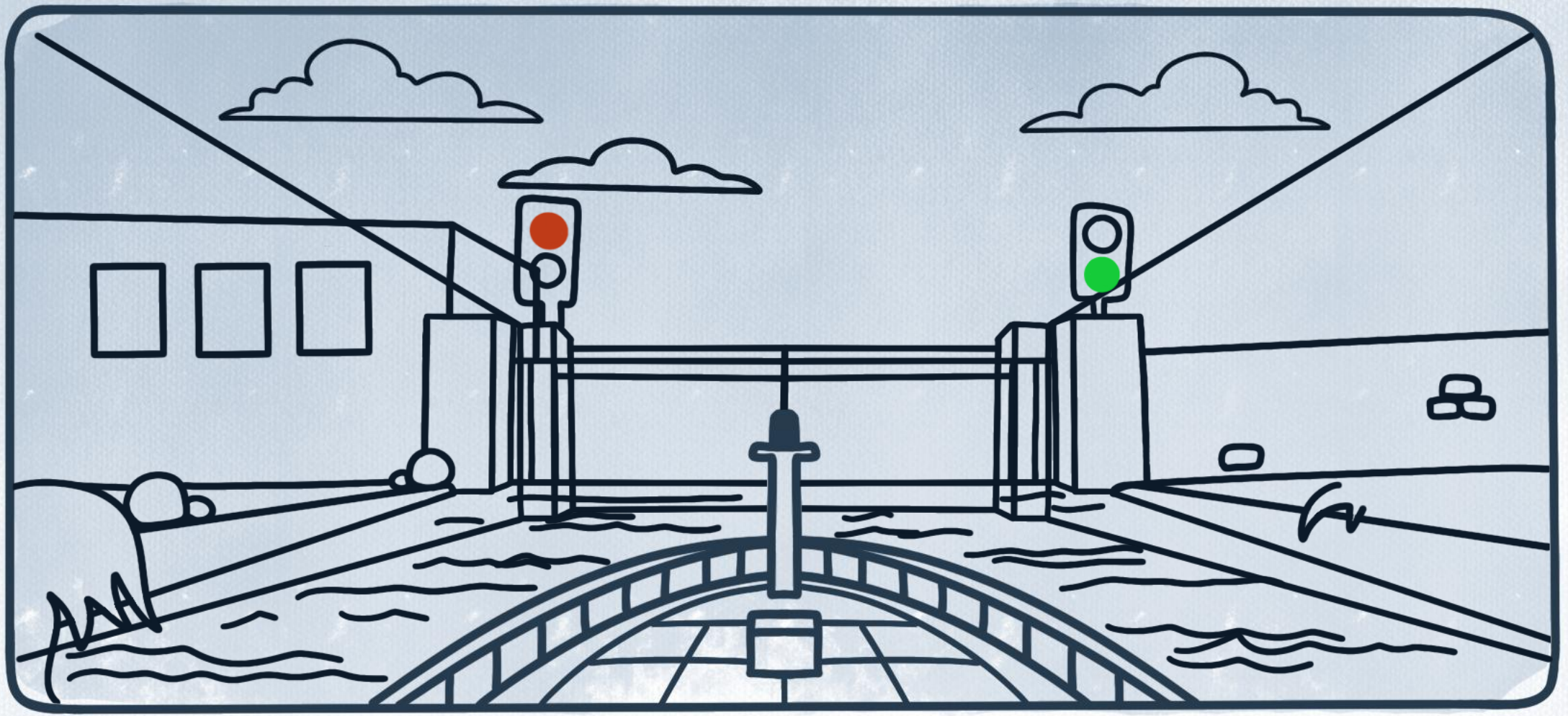
Lock Operation Request  
at Radio Calling Point

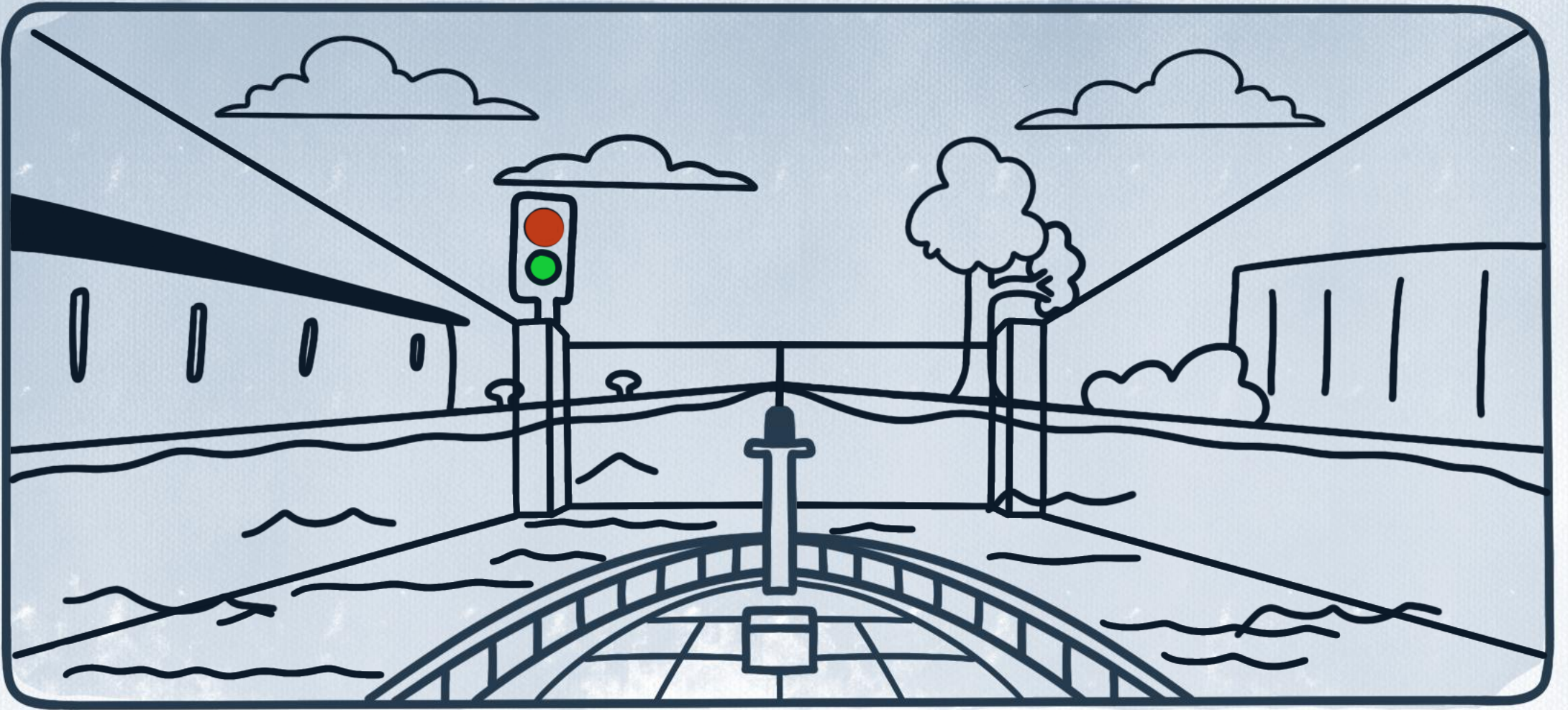




VHF: Position in lock







# Inland Navigation Today – A Reactive System

- Managed reactively by waterway authorities
- Vessels receive passage confirmation just before arrival
- Difficult to predict accurate arrival times

# The Future of Logistics – The Physical Internet

Goods will be routed dynamically based on:

- Expected delivery time
- Nature of goods (e.g., fragile, temperature-sensitive)
- Cost and environmental impact

# IWT solution- hurdles

WW-authorities:

- legal framework
- Shore side: need for flexible way of operation

# The Vision for Tomorrow – Active Traffic Management

- Proactive, predictive system
- Reliable schedule before departure
- Predictable arrival times at locks, bridges, and destination
- Connection to logistic stakeholders

# Why: Significant Benefits of Active Traffic Management

- For the Vessel and it's captain:
  - Reduced fuel usage
  - Improved safety
  - Reduced stress level
- For the Waterway Authority:
  - Better staff scheduling
  - Better use of waterway infrastrucure
  - Less calamities
- For Logistics:
  - Accurate cargo arrival forecasts
  - Improved staff planning at loading/unloading

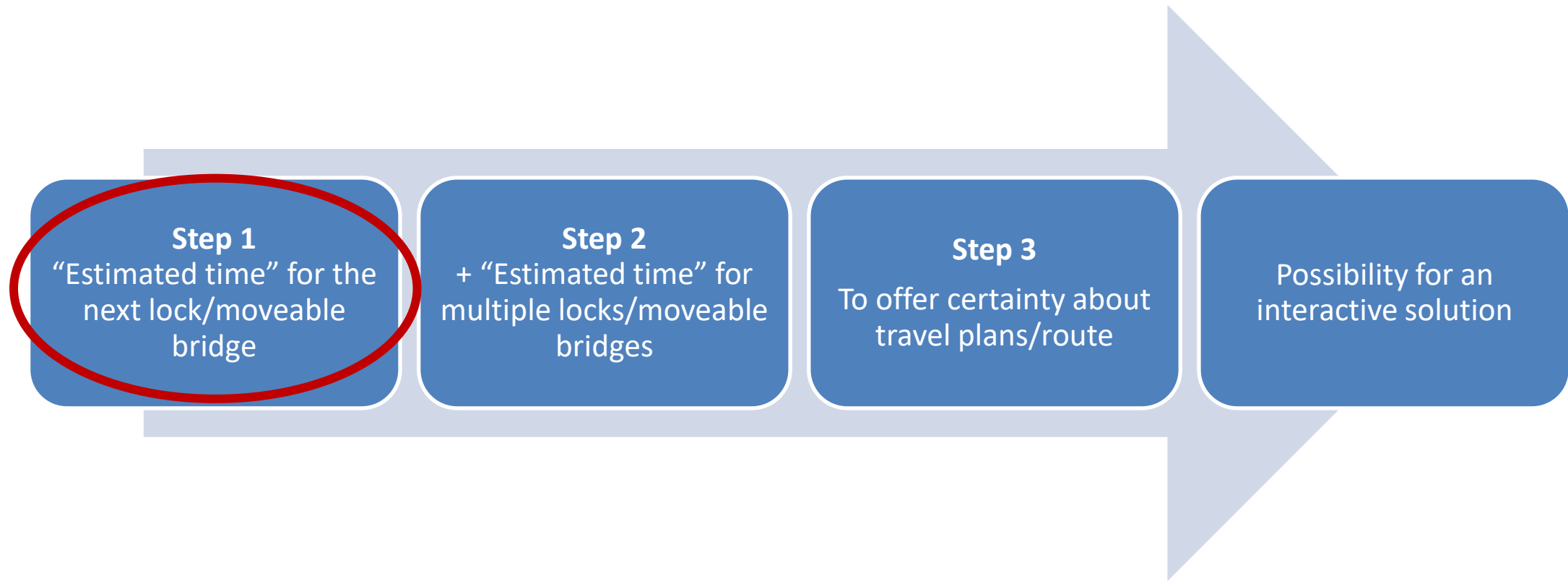
# Transition for IWT

Evolve to a active and datadriven traffic management

Program “Active and Datadriven Traffic Management”

HOW?: Step by step

# Actief traffic management: Steps



# How to Implement Active Traffic Management

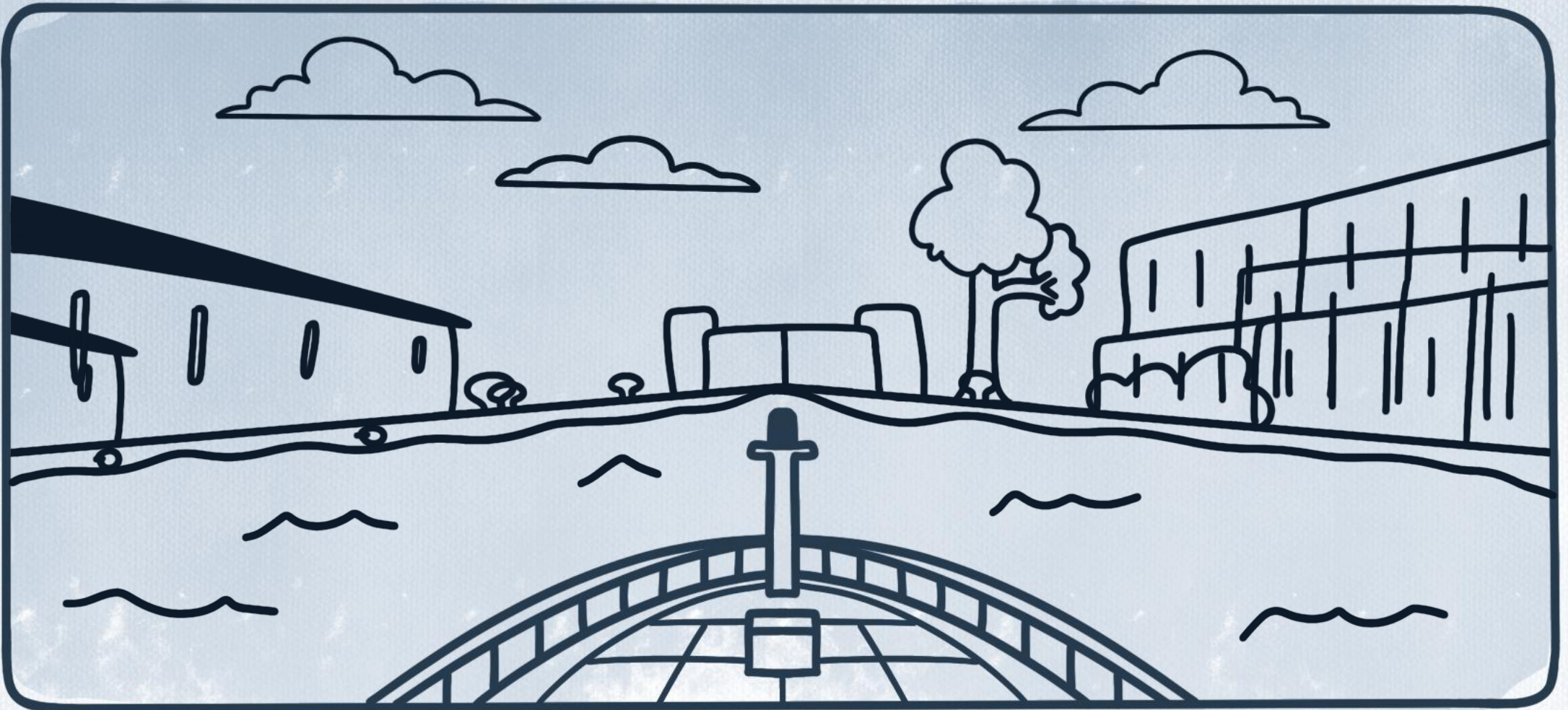
## Step 1:

- Time suggestion for next lock/bridge passage

## Integration:

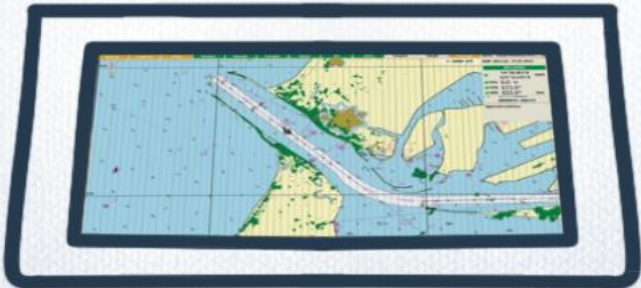
- Embed in existing systems like I-ECDIS
- Avoid new tools or apps

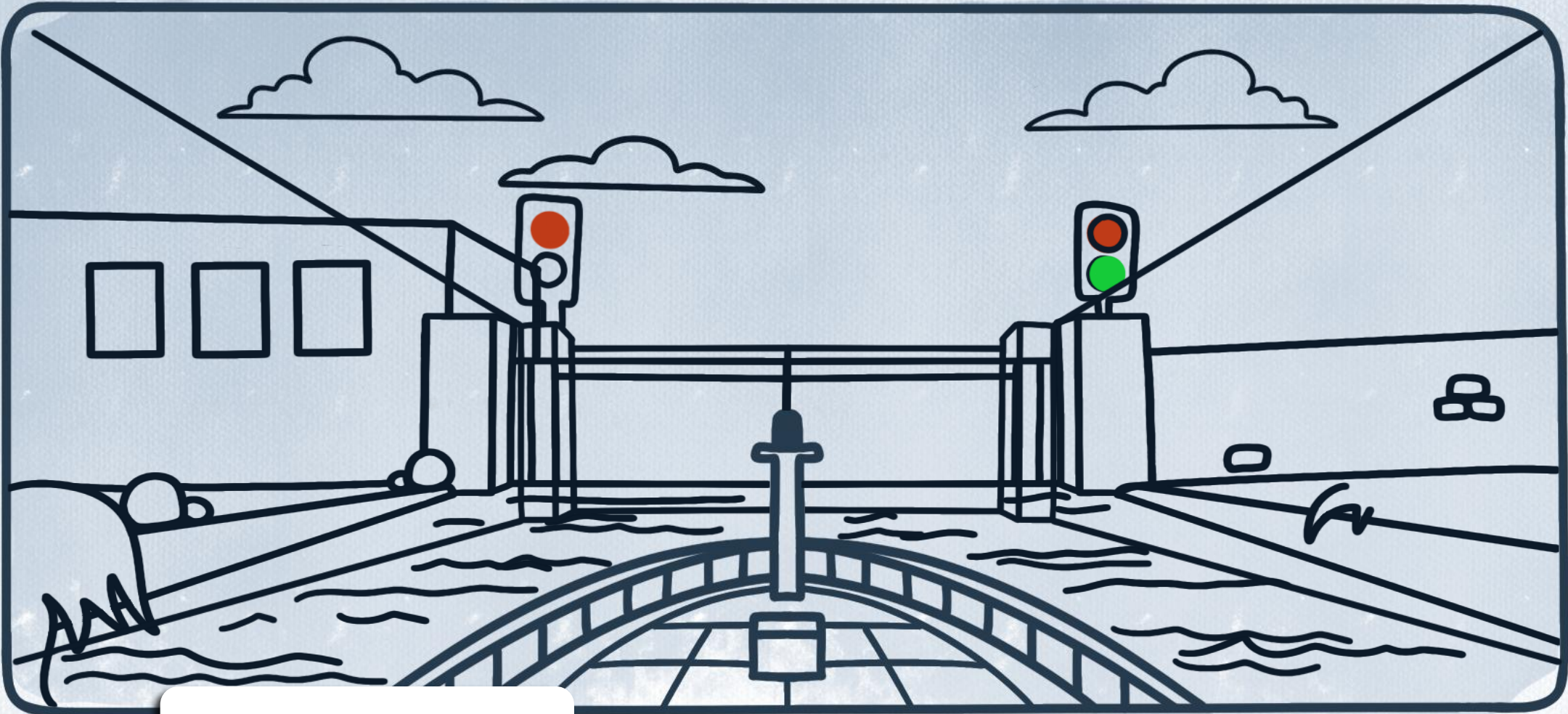
Shore side operations: no fundamental changes (but better operations)



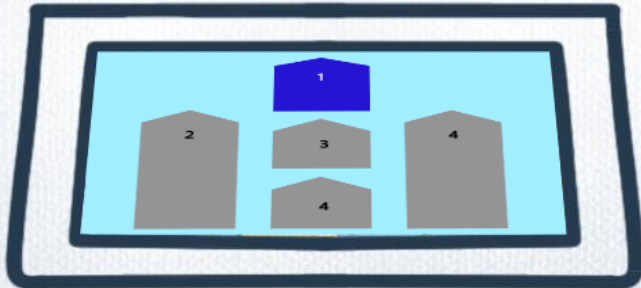
First lock

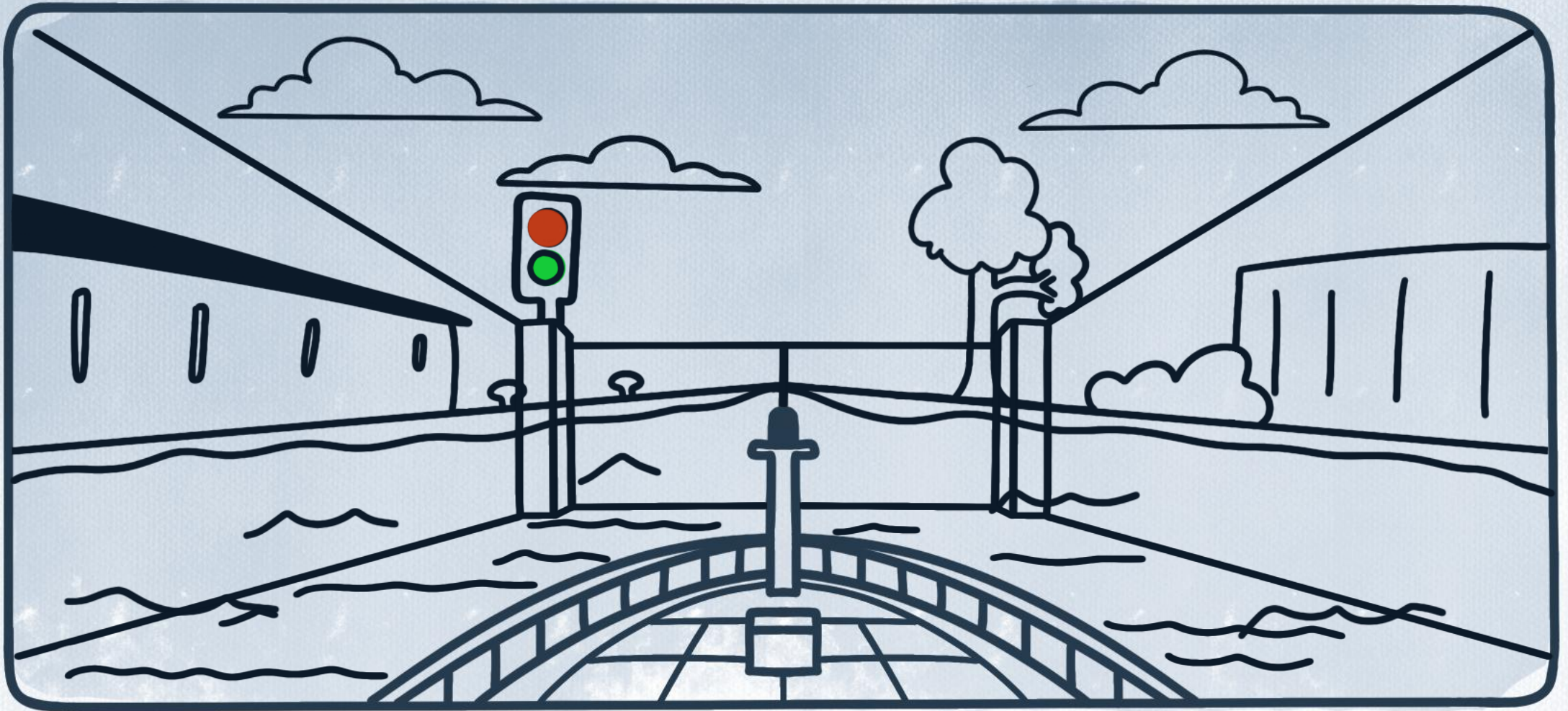
→ Request via VHF



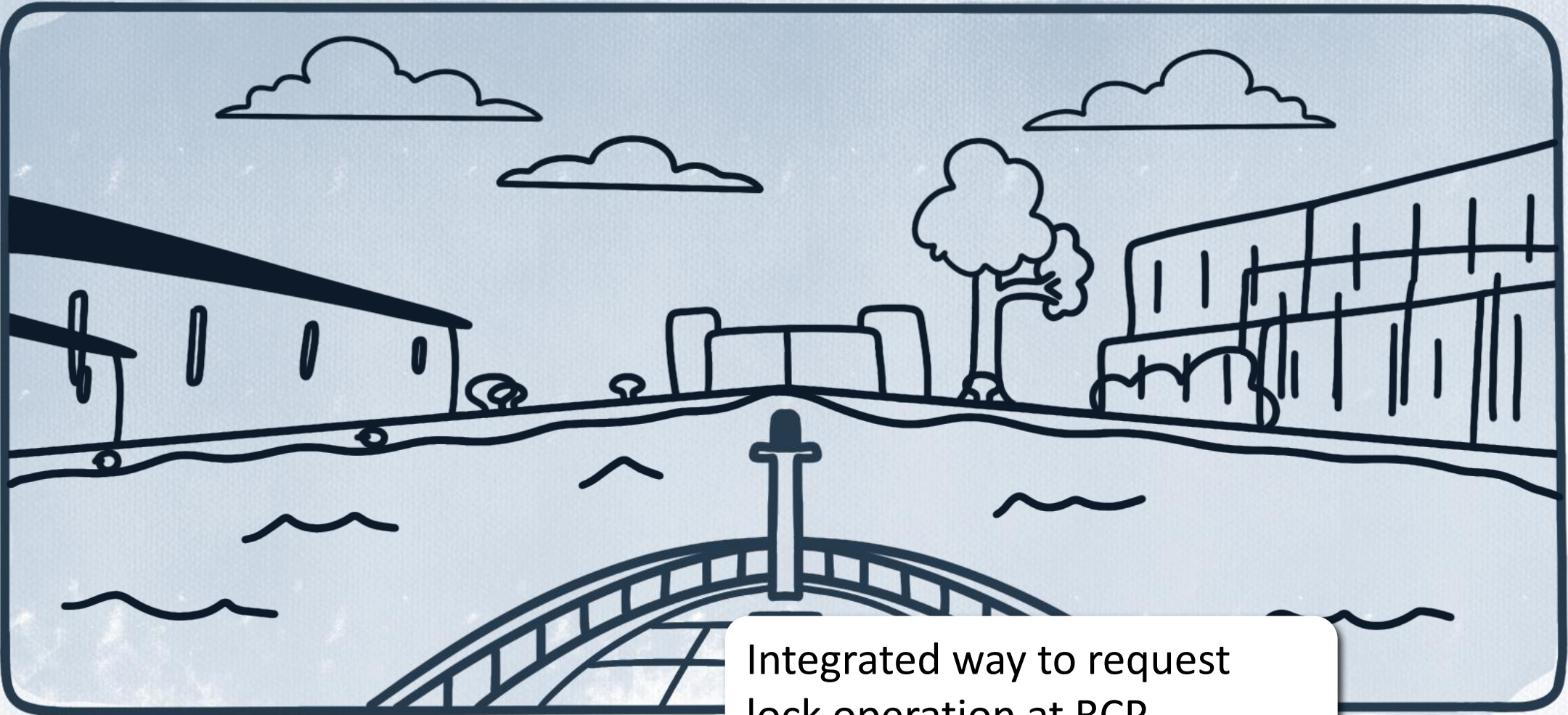


VHF or IECDIS



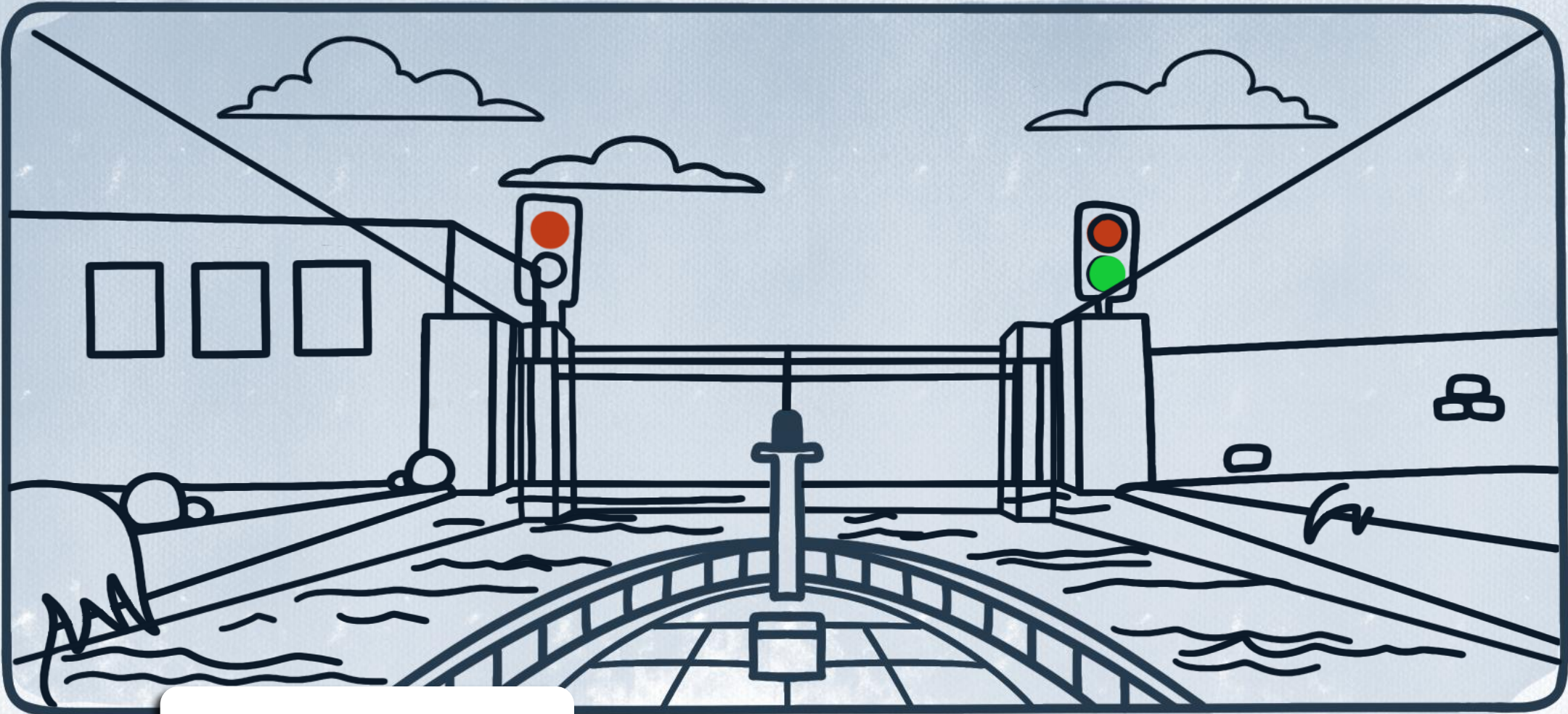


IWT-operator ETA next  
lock: 10h40 – 10h55

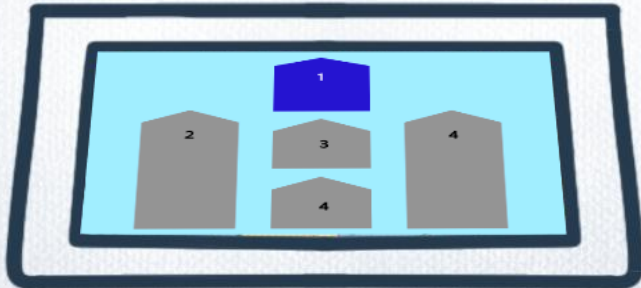


Integrated way to request lock operation at RCP





VHF or IECDIS



# Next Steps

- Shore side operations: (again) no fundamental changes
- Shore operation system: more intelligent system
- Change legal framework: Fifo at lock/bridge -> better guidance by WW-authority

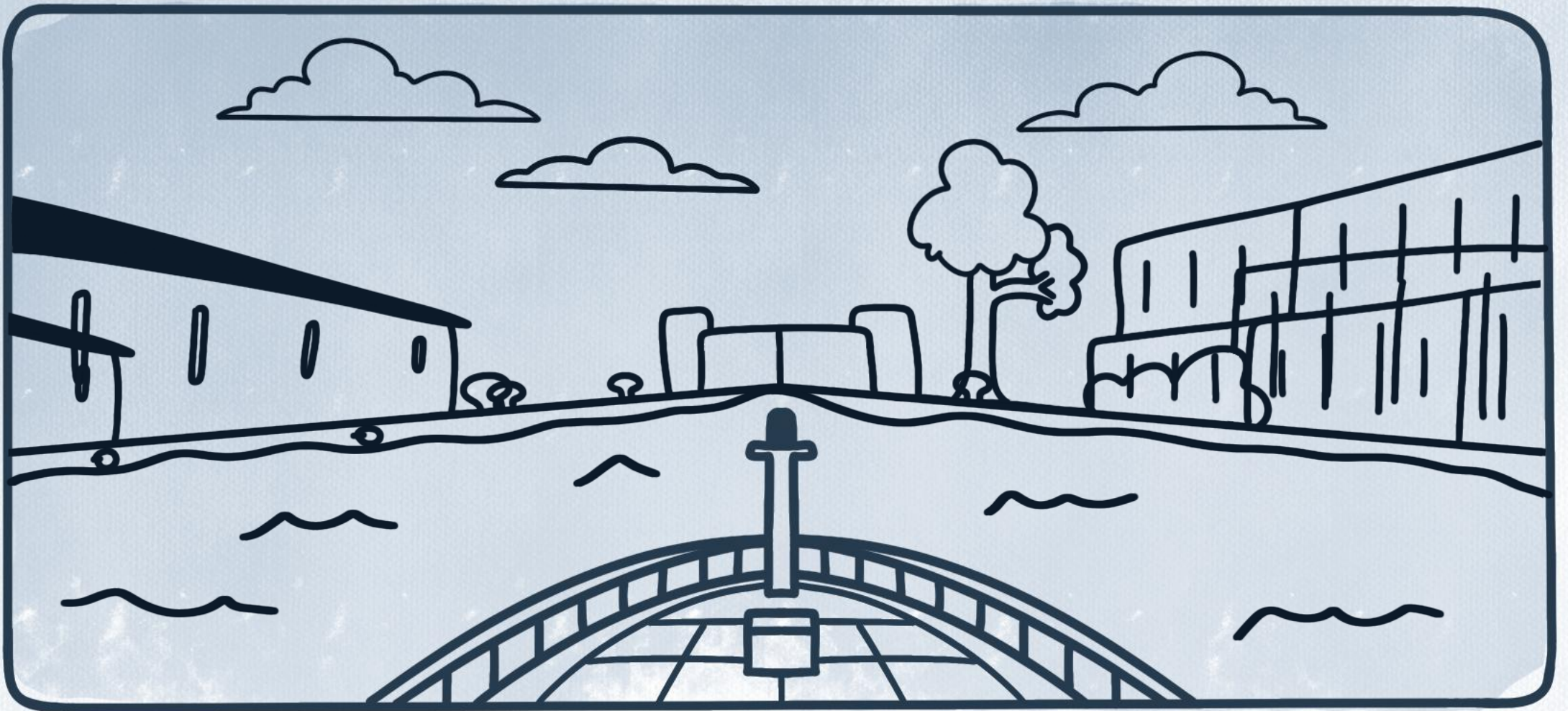


Based on your route, we will be able to schedule you in the next lock between 10h45 and 11h00

OK

Not OK

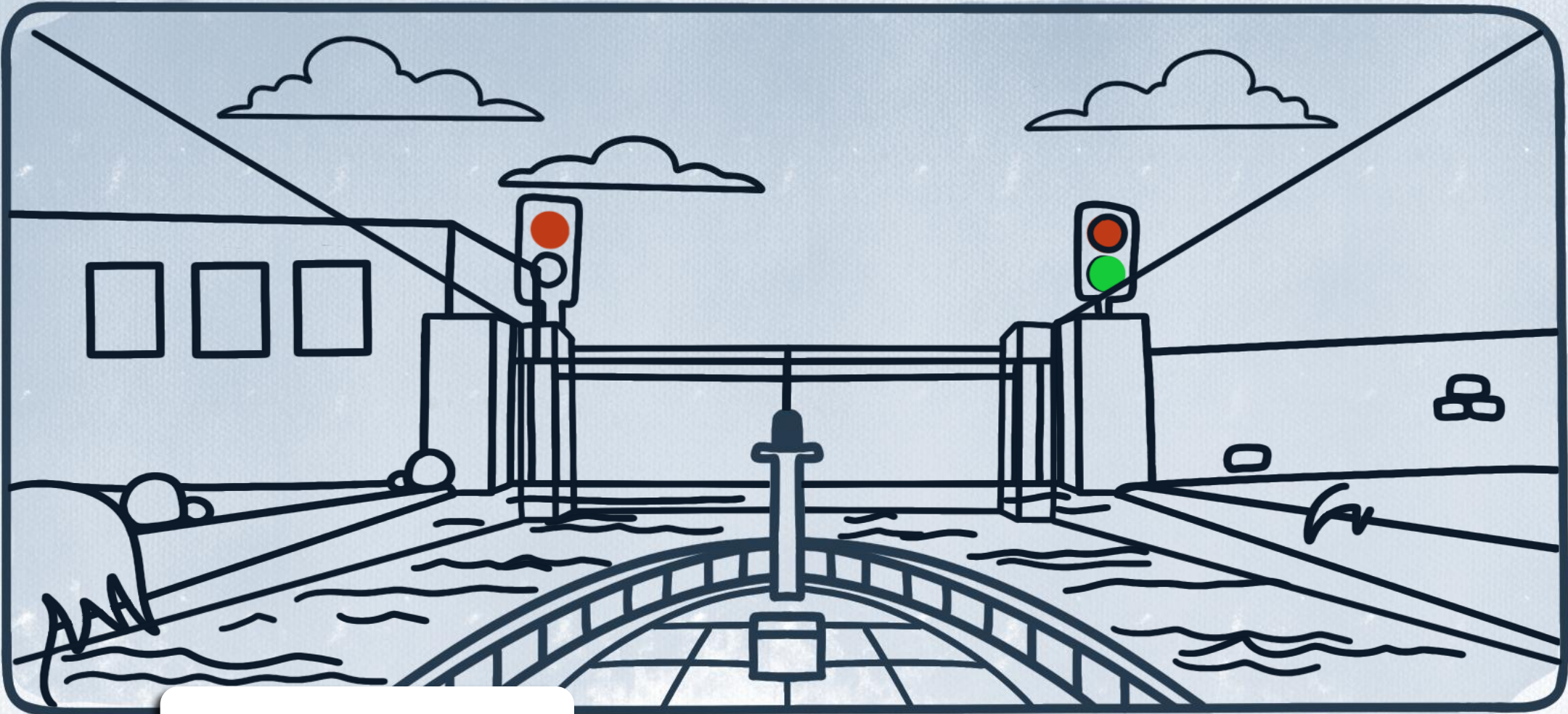




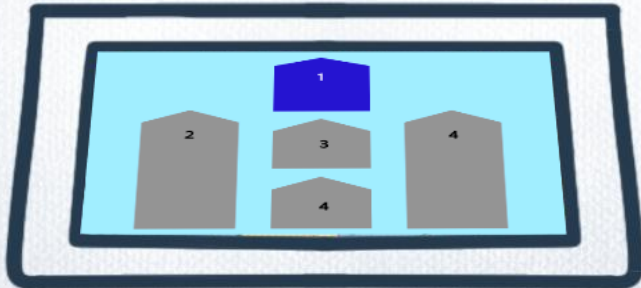
Confirm request between  
10u45 and 11u00

OK Niet OK





VHF still possible



# Questions?

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