CHAIN Afslutningsseminar
4. Oktober 2021

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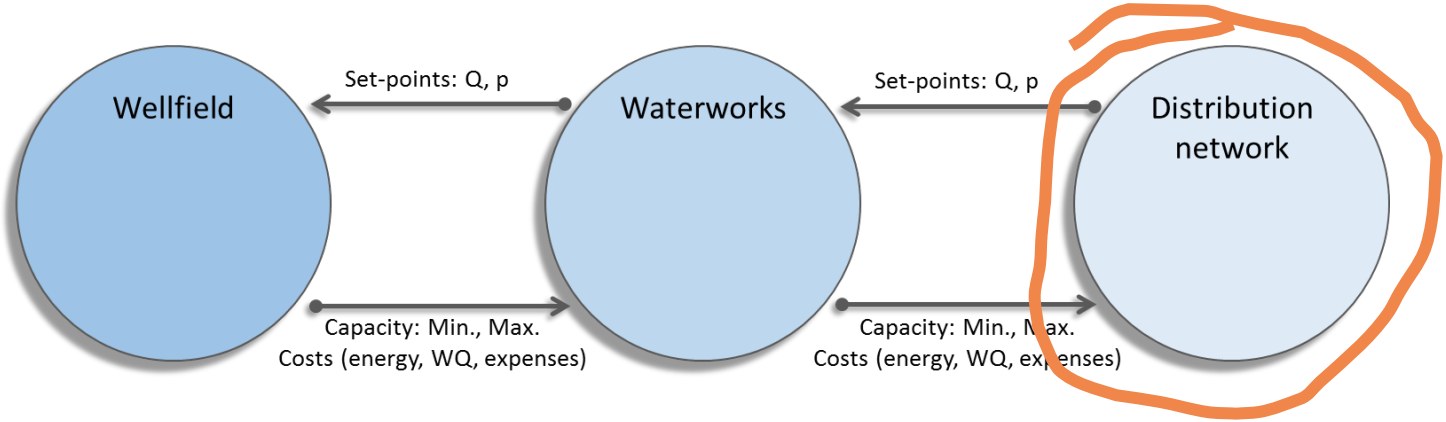
In this presentation

- RTC robot operational design.
- Parallel server for robot experiments.
- Model predictive control.



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Case study Aarhus Vand:
What we accomplished

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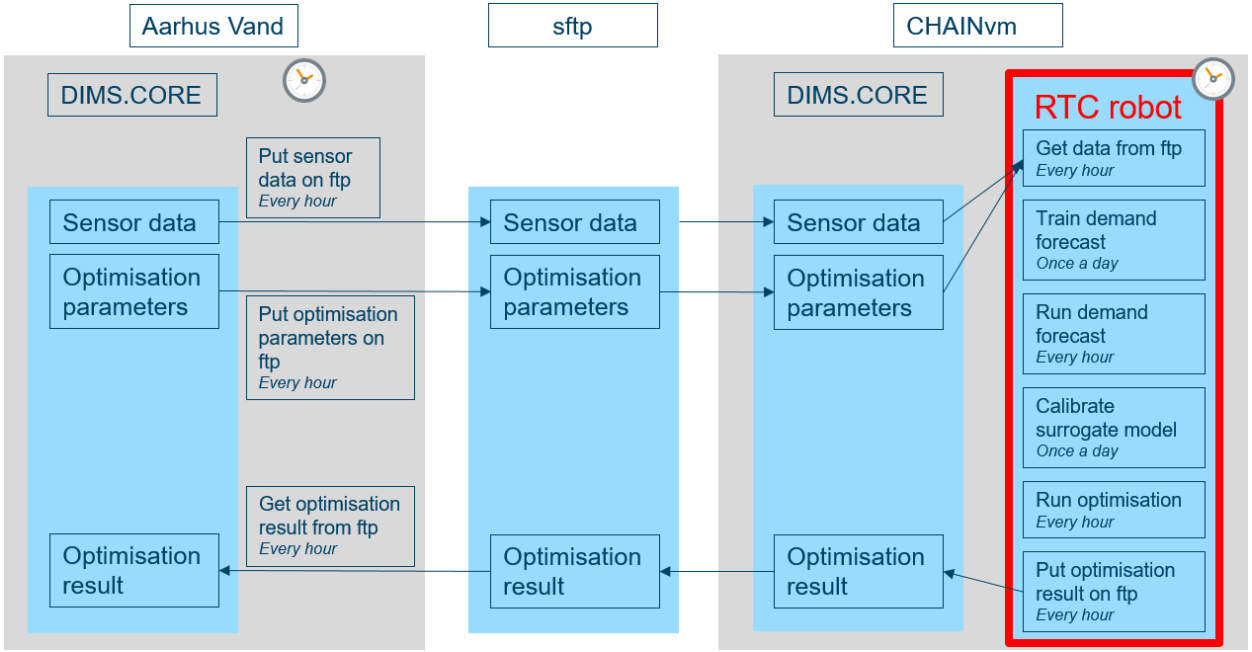
Operations in an automated workflow



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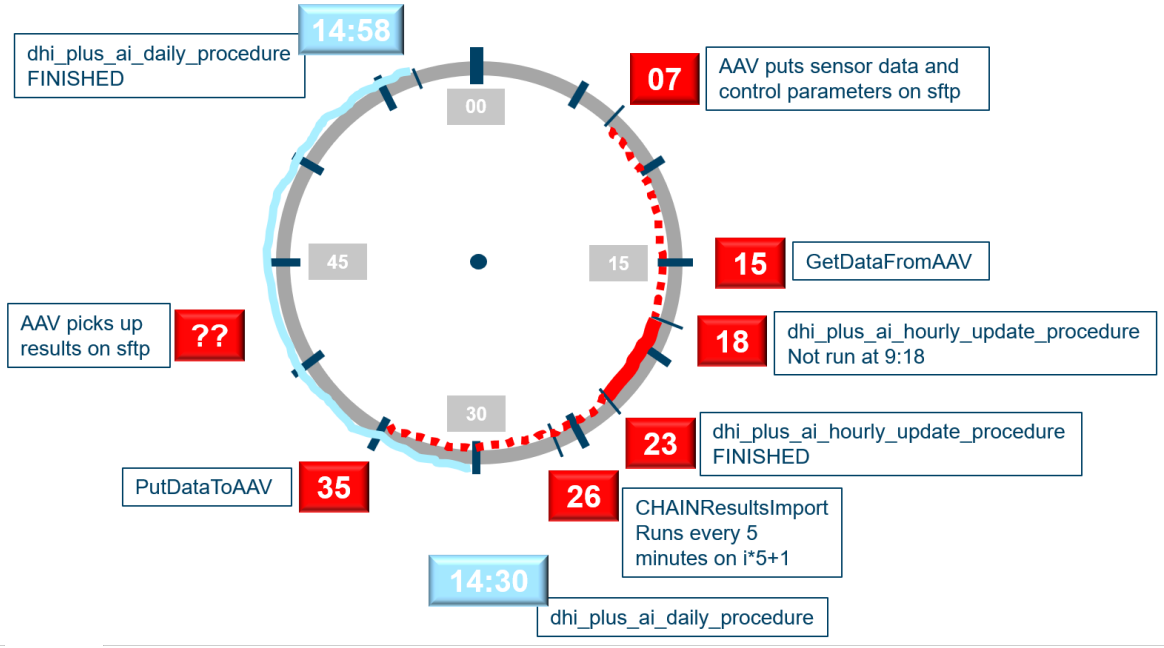
Operations in an automated workflow



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Benefits of
Model Predictive Control

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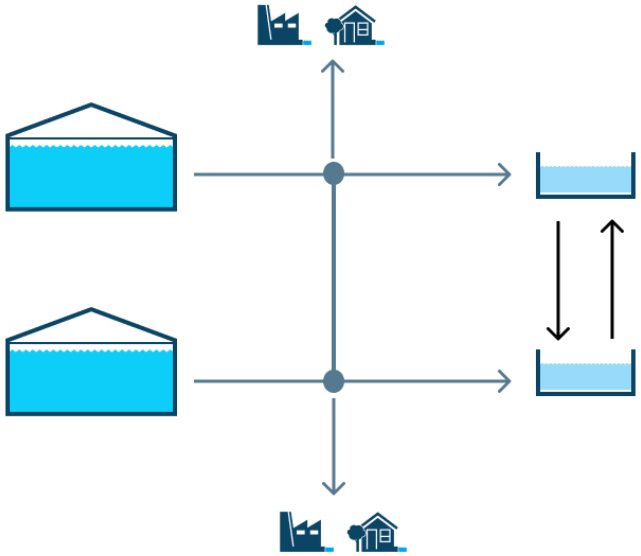
A water distribution system



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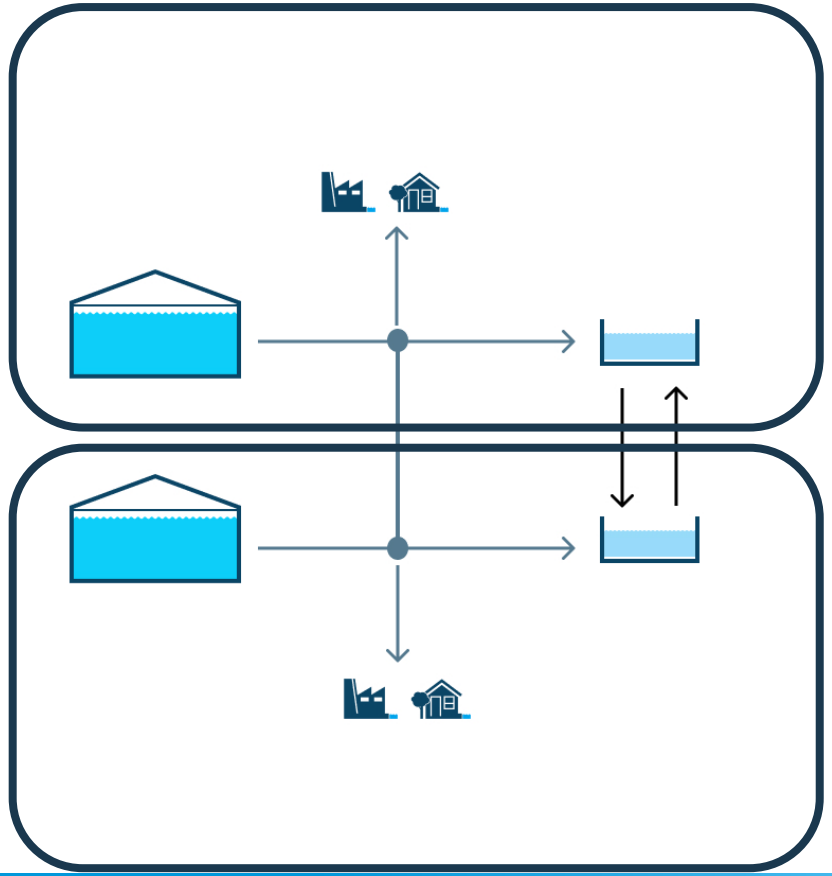
A water distribution system

Model Predictive Control

- Proactive
- Coordinates subsystems



Rule-based control

- Reactive
- Isolated control of subsystems

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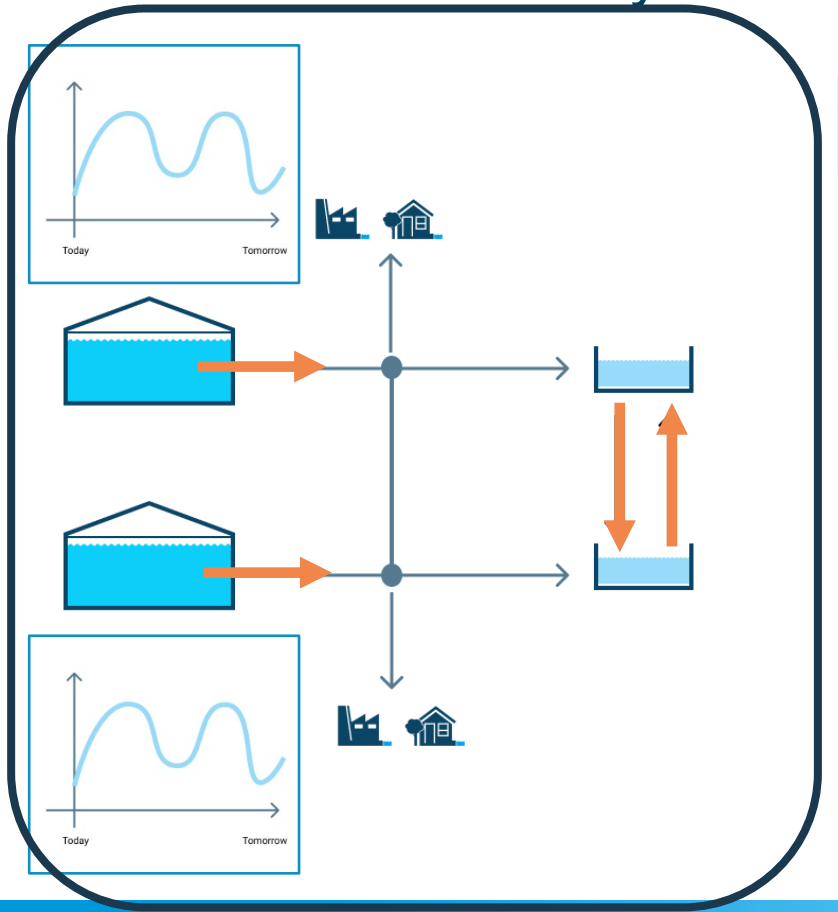
A water distribution system

Model Predictive Control

- Proactive
- Coordinates subsystems



Rule-based control

- Reactive
- Isolated control of subsystems

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Operations & Results

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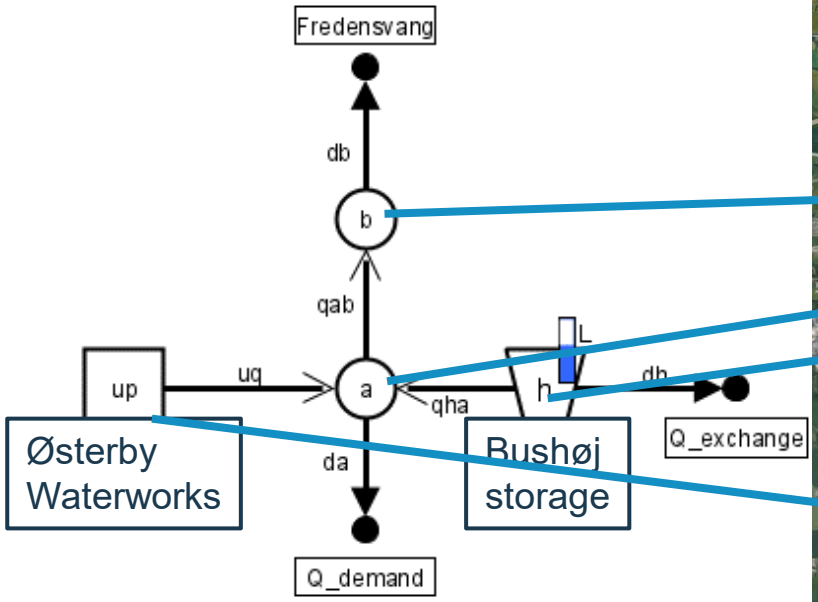
MPC for a pressure zone in a water distribution network



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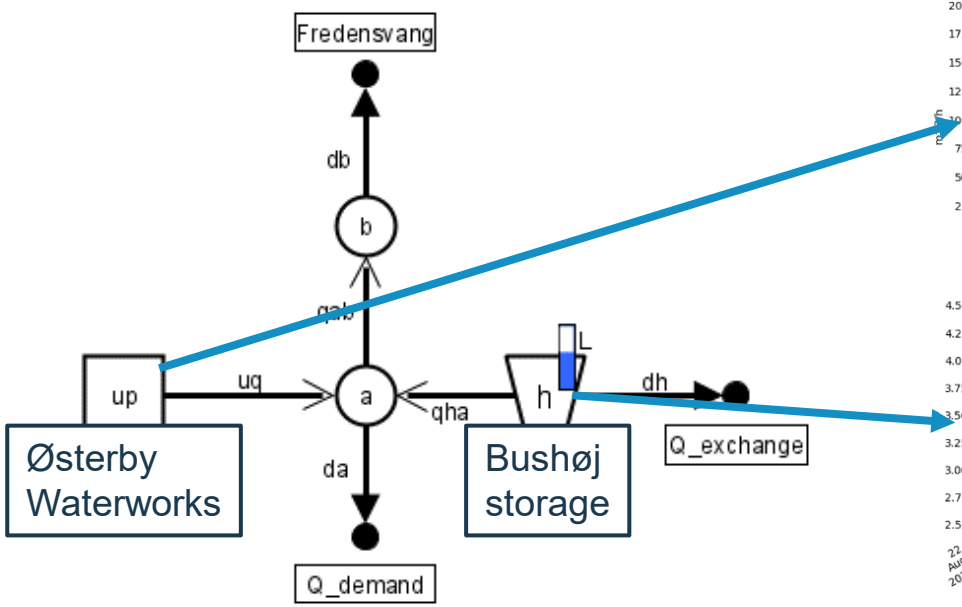
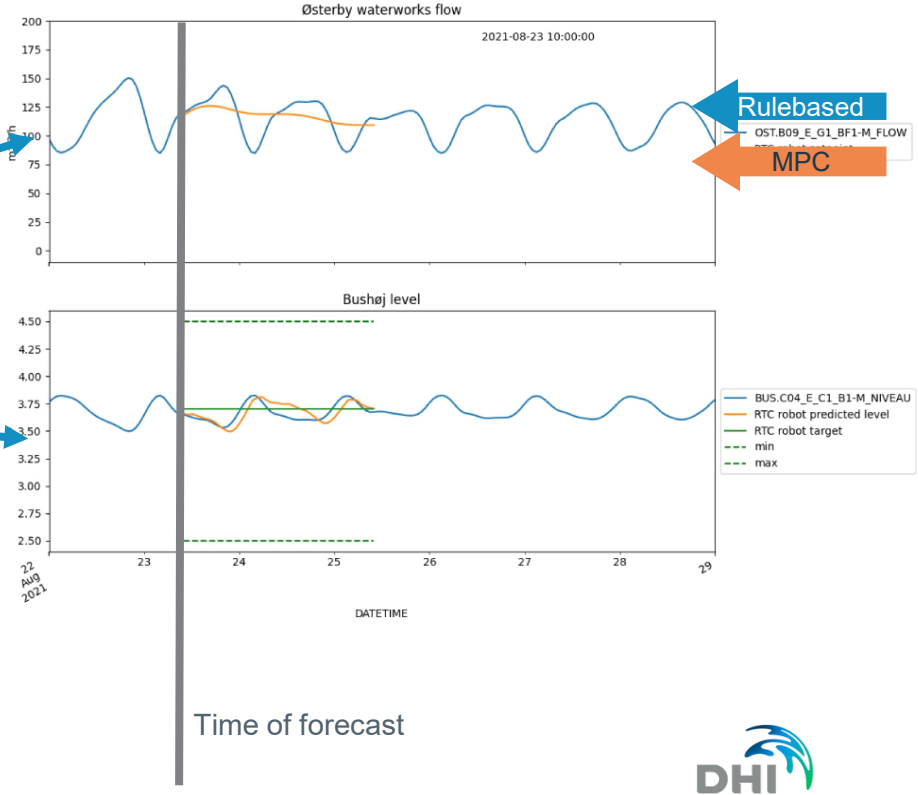
MPC for a pressure zone in a water distribution network





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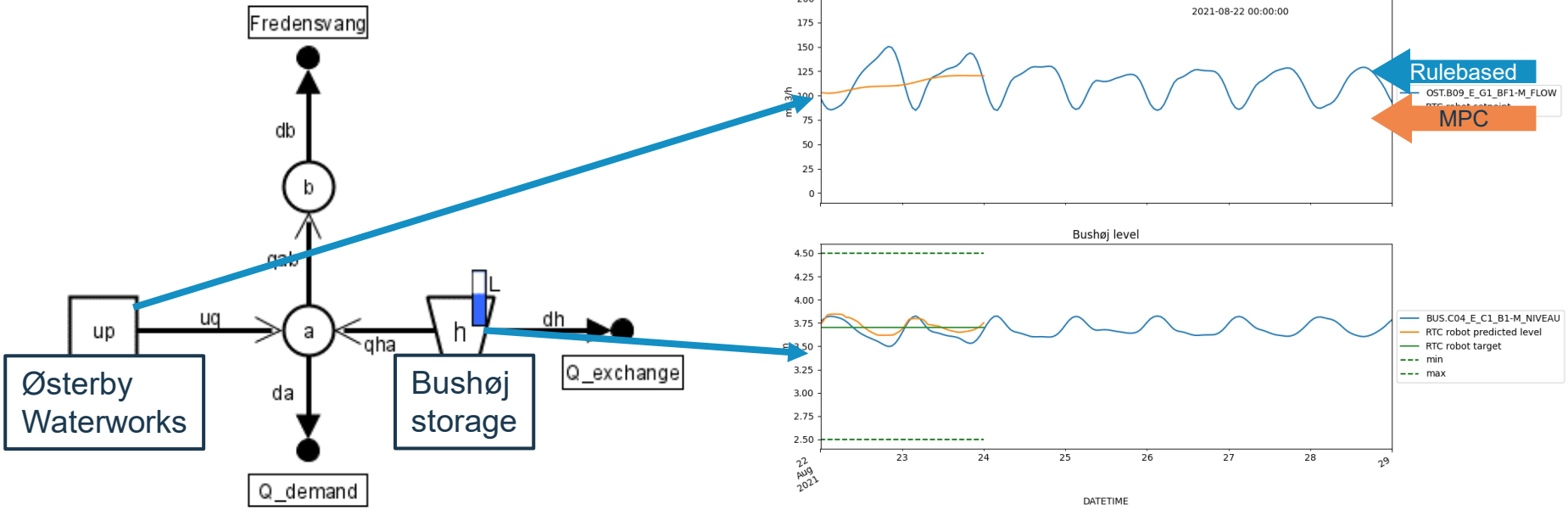
MPC for a pressure zone in a water distribution network



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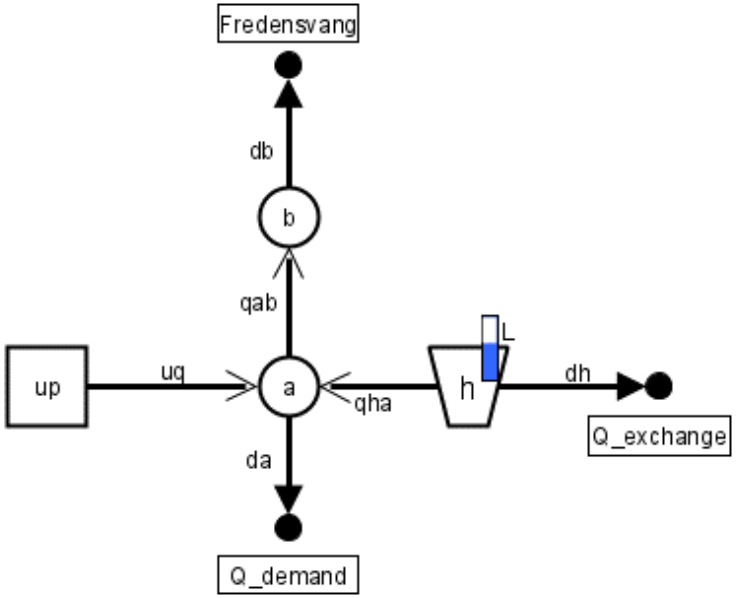
Experiences on model state selections



- Focused design for a specific purpose.
- Regular & structured meet ups with domain experts / staff.
- Better maintenance of the MPC.
- Proof-of-concept to replicate current strategy.

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