A photograph of three people sitting in a control room, viewed from behind. They are seated in black office chairs at a desk with multiple computer monitors. The monitors display various data, including maps, charts, and images of offshore oil rigs. The room is dimly lit, with light coming from the screens and large windows in the background.

## Digital Pioneering; from engineering via commissioning towards operation

Pieter Demeersseman, manager systems  
June 18<sup>th</sup> 2025



# Allseas – Who are we?

A world-leading contractor in the offshore energy market, with **dynamism, rapid progress and pioneering spirit** at our core.

**Designed and optimised in-house**, our fleet of record-breaking construction and support vessels exceed the limit of what is possible above and below the water surface.

Develop state-of-the-art equipment and specialised tools to **improve safety, efficiency and productivity** of our vessels

From bold ideas to building, design and operation – **all in 1 company**

**Responsible family company** that ensures its people can work safely and passionately to be productive in a sustainable way.



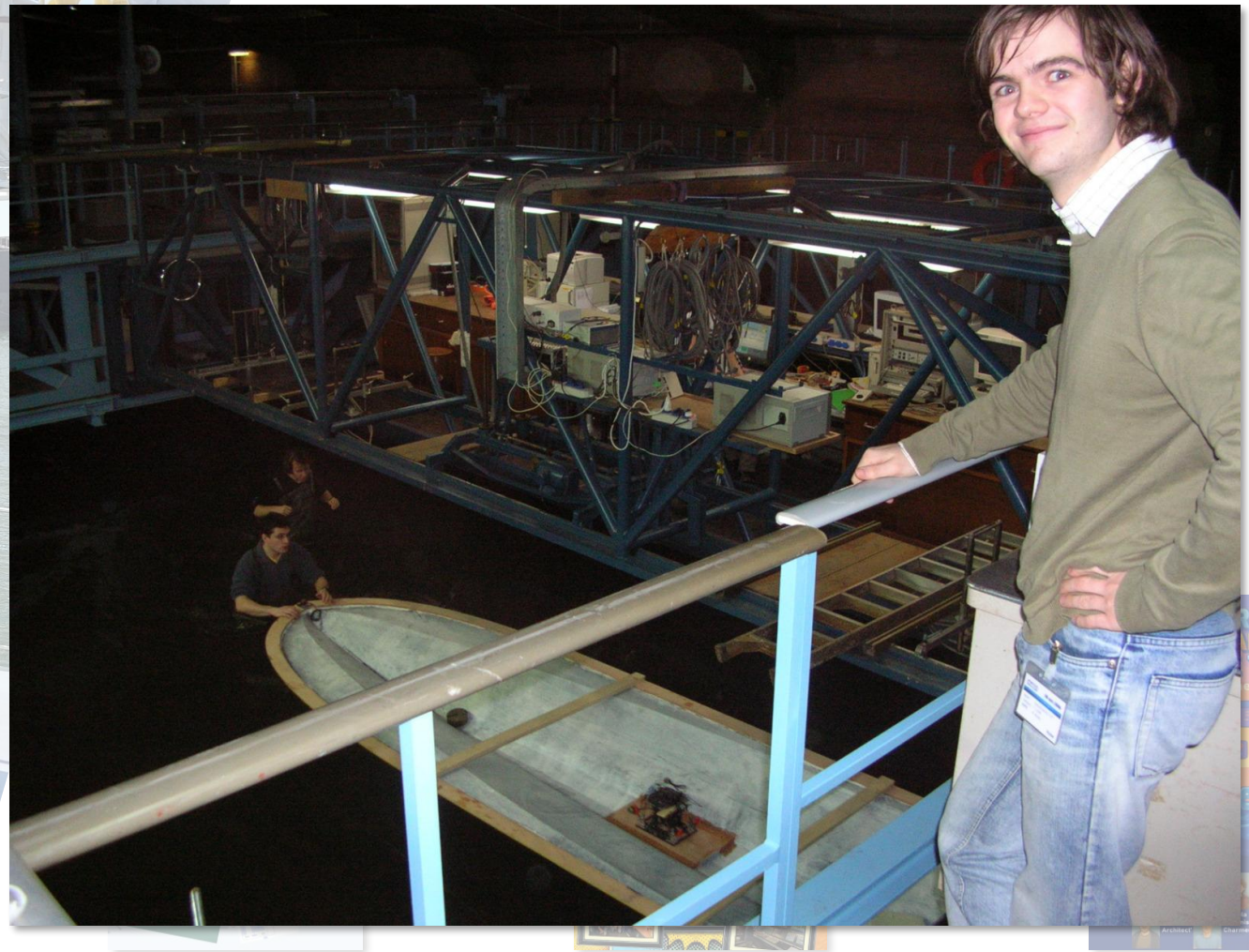




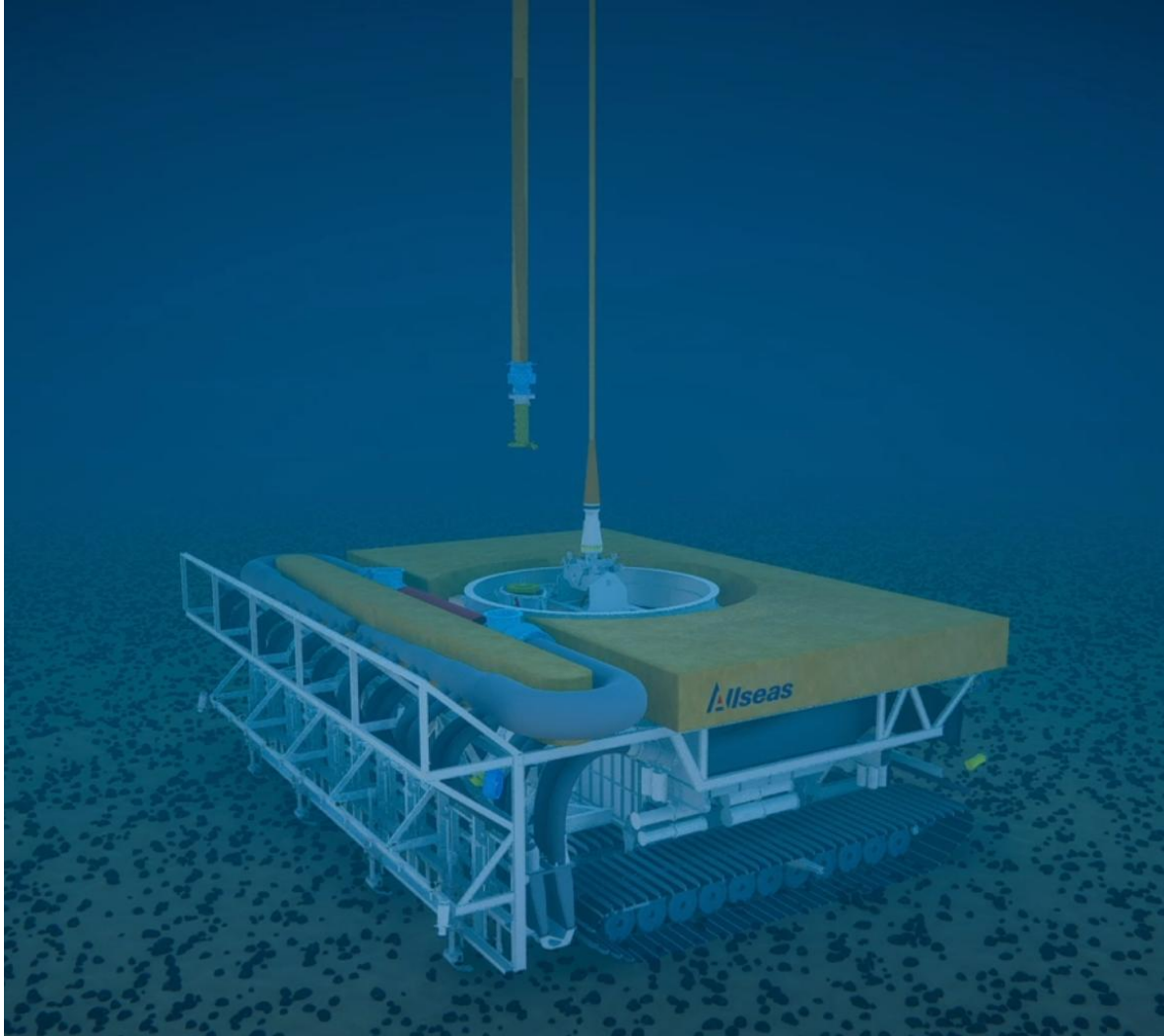
Allseas' activities







# Why digitalisation matters so much



There is simply no other way...

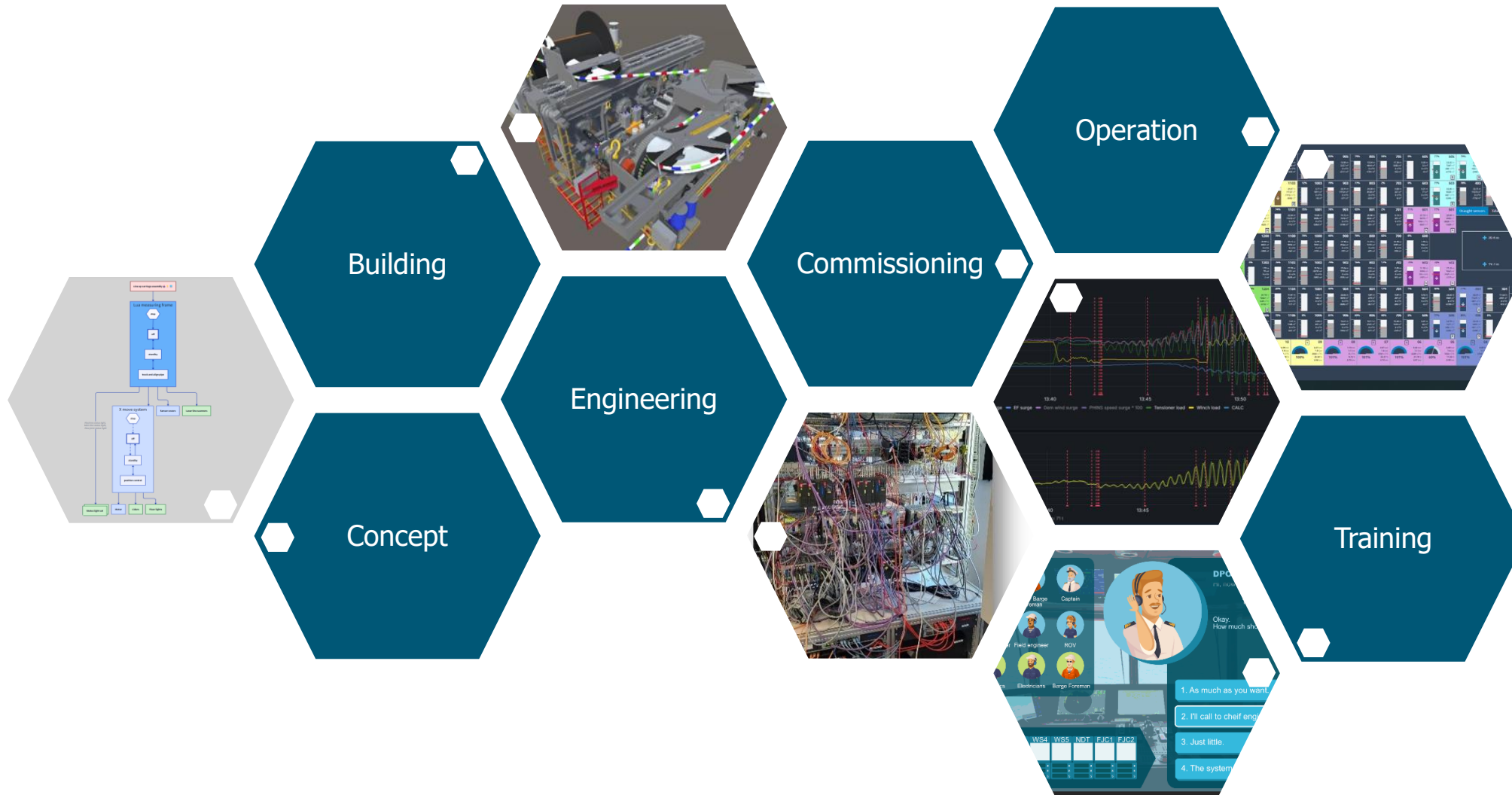
Allseas' agility requires speed and iteration

while maximizing

- ⚙️ Operability
- 🧠 Knowledge safeguarding
- ✅ Quality
- 🎉 Fun



# A holistic approach to digitalisation



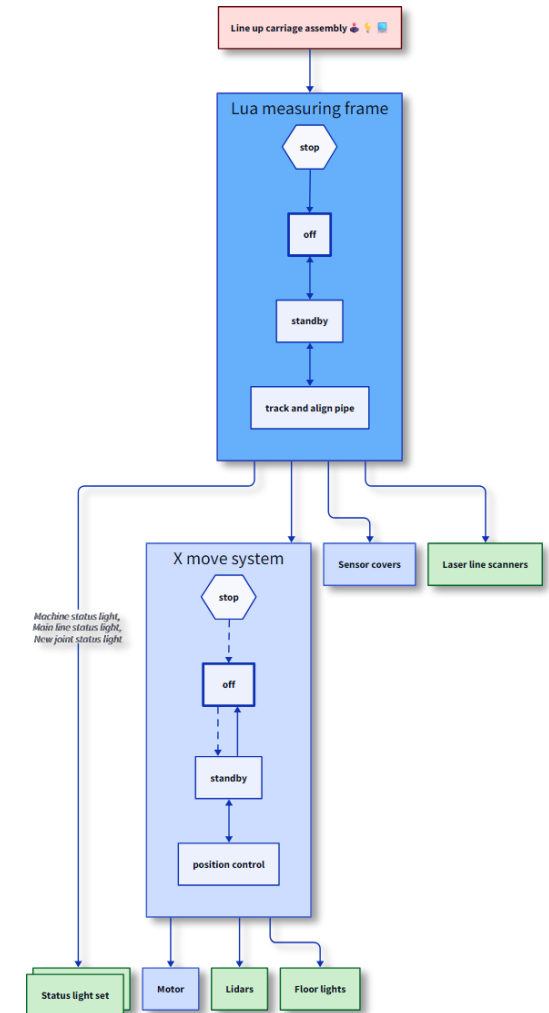
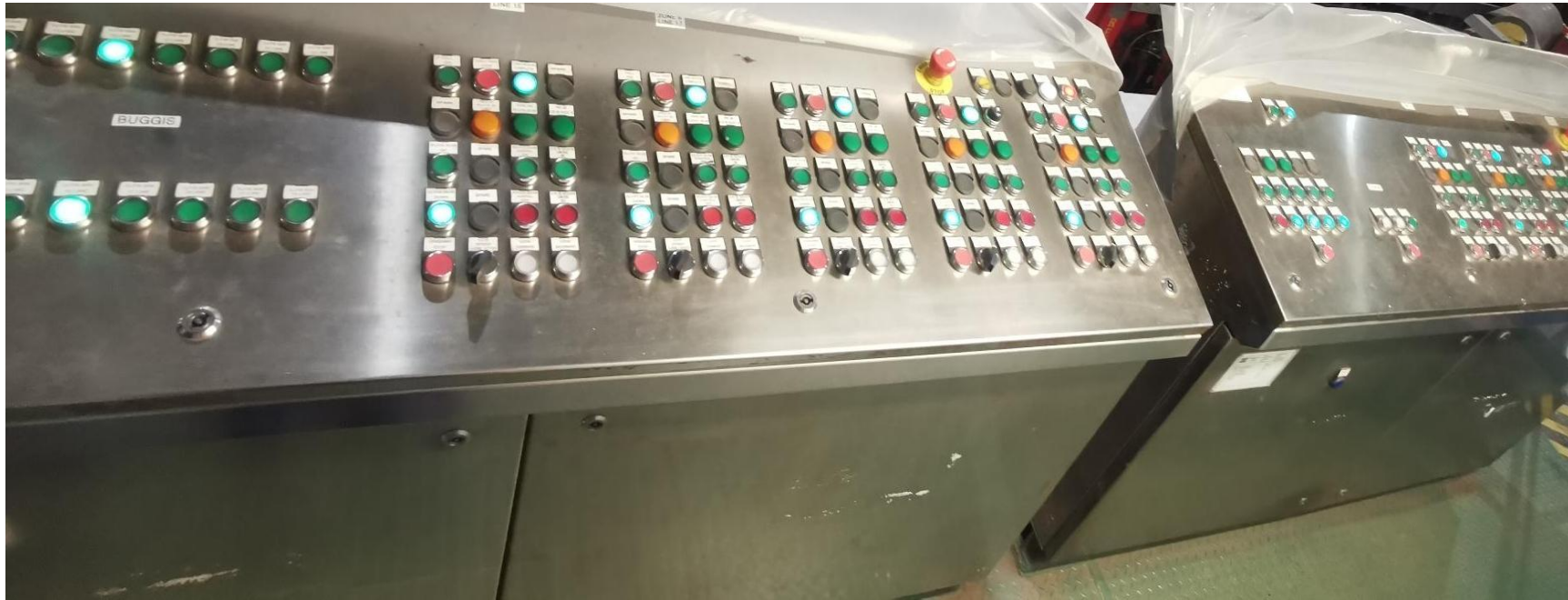
# The concept is digital

Functionality thinking

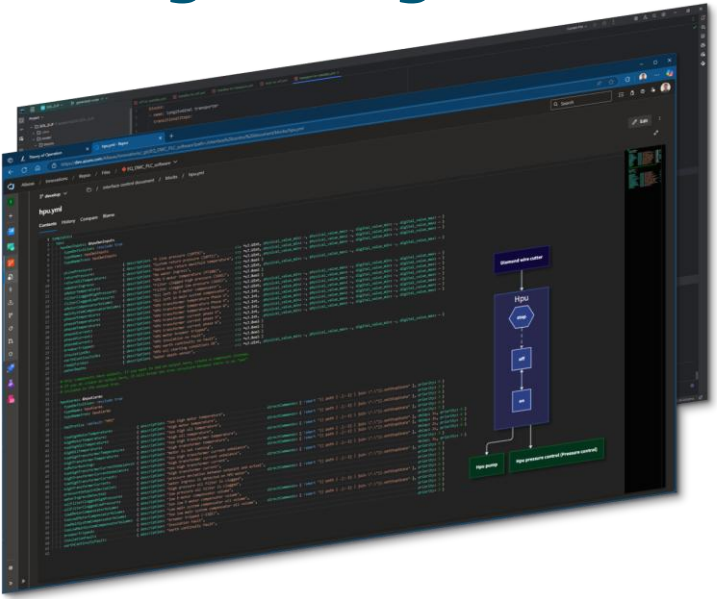
Digital not an add-on

System modularity is key

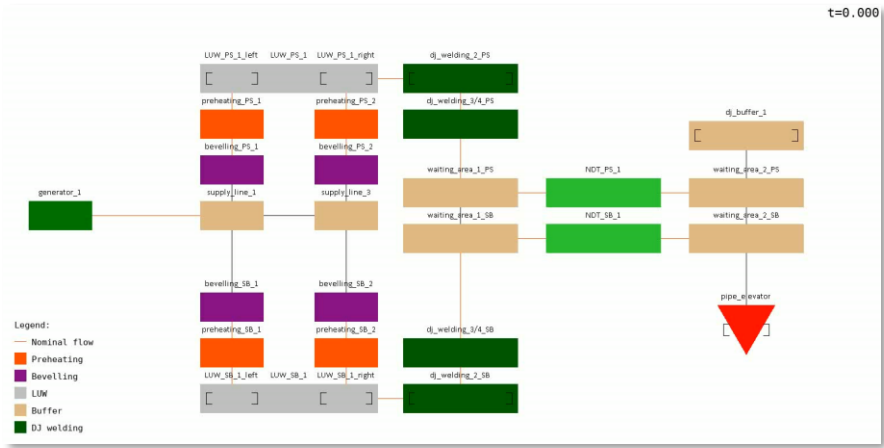
*"if you automate a mess, you get an automated mess"*



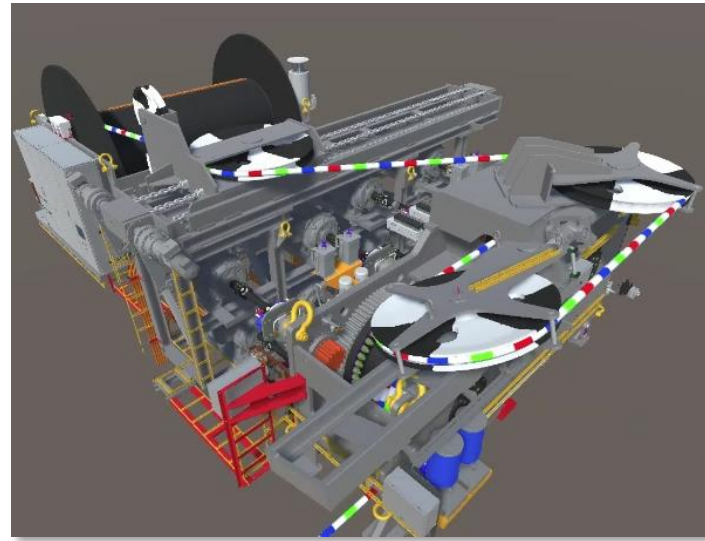
# Engineering for digital



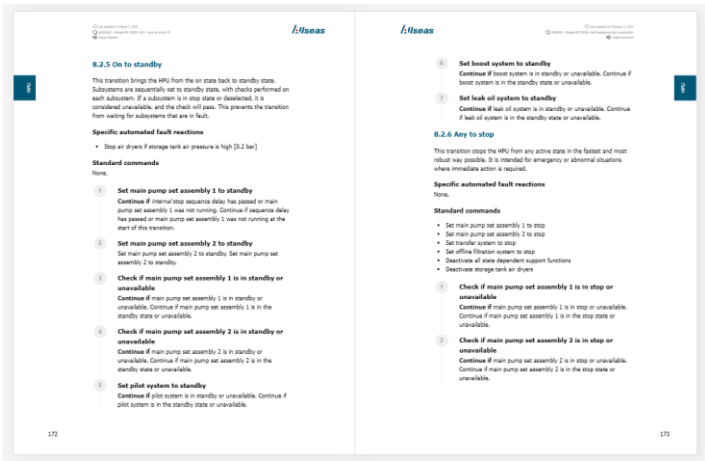
Enrich digital model with interfaces



simulations set the basis



Modelling starts here

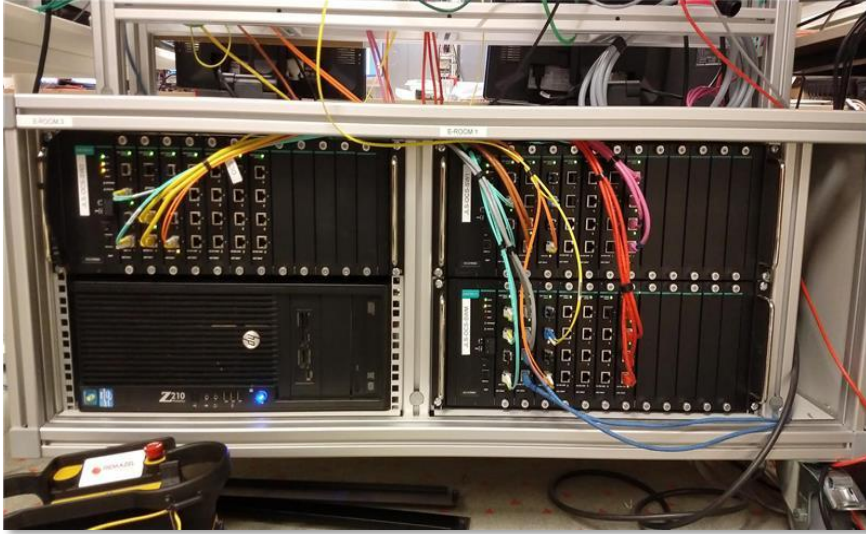


Document 'as-code'

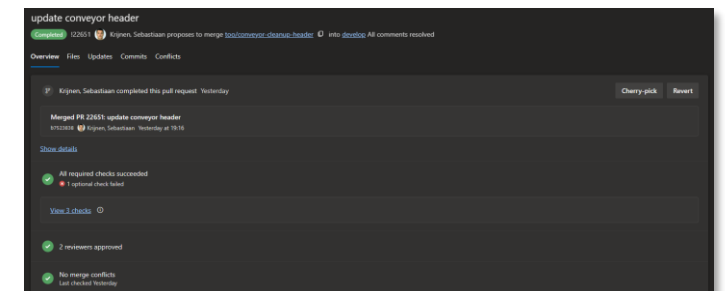


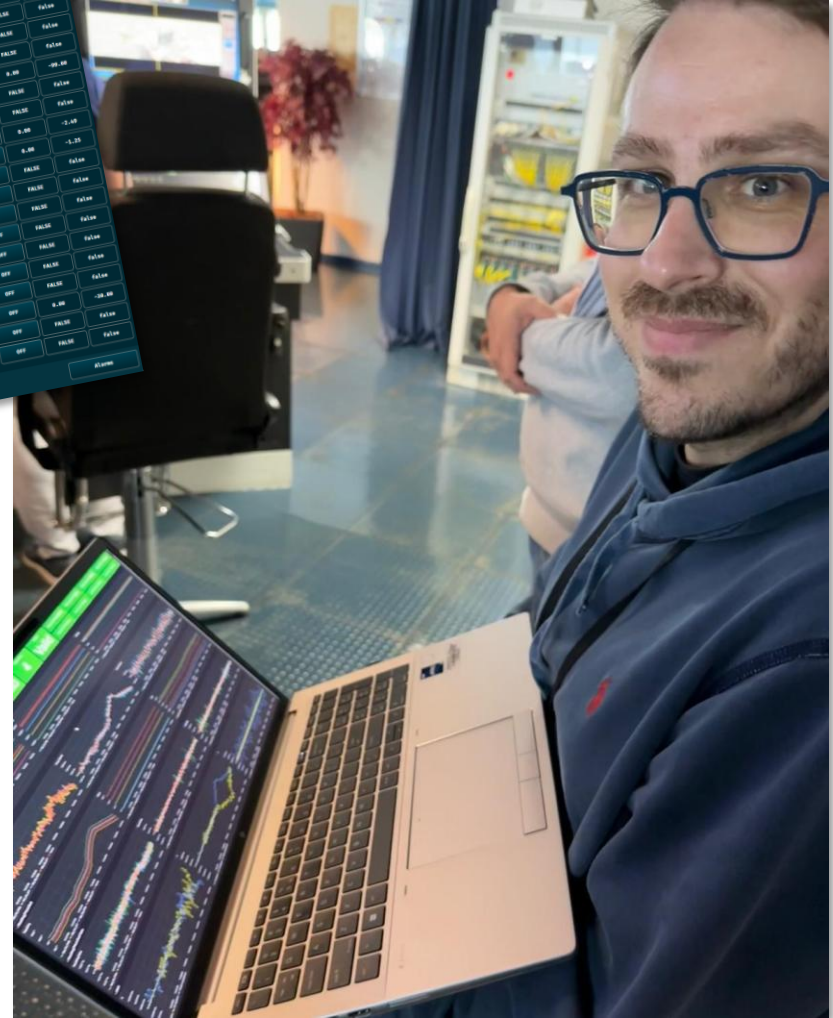


# Build it like software



**Modularity**  
**Fail fast**  
**You never test once**  
**Harvest your digital investments by tooling**

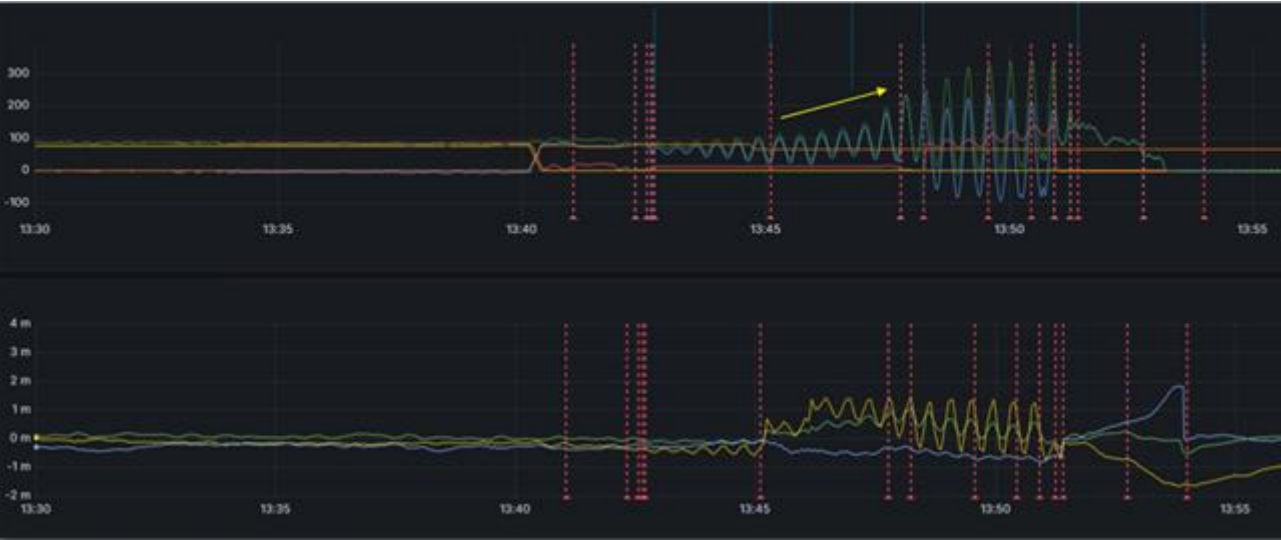
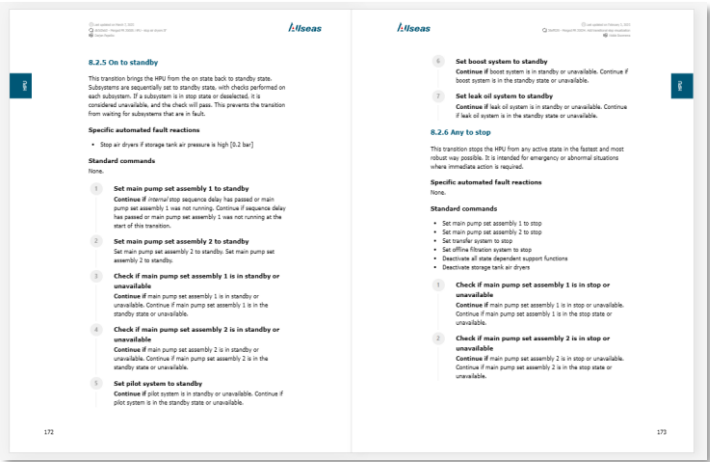




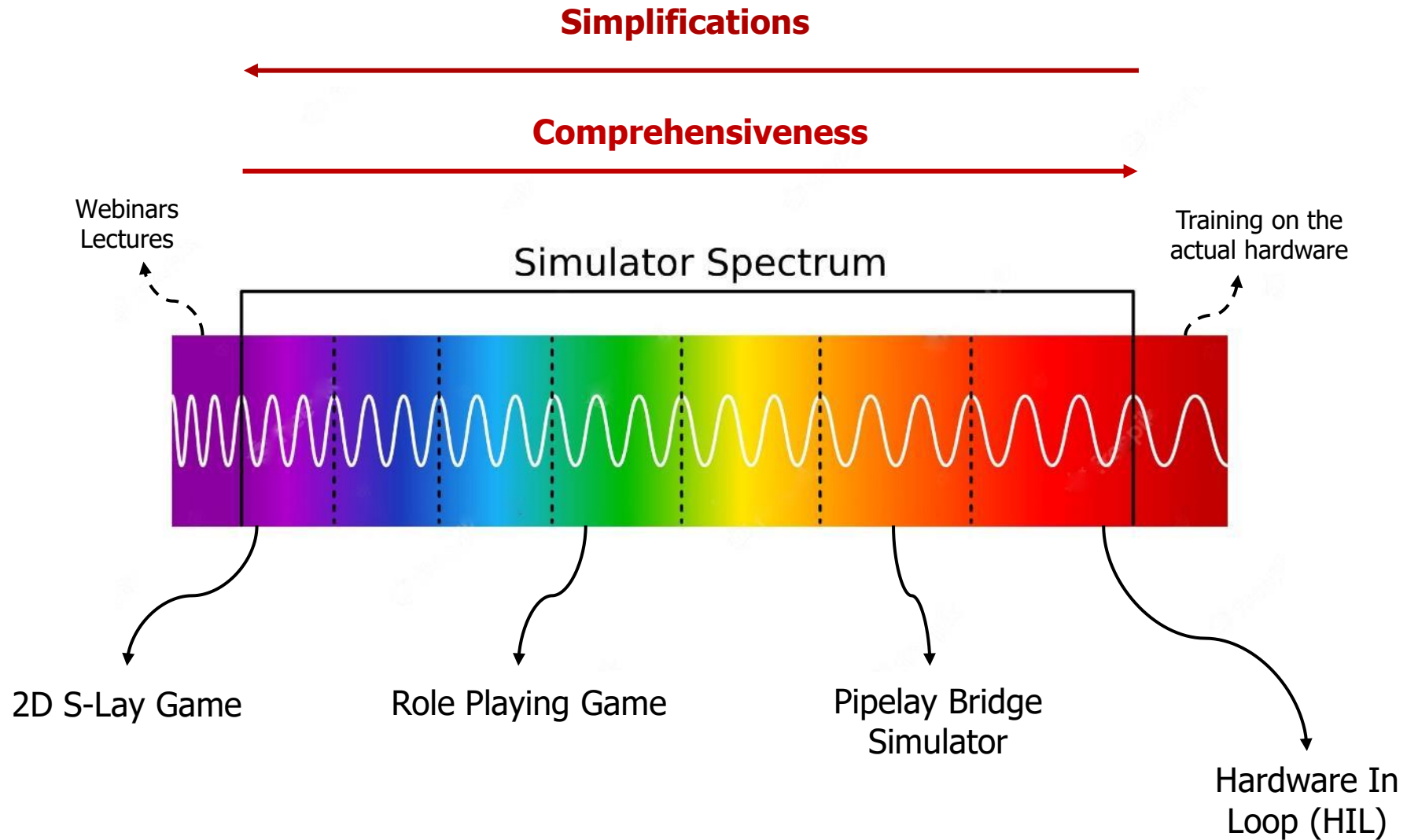


# Operate smart

- Operational insight and advice for operations and maintenance
- Remote support
- Up to date engineering info
- Data analysis for learning



# I want a simulator!







In-house developed pipelay simulator for training bridge crew including tensioner and DP operators

Developed based on *Solitaire* equipment | Other vessels to follow | Training of crew ongoing



## Key learning & challenges

- Shifting digitalization left
- Openness and modularity are key
- Focus on the foundation



