

Manned Underwater Operations in Aker BP

Experience and Future Strategy

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Aker BP portfolio overview



Alvheim area (operator)

High production efficiency and continued resource growth



Valhall/Hod (operator)

Billion barrels produced, ambition to produce another billion



Ivar Aasen (operator)

Pioneering digital operations model



Skarv / Ærfugl (operator)

Strong base performance and area upside potential



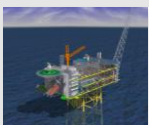
Ula/Tambar (operator)

Late life production with significant upside potential



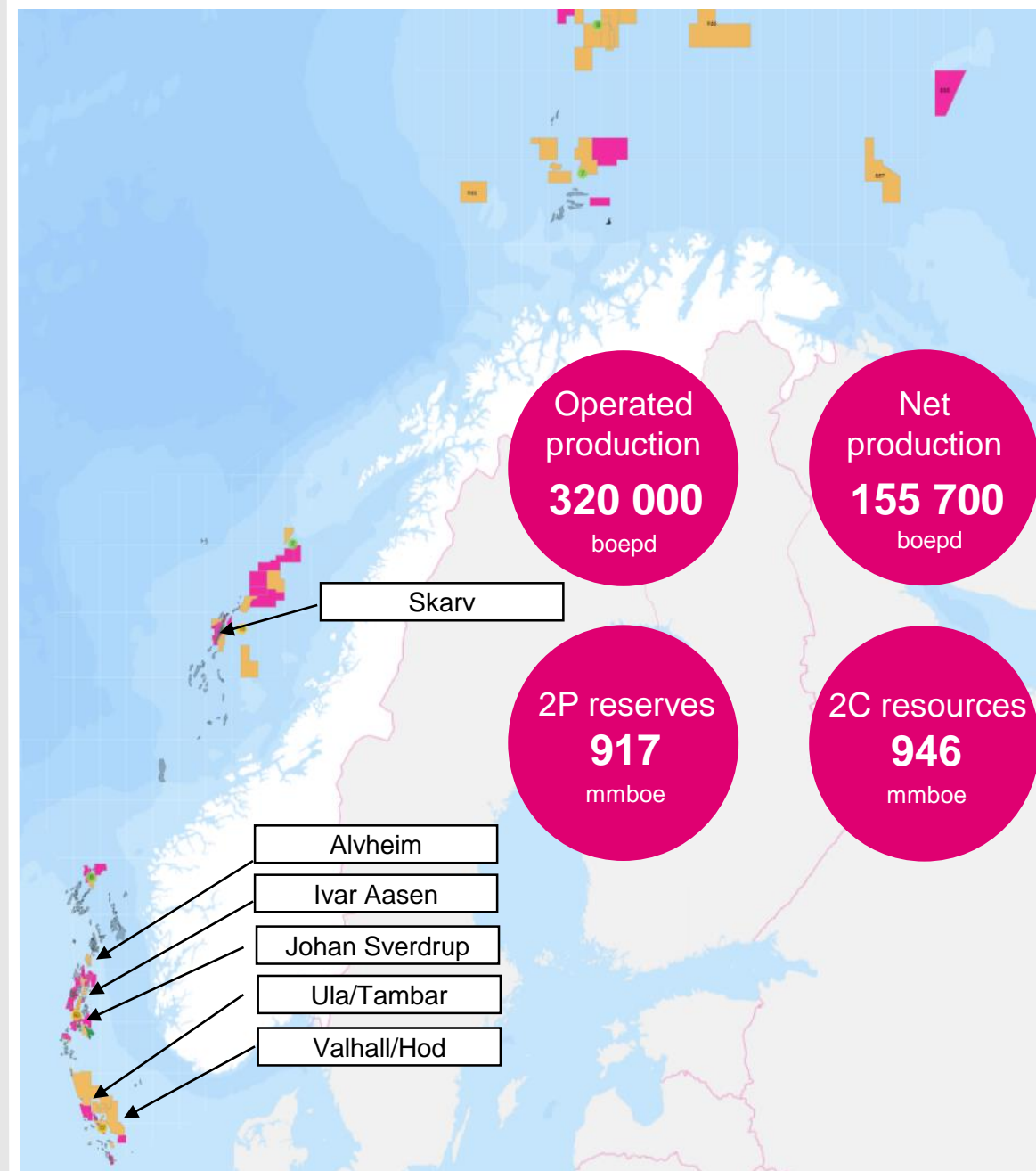
Johan Sverdrup (partner)

World class development with superior economics



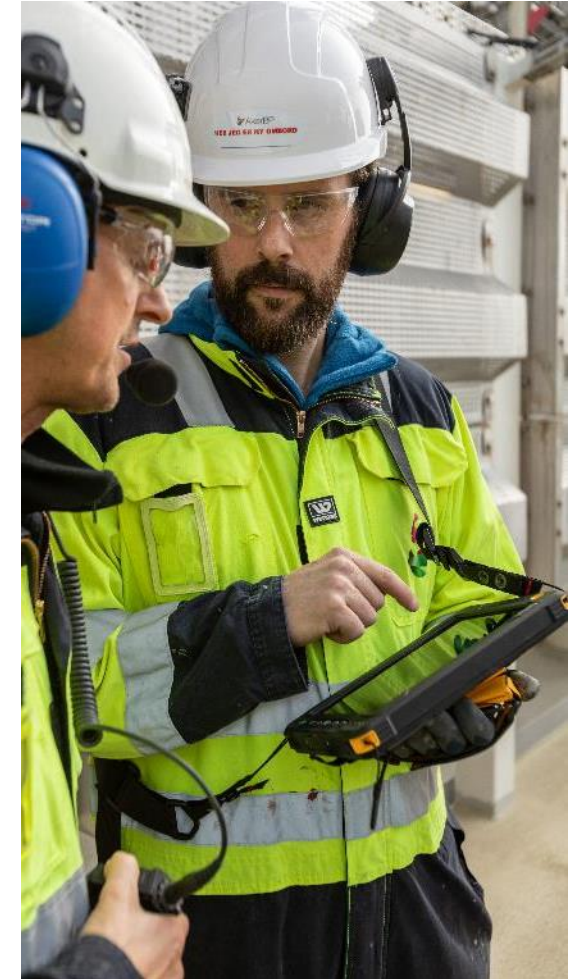
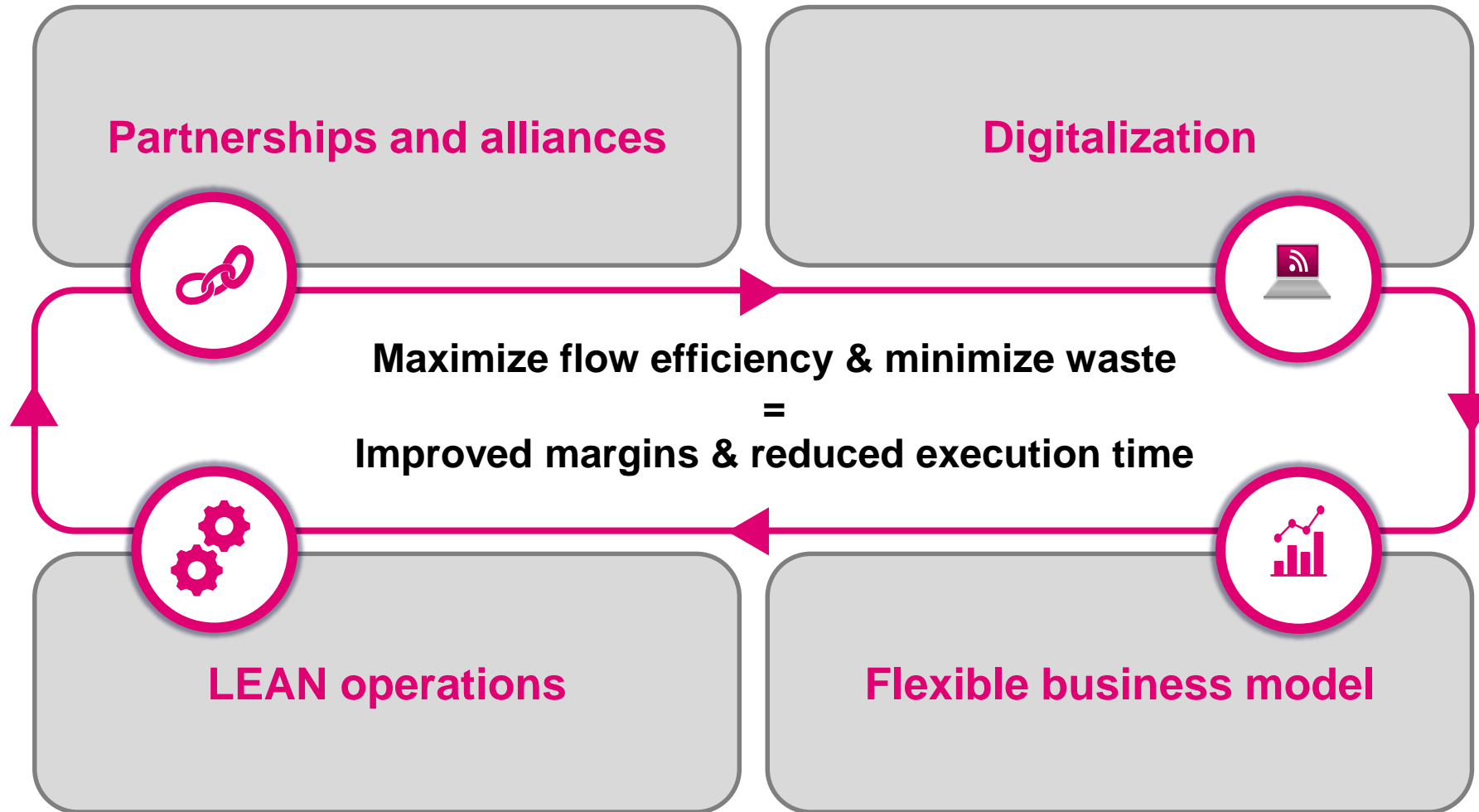
NOAKA (operator)

Targeting an area development



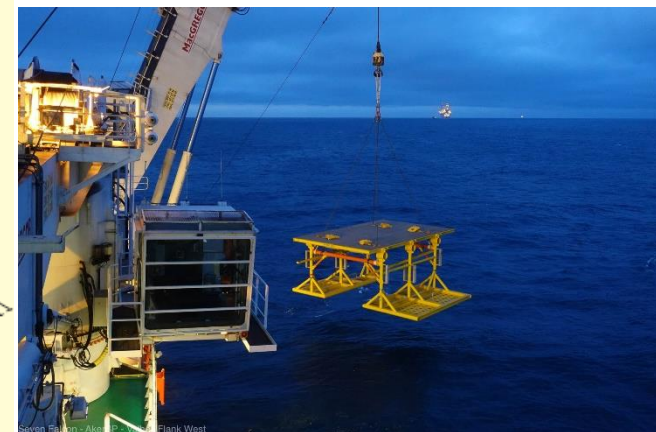
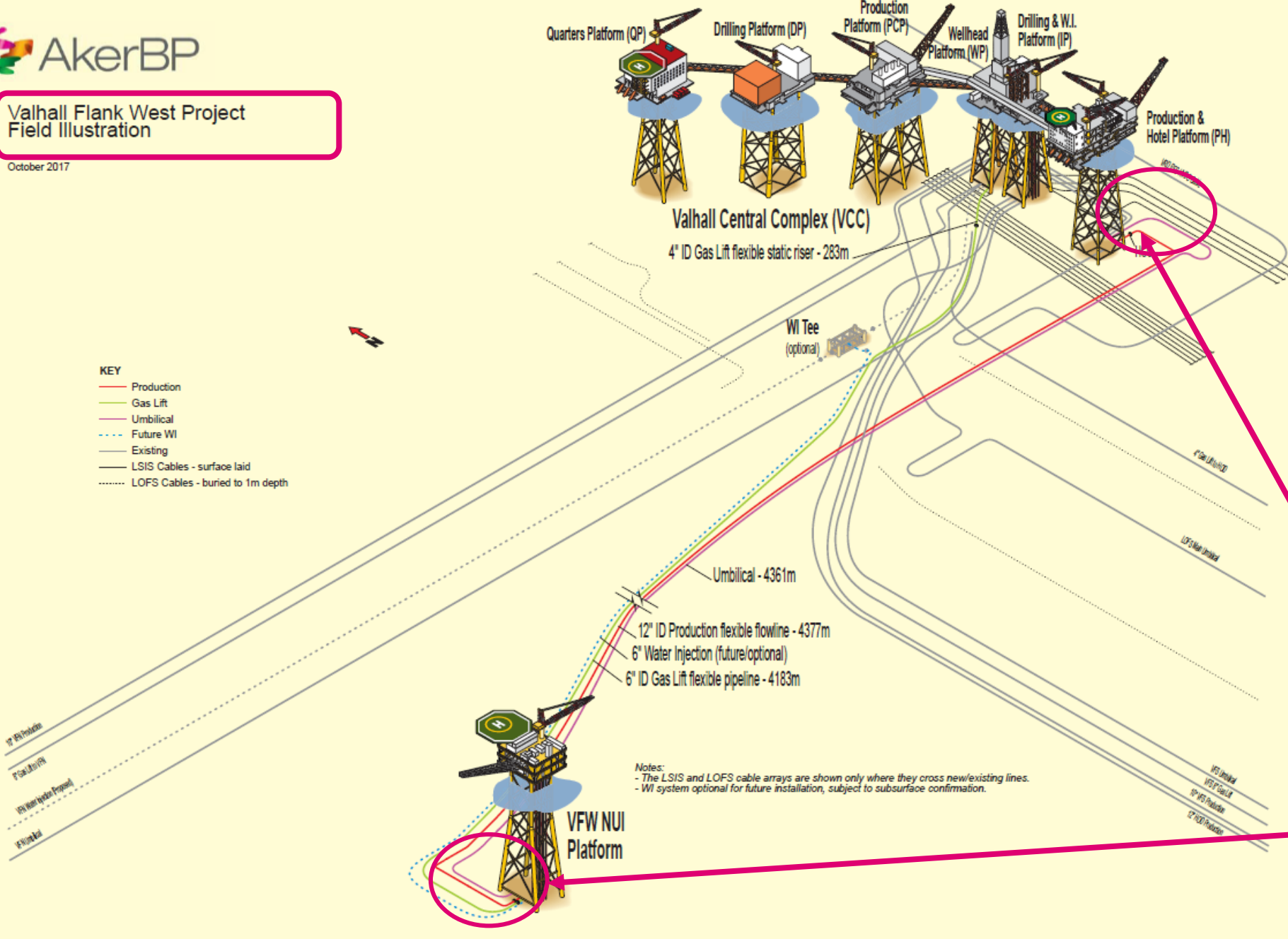
RECONSTRUCTING THE WAY WE OPERATE OUR BUSINESS

Aker BP's four main improvement pillars



Valhall Flank West Project Field Illustration

October 2017



Valhall Flank West 2019

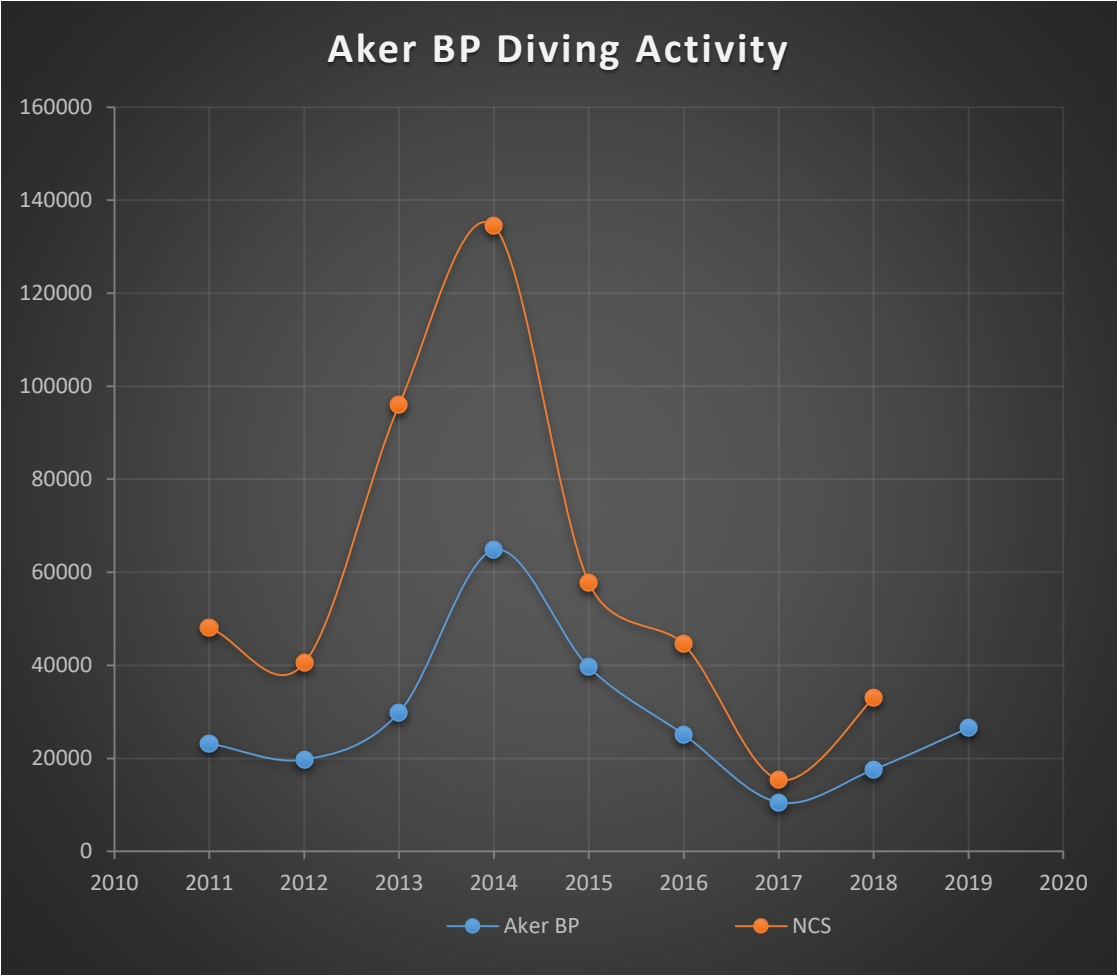
- 1 x Diver 12" BHGE Flexible Tie-in.
- 42Te. Steel Protection Cover

Valhall Flank West 2019

- 2 Diver Tie-ins
- 6" & 12" Flexibles

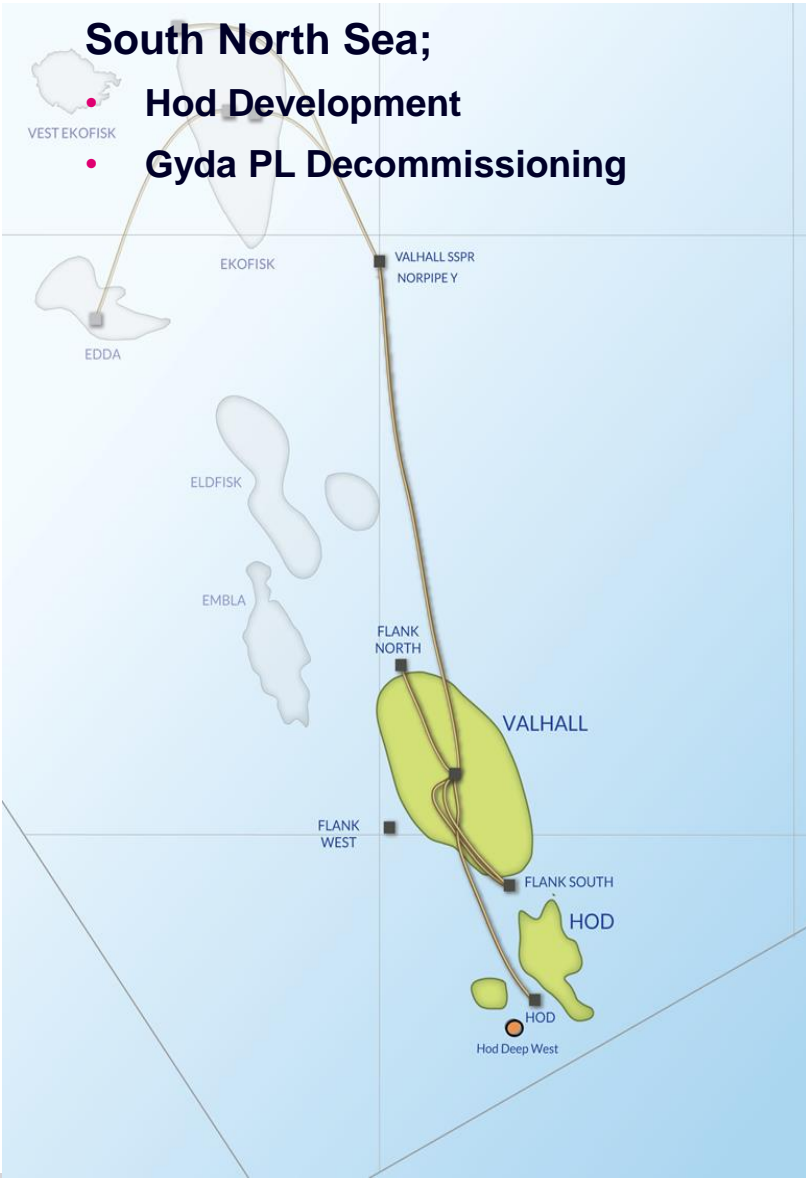
Diving Activity and DSV Days

Manhours in Saturation



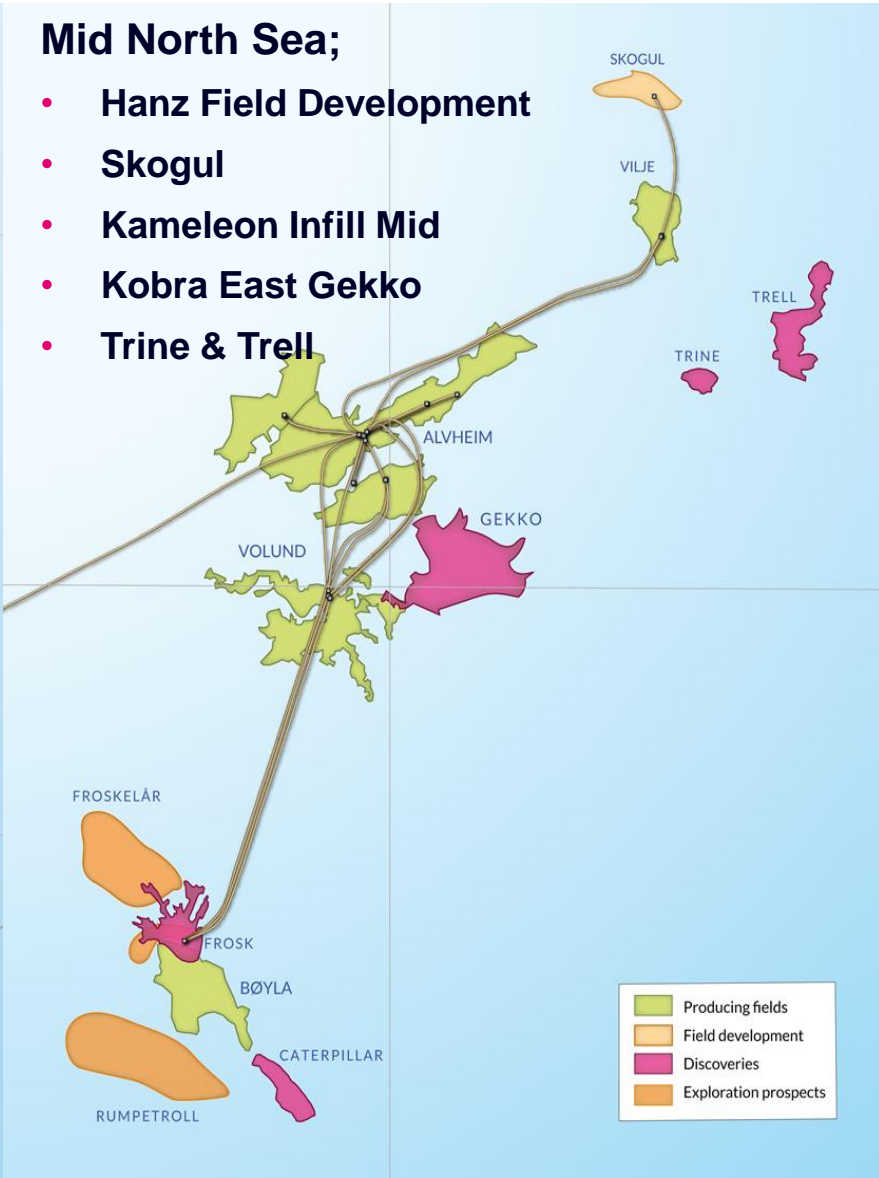
New Projects

South North Sea;
Hod Development
Gyda PL Decommissioning



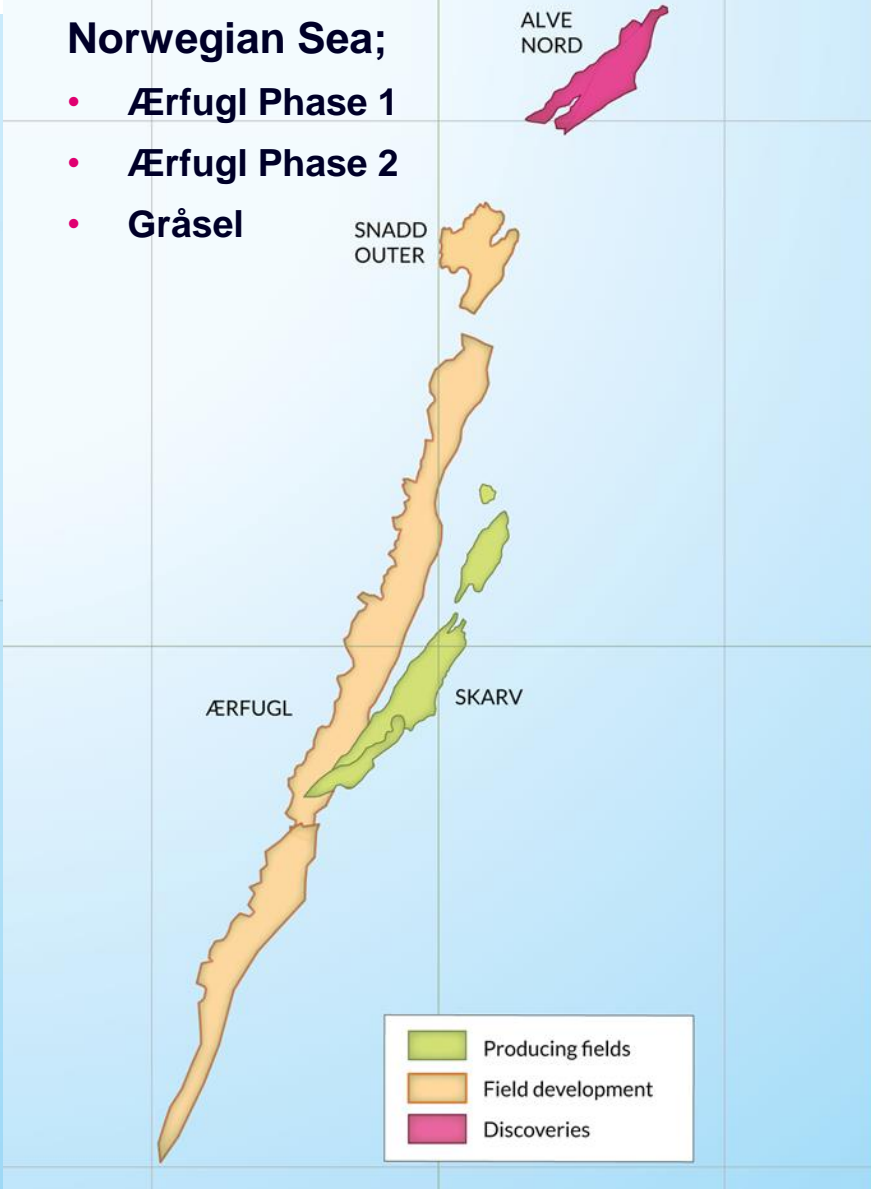
Mid North Sea;

- Hanz Field Development
- Skogul
- Kameleon Infill Mid
- Kobra East Gekko
- Trine & Trel



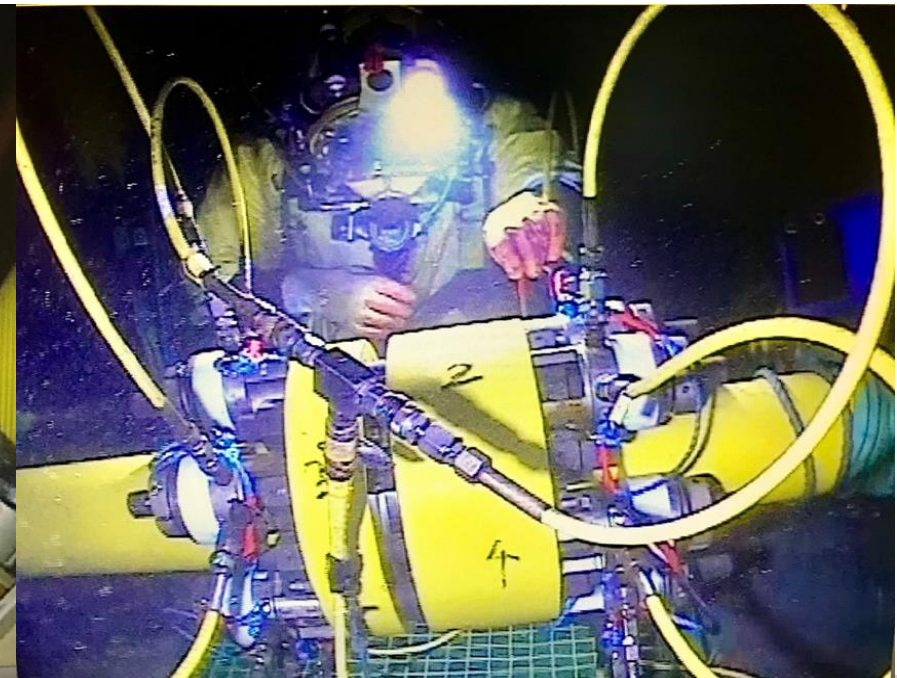
Norwegian Sea;

- Ærfugl Phase 1
- Ærfugl Phase 2
- Gråsel

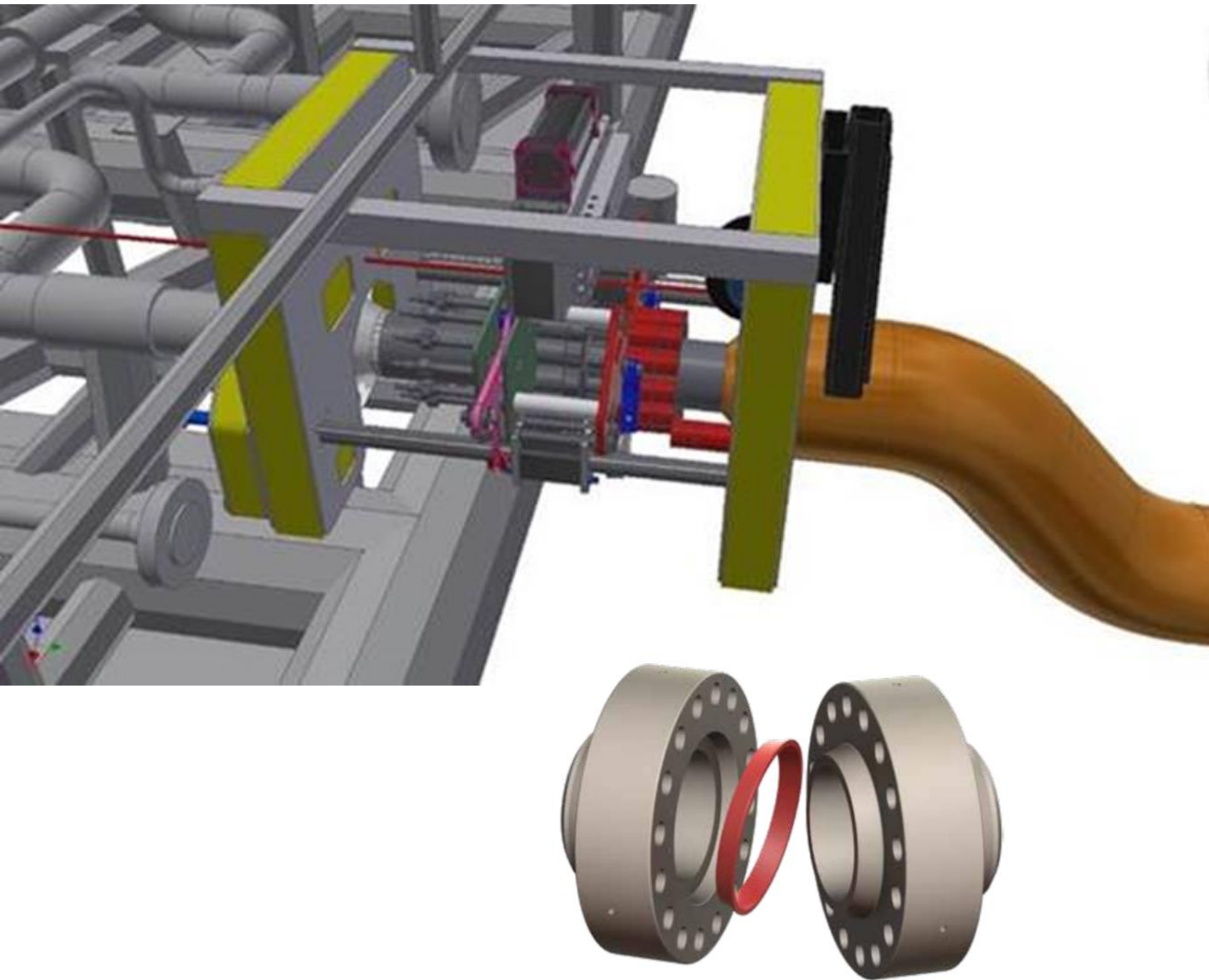


Strategy for Manned Underwater Operations

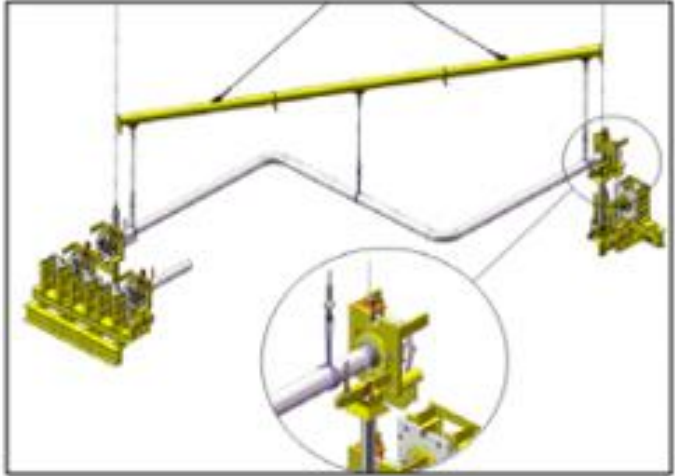
- Installation, repair and maintenance on existing subsea systems
- Digitalization and remote control
- New developments to standardize on new technology



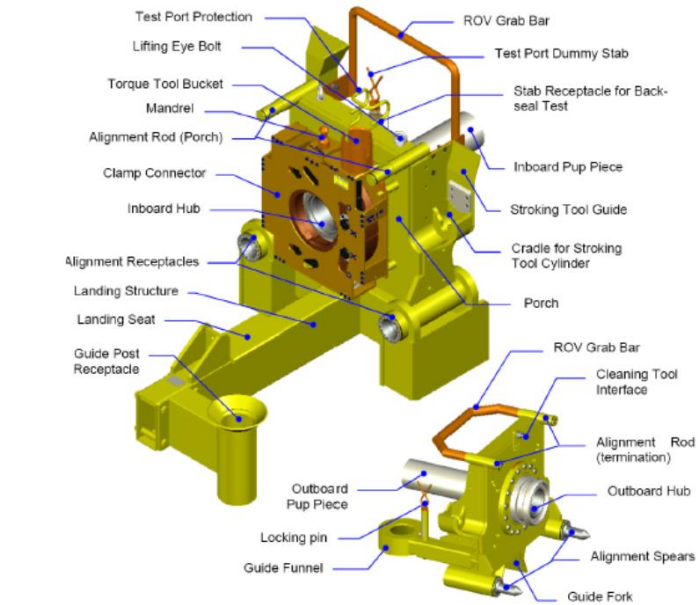
Remote tie-in of diver friendly spool flanges



VS



HCCS TIE-IN DESCRIPTION



In Summary

- Aker BP move towards more remote controlled operations. However, benefits of manned underwater intervention vs remote controlled intervention to be evaluated in the select phase of a project.
- Aker BP will continue to use diving intervention for installation, repair and maintenance on existing subsea systems
- Aker BP need to have diving as an available intervention method for our projects for the foreseeable future.



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