

Decommissioning in Practice: Eider Post CoP OPEX Reduction



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Offshore Decommissioning Conference 2019



Decommissioning in Practice: Eider Post CoP OPEX Reduction

Agenda



- Company & Asset Introduction
- The Eider Late Life Project
- OPEX Spend and Associated Reductions
- Learnings
- 'Takeaways'

Eider Post CoP OPEX Reduction Company & Asset Introduction



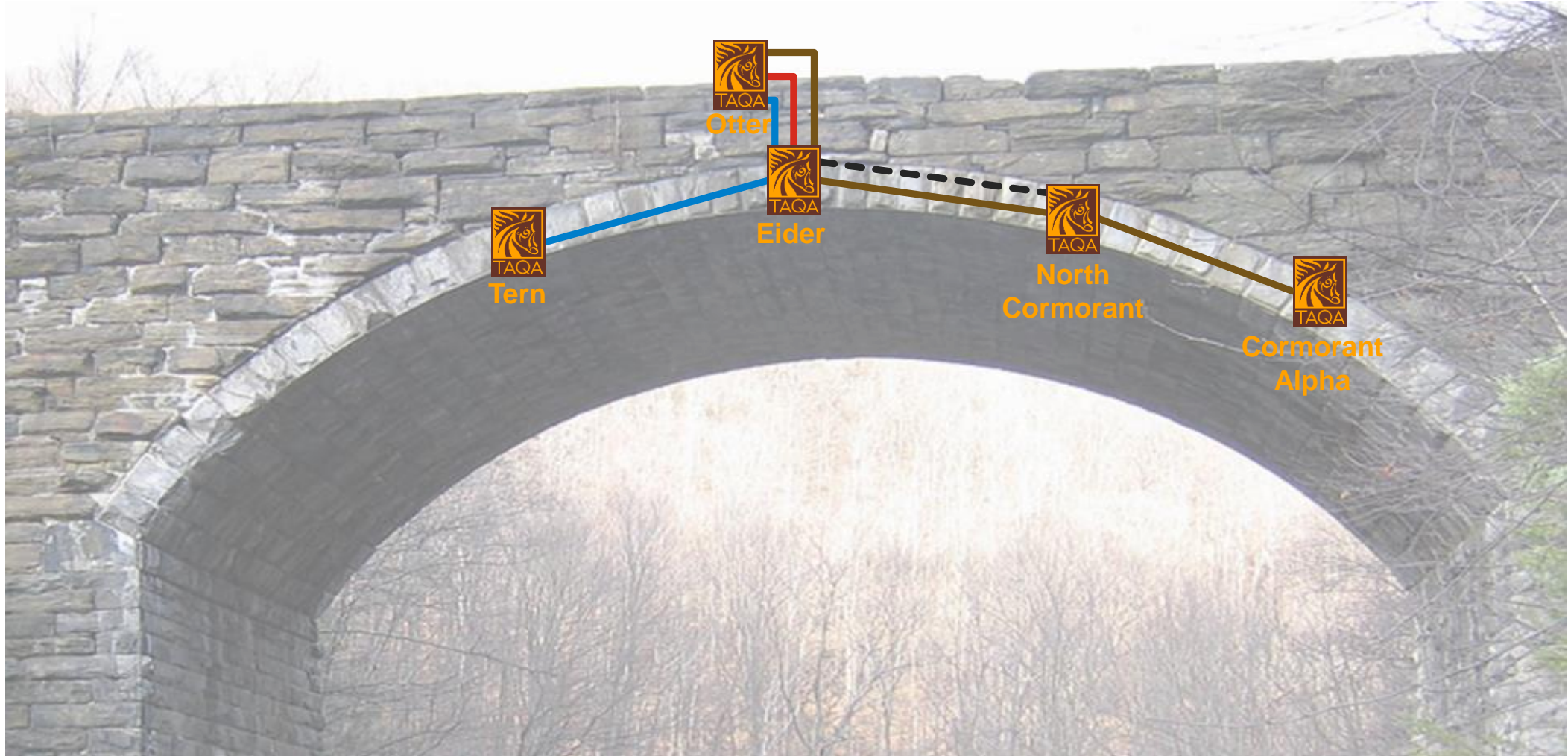
- TAQA is a leading late-life Operator in the UK North Sea, with over 10 years experience managing our NNS portfolio.
- We are focussed on safely and efficiently managing late-life operations in order to Maximise Economic Recovery (MER) and extending field life.
- We are also taking ownership of, and planning for, decommissioning.





Eider Post CoP OPEX Reduction

The Importance of Eider

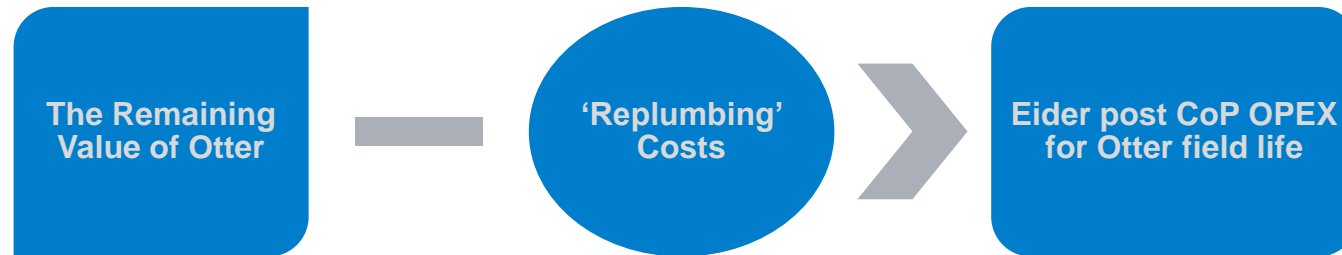


Eider Post CoP OPEX Reduction

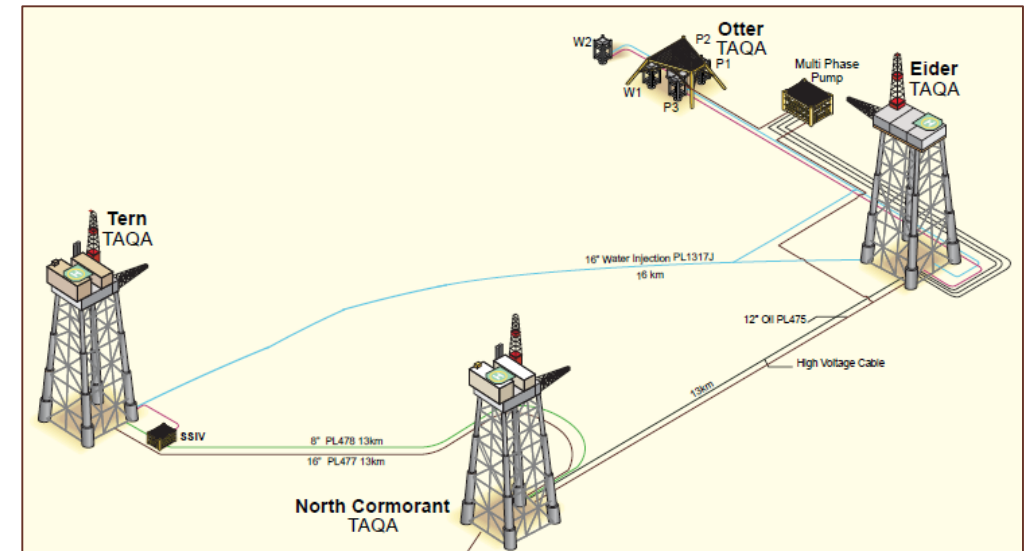
Utility Mode & The Eider Late Life Project



- Extension of Otter field life (and the delivery of MER) required changes to existing infrastructure.
- The chosen solution had to screen these basic economics:



- Cost and/or infrastructure constraints meant that many options were not considered as viable.
- The chosen solution retained the Eider topsides: *'Utility Mode'*.



Eider Post CoP OPEX Reduction

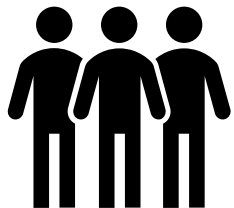
Eider Late Life Project: Elements to Achieving the Goal



Hazard Reduction: Eliminating major accident hazards (MAH) through material changes to the Safety Case, performance standard updates and verification scheme amendments.

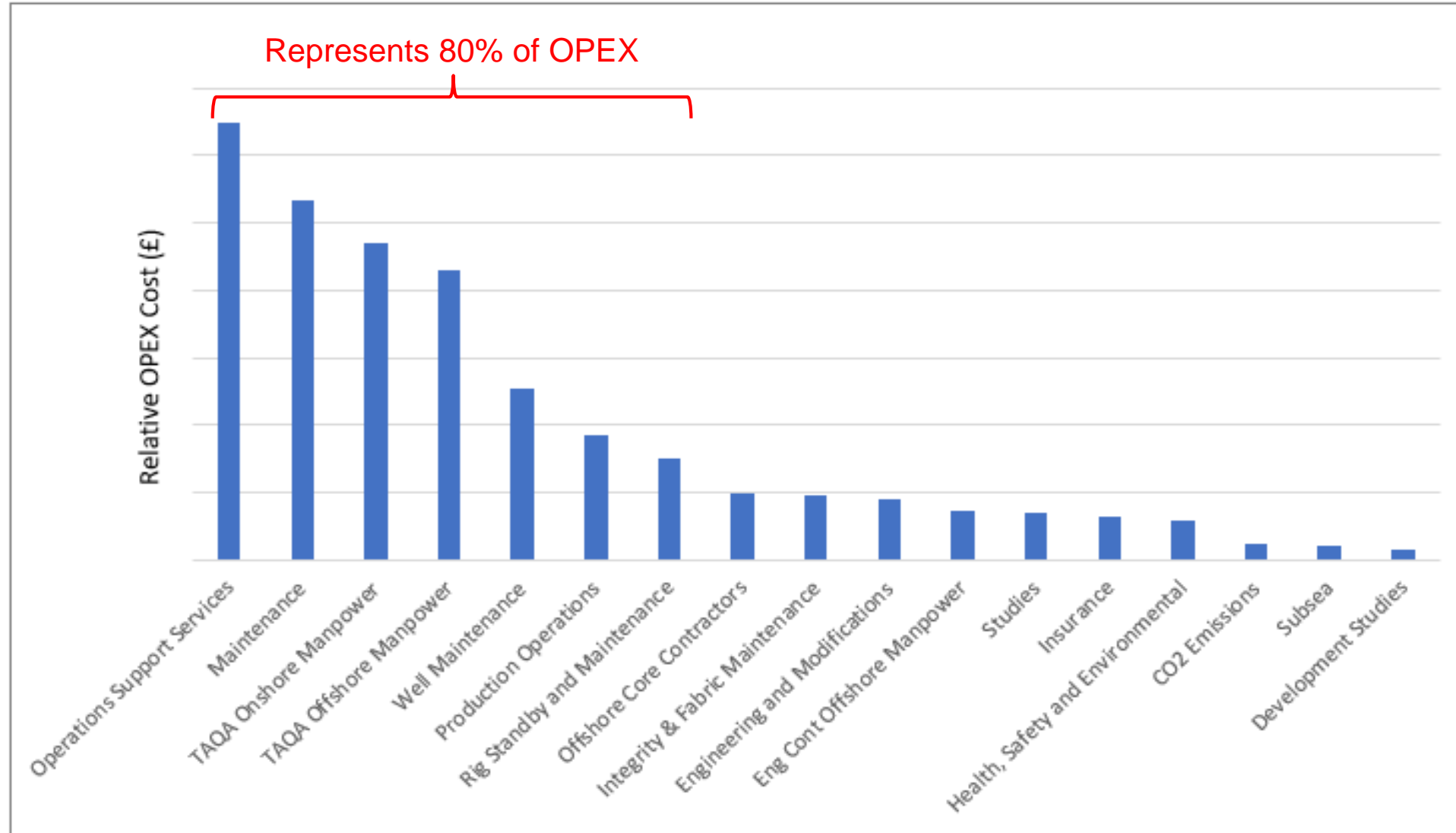


Engineering Modifications: System simplification and defect elimination to optimise operability, reliability and maintenance commitment.



Reduced Eider Manning Profile: Which fulfils regulatory commitments, operability, maintenance commitment, welfare and emergency response & management requirements.

Eider Post CoP OPEX Reduction Platform Pre-CoP OPEX (2016)



Eider Post CoP-OPEX Reduction

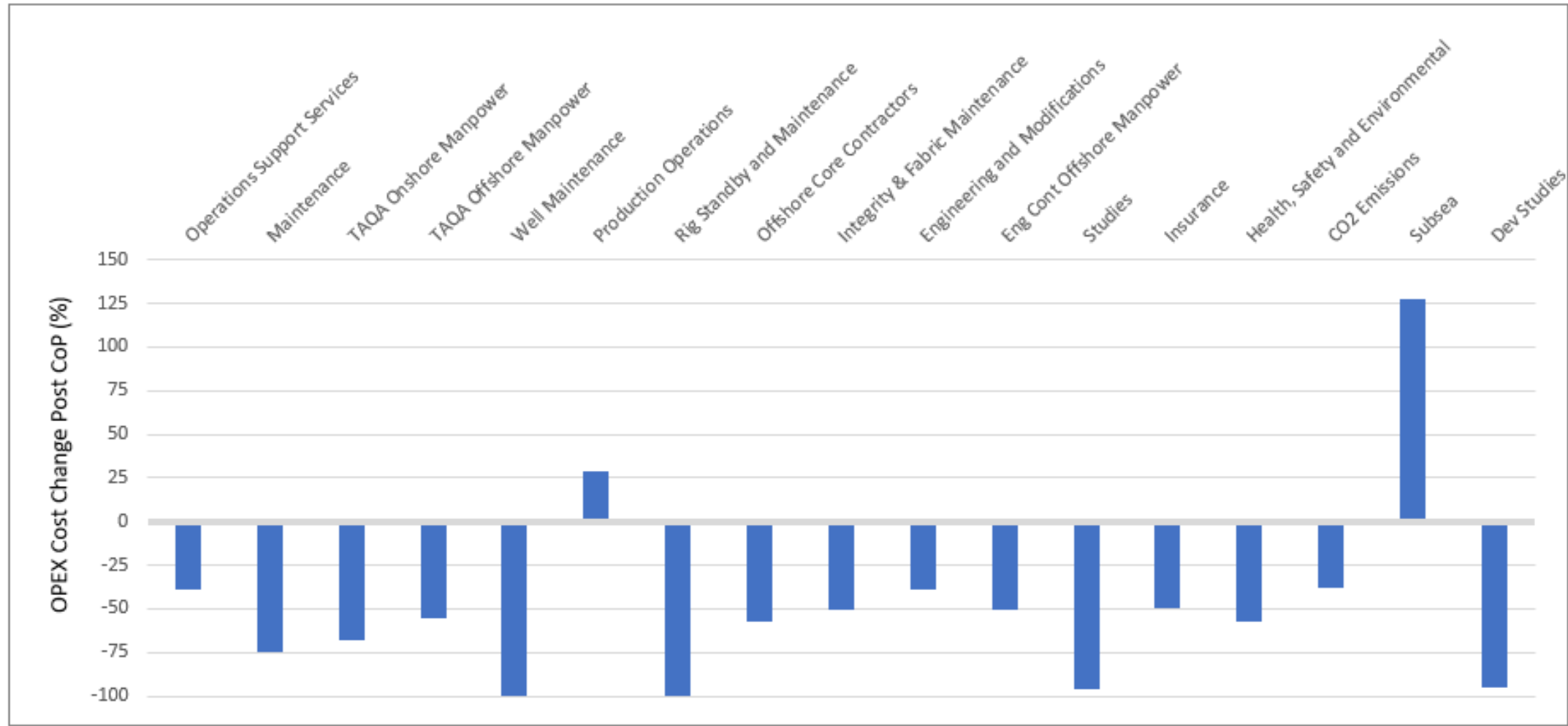
Cost Reduction



- Eider started off from a low point in terms of its annual OPEX spend.
- High levels of granularity over areas of spend and associated excellent cost control provided a solid basis to start from.
- Existing core crew level of 25 was able to be reduced to 6.
- Reduced platform activity enabled a simplified air and marine logistics programme to be implemented.
- No staff redundancies were required as part of the Eider Late Life Project.

Eider Post CoP OPEX Reduction

Platform OPEX Changes by Category: 2016 vs 2019(LE)



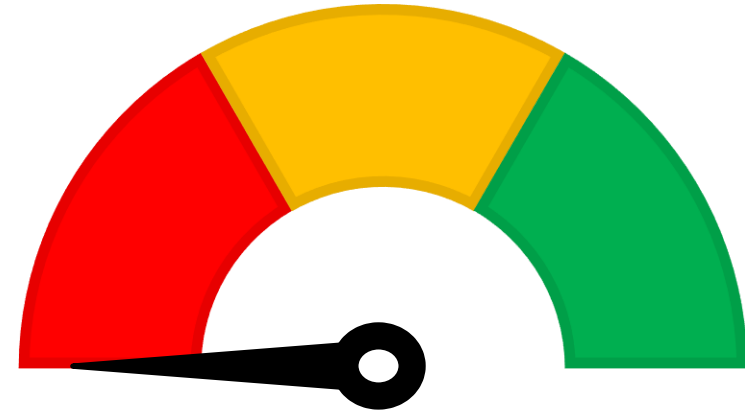
Total OPEX reduction of c.57% across this period

Eider Post CoP-OPEX Reduction

What Went Well?



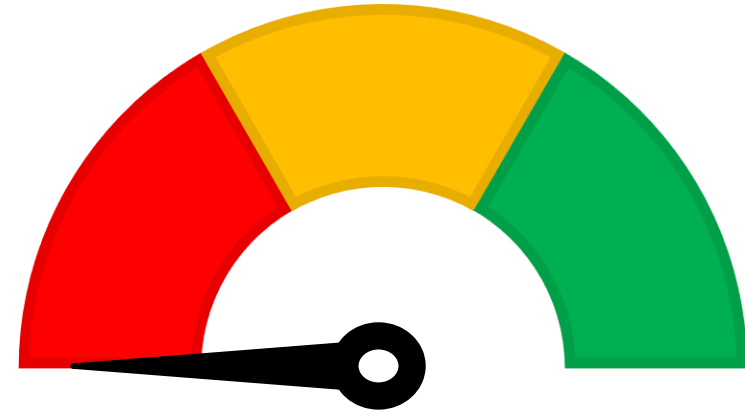
1. **Safe and Successful delivery** of the goal to significantly reduce Post CoP OPEX levels.
2. **Endorsed** TAQA's view of ultra late life cost management and achievable savings.
3. **Early engagement** meetings with **HSEx** and **IVB** led to alignment on project hazard reduction goals.
4. **Rationalisation** of ESD and F&G safety systems **completed successfully** and **ahead of schedule**.
5. **Excellent communication** with the personnel affected by the project, **high levels of morale maintained**.



Eider Post CoP-OPEX Reduction Learning Opportunities



1. **Impact of turndown on plant stability** in the lead up to economic CoP date was not fully understood.
2. Eider flushing programme could have been **planned earlier** as there was **no agreed philosophy** prior to CoP.
3. **c.3 month delay** to the declaration of Hydrocarbon Free status due to the **presence of biogenic methane** in the well annuli.
4. Lack of foresight on the **impact of the project** on internal specialist **Supply Chain resources**
5. Whilst maintenance rundown was successful it **could have been better – more frequent interfacing** with TA's and peer groups would have facilitated a **more timely safety critical maintenance reduction**



Eider Post CoP-OPEX Reduction 'Takeaways'



- A 'traditional' decommissioning approach was not appropriate.
- Eider Late Life Project increased the profitability and remaining life of the associated TAQA assets.
- The impact of turndown on plant stability in late life needs to be well understood.
- Understanding where the OPEX is being spent, and in sufficient detail, prior to CoP is crucial.
- This project demonstrates that excellence in late life cost management can realise significant post-CoP OPEX reductions.
- Putting people first significantly assisted with the successful delivery of the project.

