

Kriegers Flak - Combined Grid Solution Hybrid interconnector between DE and DK2

Hans-Christian Seeliger, 50Hertz Transmission GmbH

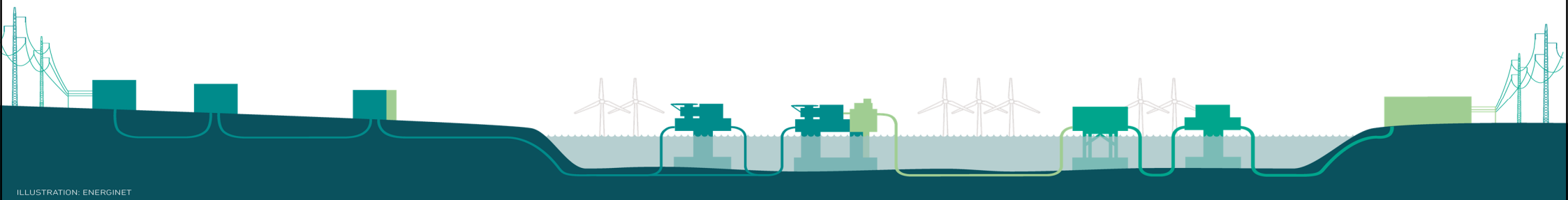


ILLUSTRATION: ENERGINET

1. What is KF CGS?
2. Where is the benefit?
3. Collaboration as a success factor
4. And what about operational experiences?

Introduction to Kriegers Flak – Combined Grid Solution

[Kriegers Flak Combined Grid Solution - English subtitles - YouTube](#)



High offshore wind scenarios



Low / no offshore wind scenarios

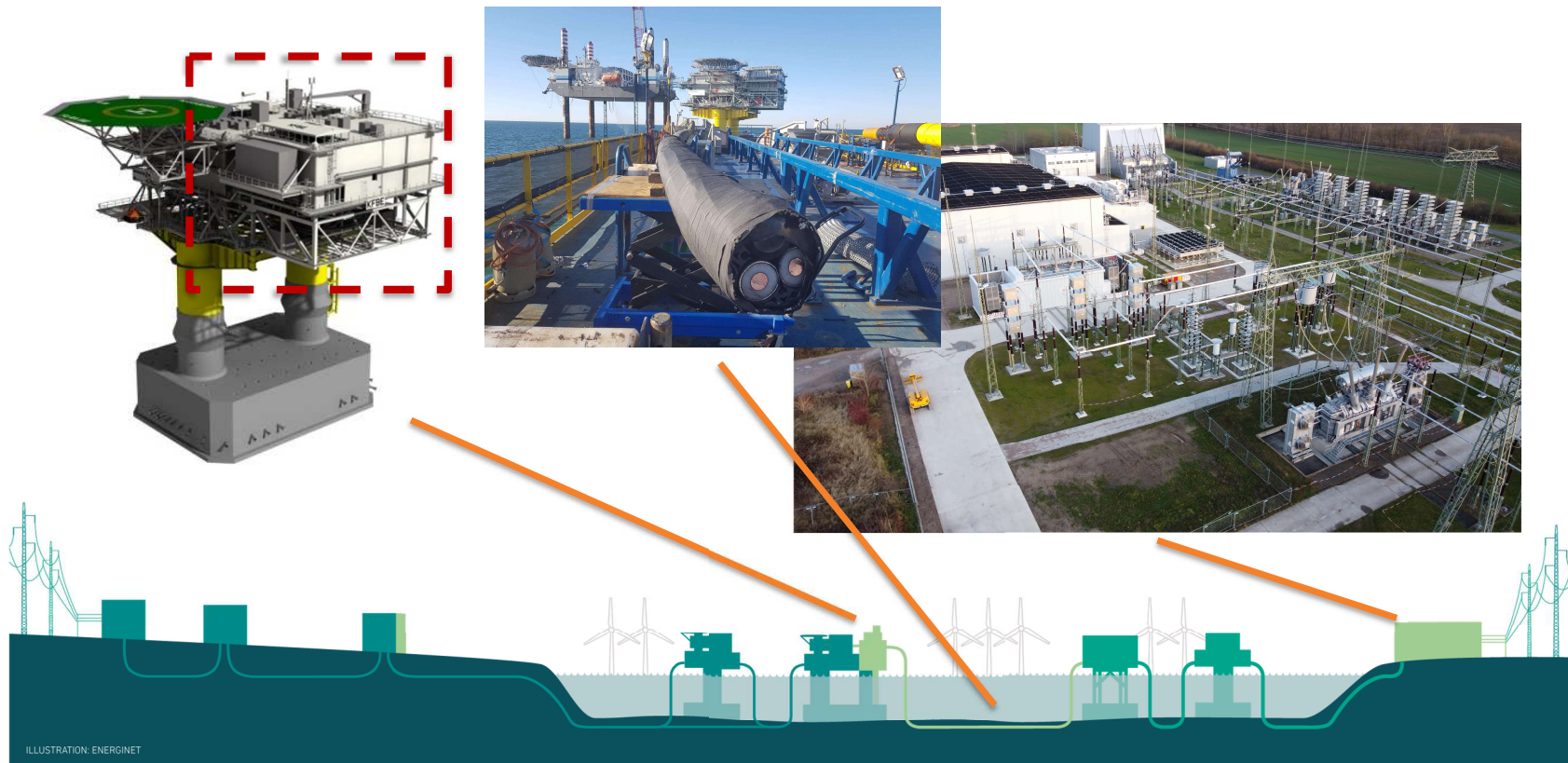


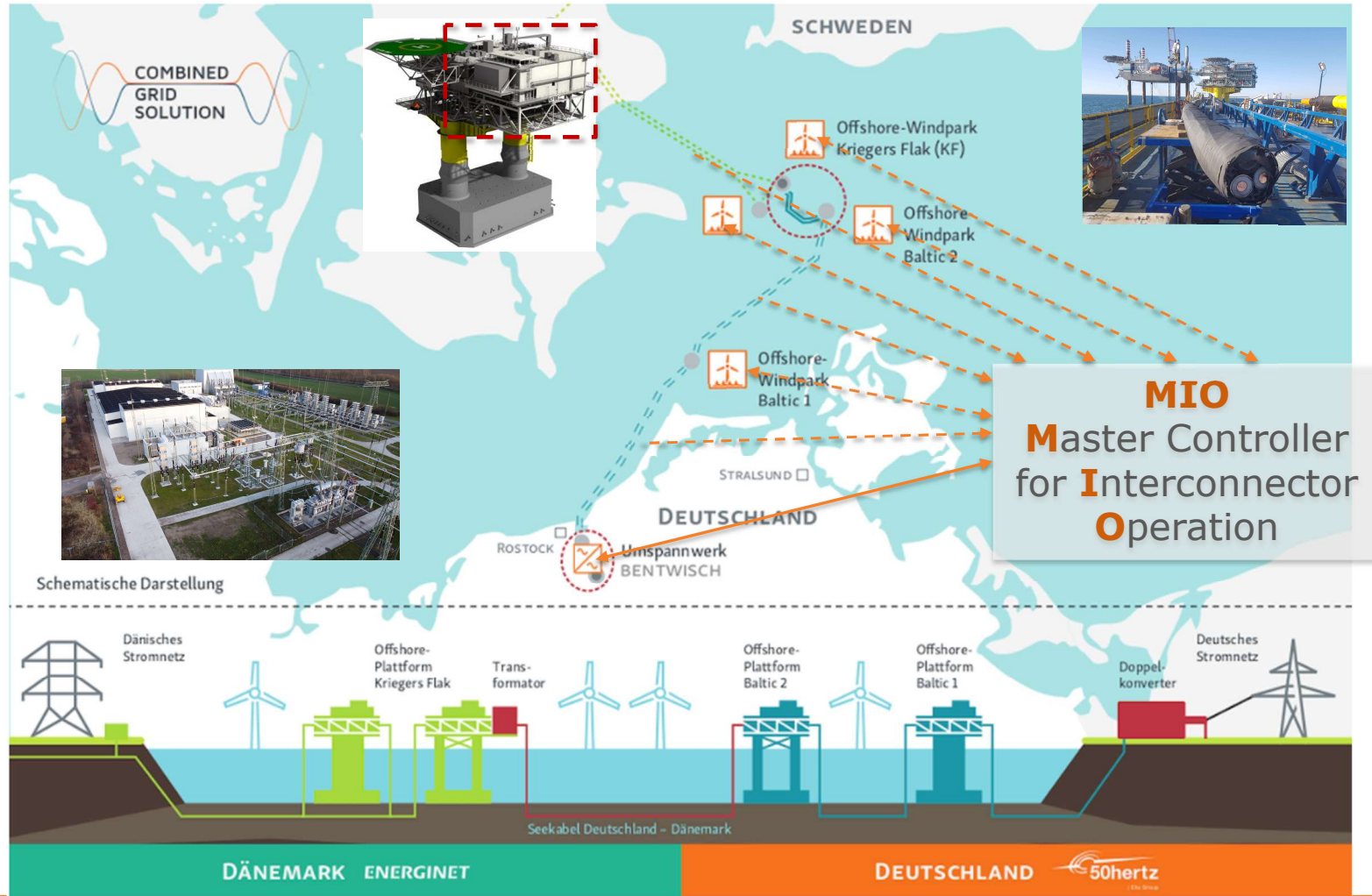
Low / no offshore wind scenarios



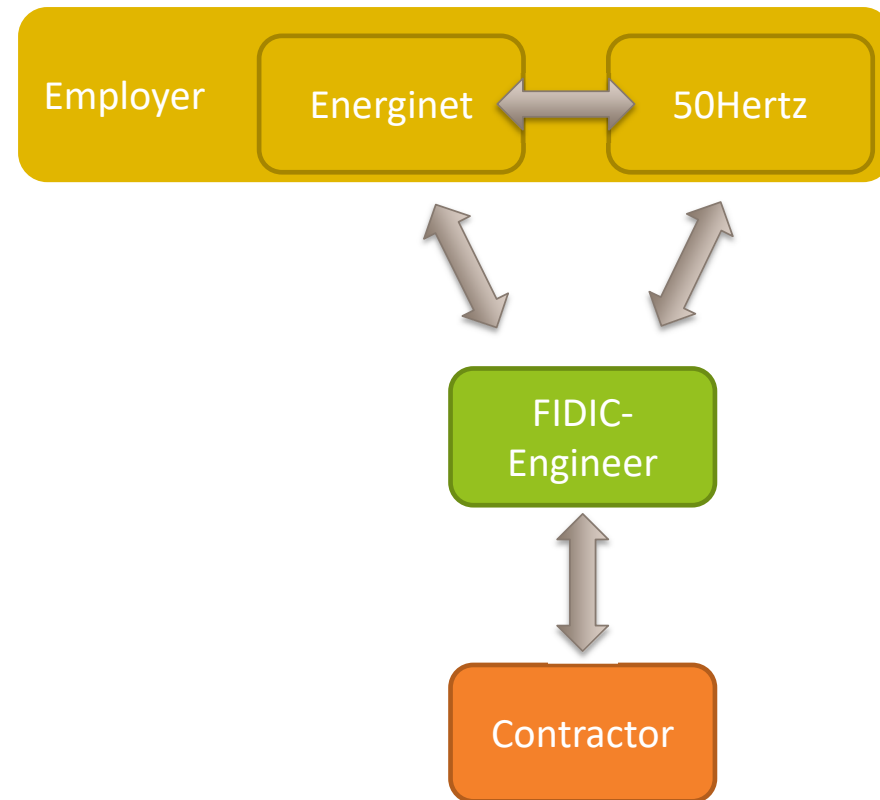
- Make best use of existing infrastructure
- Significant increase of power exchange capacity between DK2 & DE
- Increase system stability, availability + capability for grid restoration
- Price damping effect through increased power exchange

KF CGS – Project Overview

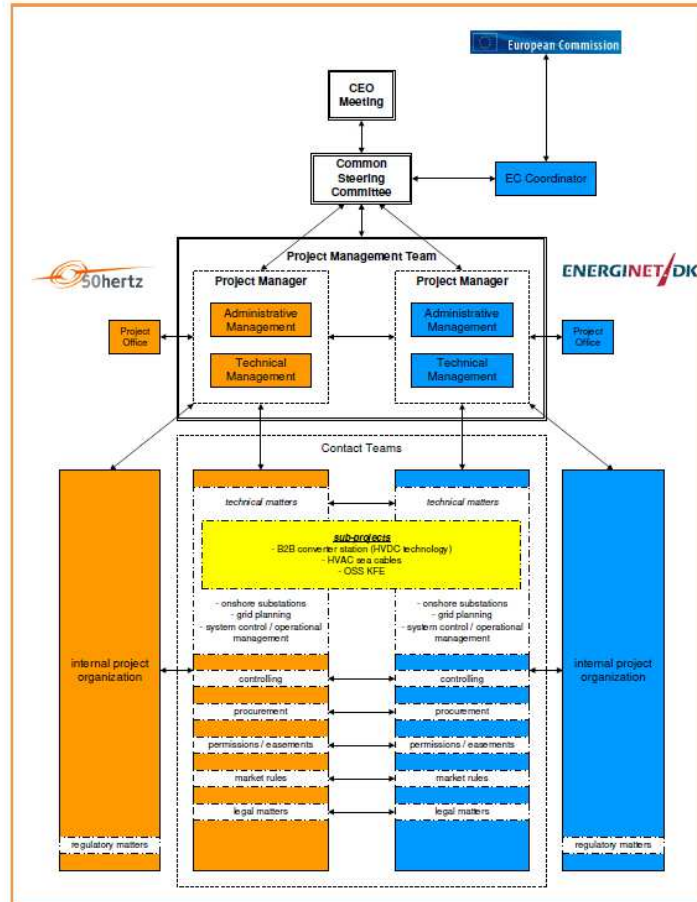




Project setup – from the outside to the inside



Project setup – from the outside to the inside



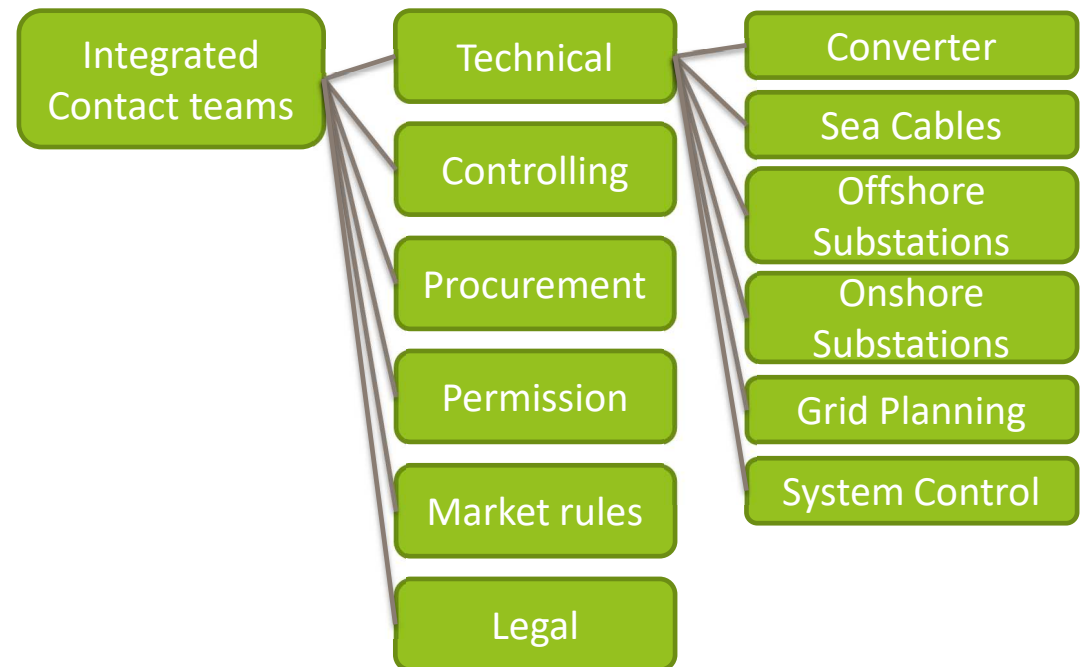
Project setup – from the outside to the inside

Mapping according to subjects & competences

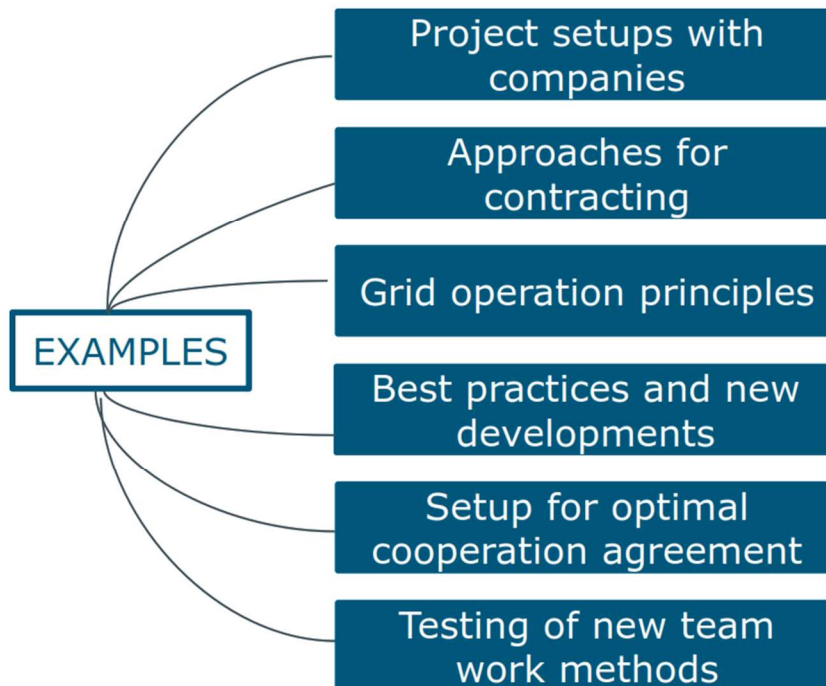
Regular exchange on all levels + ad-hoc meetings for specific topics

Important decisions are taken commonly

Procurement: Approval of all purchases prior execution according to individual rules



$$1 + 1 > 2$$



ROC Drill concept for Commissioning Workshop
– result: smart ideas and good team spirit

Facts and figures

- Power transmission capacity CGS: 400 MW
- Total Power transmission capacity between DK2 and DE: up to 1000 MW (depending on wind power infeed)
- ~ 1/5 to 1/4 of the trading between DK2 & DE physically done via CGS
- Utilization of existing assets doubled; e.g. southbound 43% wind infeed & 45% trading (06/21-04/22)
- ~ 4-5x more realized trades southbound than northbound

Thank you for your attention

