### Hvorfor og hvordan satser Kongsberg Gruppen innenfor Offshore vind?

Sverre Gotaas, Innovasjonsdirektør, Kongsberg Gruppen ASA



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#### Industrial pioneer established in 1814





KONGSBERG was internationally known for its Krag-Jørgensen rifle, developed in the late 19th century, and adopted as the standard US army rifle in 1892.

#### KONGSBERG has an unique history and a strong culture

08/05/2015



# Today: International high-tech solutions, from deep sea to outer space

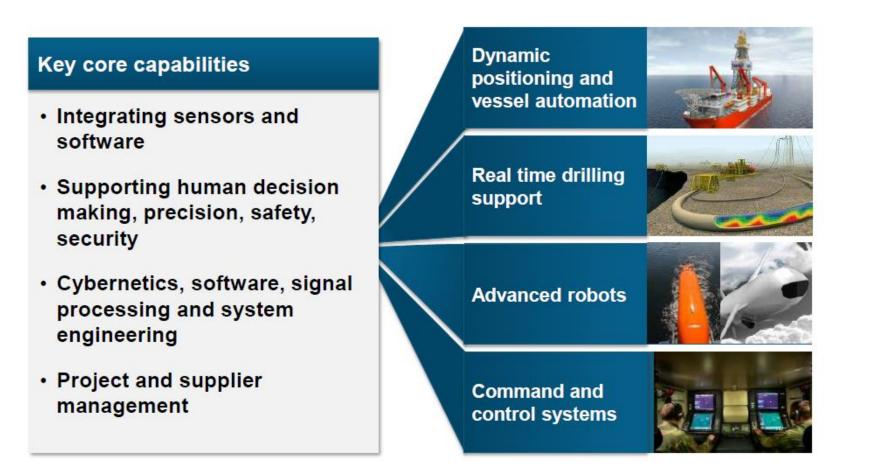


Advanced solutions and applications for the maritime, oil & gas, defence and space industry.

- Extreme Performance for Extreme Conditions -

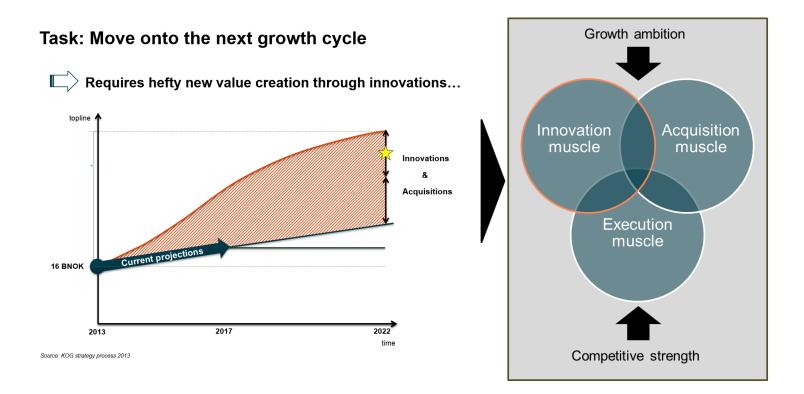


# **KONGSBERG** integrates advanced technologies into complete solutions





# WHY? The coming 10 years we need to generate significant growth through innovation

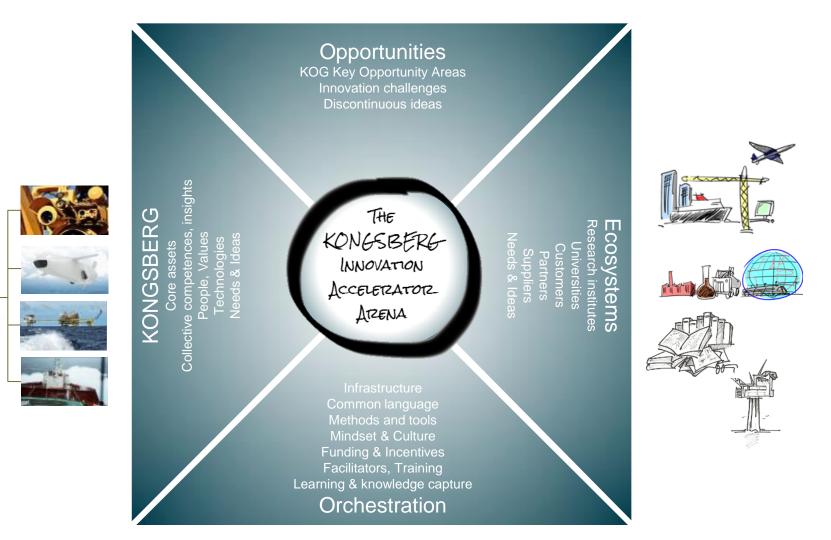


# «Innovate with KONGSBERG» is the initiative to create a platform for handling this challenge

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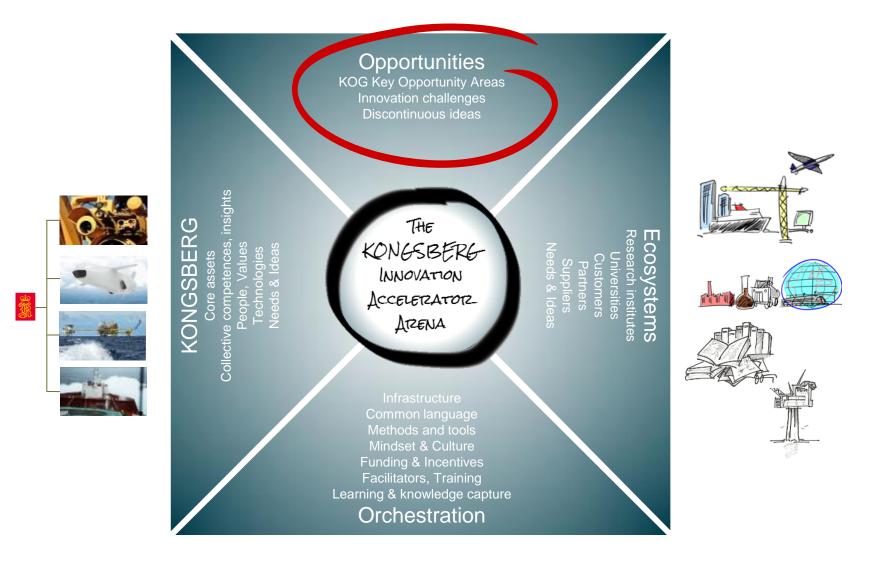
### The KONGSBERG Innovation model

 a structured approach leveraging collective capabilities to identify and address business opportunities





# The KOA's are central in the KONGSBERG Innovation model



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## **Ocean Space**

- Leveraging our's and Norway's unique position to take a leading role in exploring innovative opportunities in the ocean space

## **Smart communities**

 KONGSBERG technologies enabling and protecting the intelligent – but vulnerable – society. Optimizing, securing and protecting critical interests, such as supply-, distribution- and consumption of resources



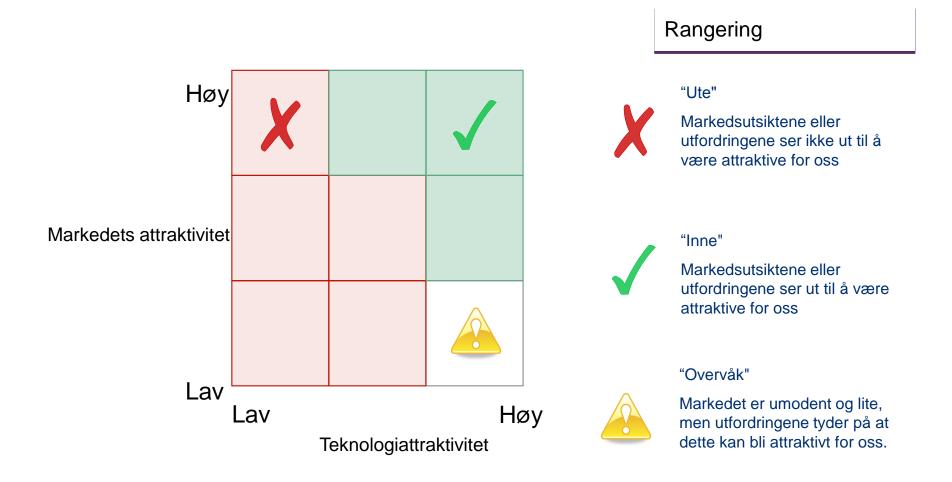
# HOW? KONGSBERG opportunity space within sustainable energy

	Energy generation or related	Product/services
Biofuel	Solar	Smart grids
Biomass	Wave and tidal	Fuel cells
CCS	Wind	Energy storage
Hydrogen	Hydropower	
Geothermal	Nuclear	



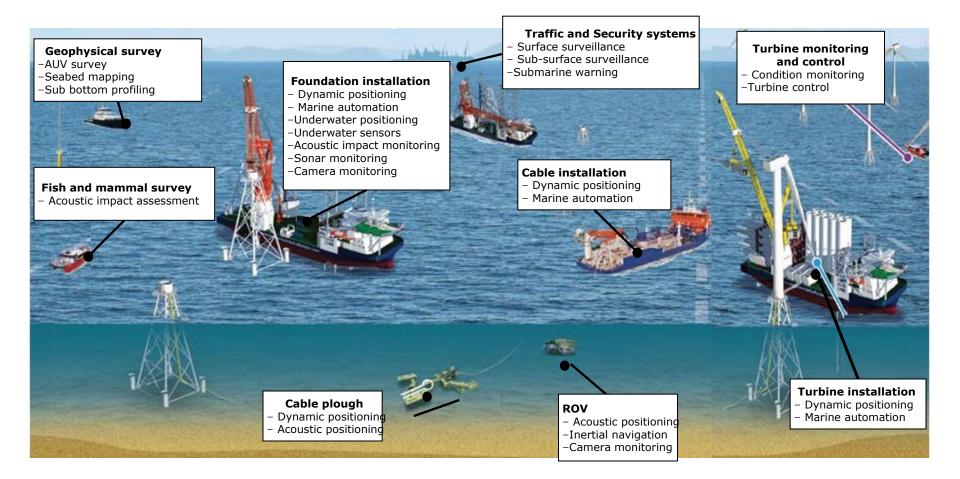


### De forskjellige mulighetene ble rangert i hhv " "Inne", "Ute" og "Overvåk"



#### Offshore Wind Development KONGSBERG Capabilities







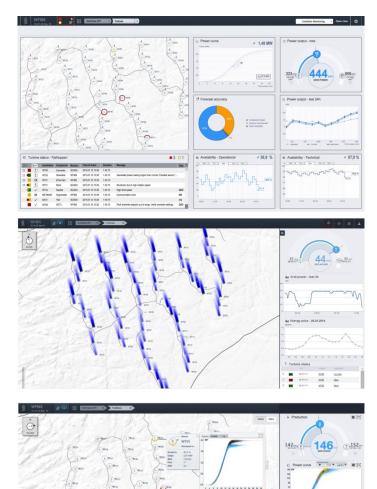


### Background

- Initiated in 2012
- Goal of being established as a new BU First goal is to reach an revenue of 200MNOK
- Growth through an mixture of organic growth and acquisitions

#### **KONGSBERG** possibilities

- An market looking for solutions for cost reductions
- High technology content
- Advanced turbine regulation algorithms
- Immature market compared to known KONGSBERG markets
- High growth especially in Offshore wind
- Technology can be used in eg solar and hydro applications



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