



# Short introduction to Telenor Maritime

November 2016

# Telenor Maritime – The Mobile Operator at Sea

**Cruise & Ferry**



**Offshore Oil & Gas**



**Offshore Wind**



**Fisheries**



“We want to be our customers' favorite partner in digital life”

*Sigve Brekke, CEO telenor Group*

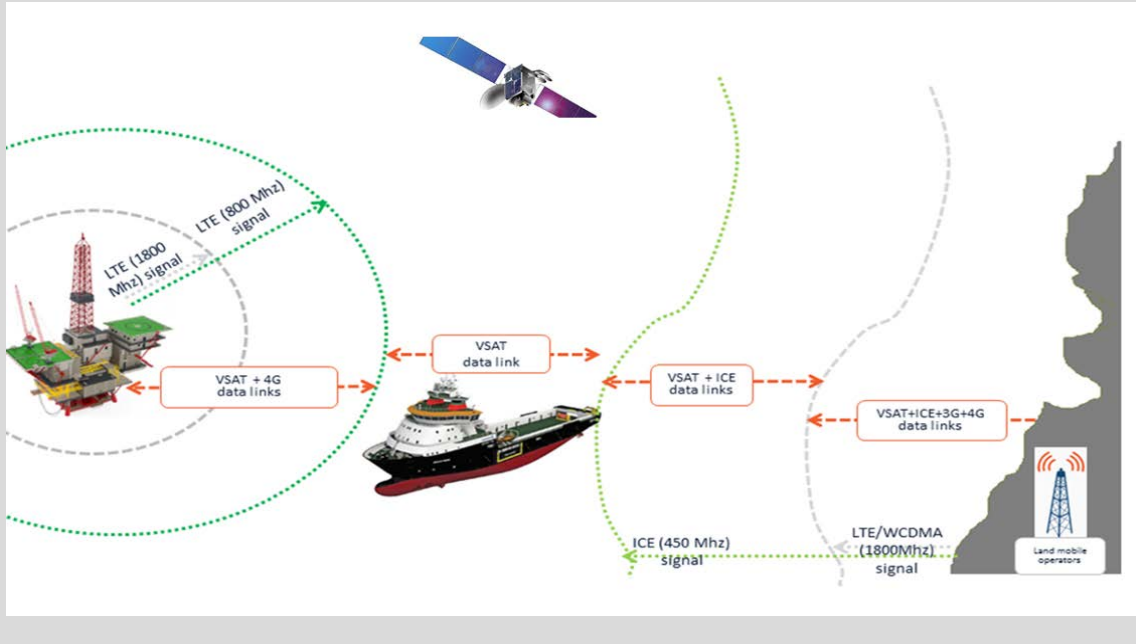
# The mobile industry has driven radical changes in how we work, collaborate and communicate onshore



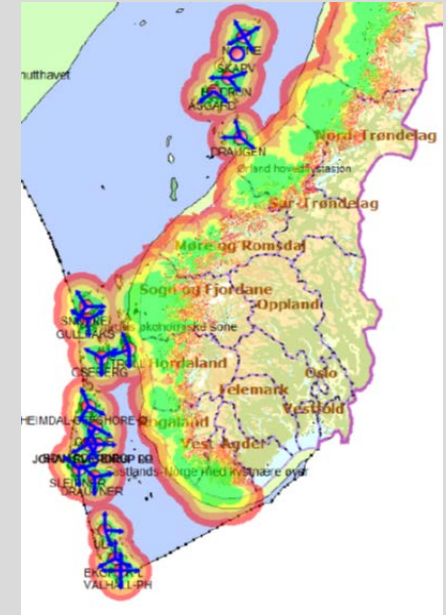
- The offshore society has been left behind
  - Hindering innovation
  - Losing productivity gain
- Telenor Maritime is the mobile operator at sea
  - Removes the “digital divide” Supports innovation
  - Enables smarter ways of working
  - Internet for All
- Partnering with Technology providers to support digitalization and the Internet of things
- Cooperation with Telenor Connexion – global leader in the IoT market

# Smart utilization of hybrid backhaul

Seamless connectivity from base to field – Utilizing Telenor’s portfolio of satellites, land-based network and Telenor Maritime’s offshore network



Current 4G coverage on NCS



# Building oil-field coverage offshore Norway is the first step in a global strategy

Strategic cooperation with Statoil enables efficient deployment of a complete offshore 4G network

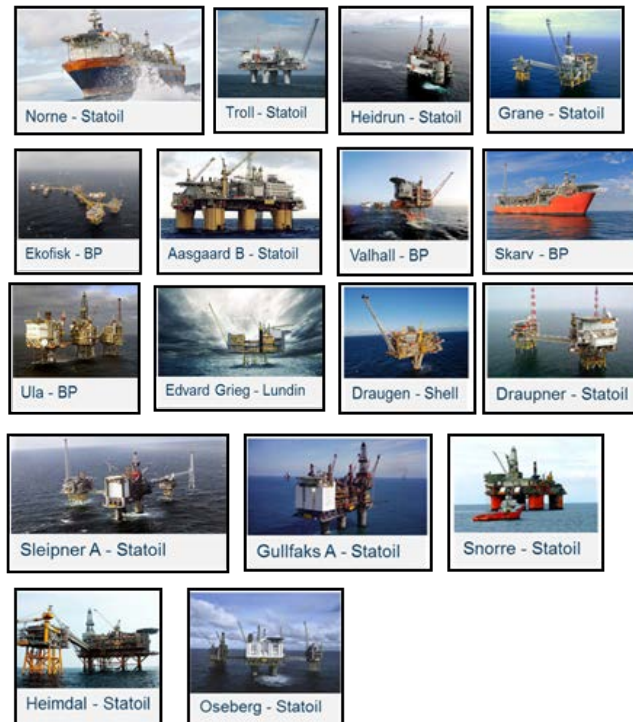
- Field coverage for rigs and vessels
- Dedicated network for Statoil's operations – using Statoil's spectrum
- A public 4G and GSM service for everyone else – using Telenor Maritime's own spectrum

Telenor Maritime holds own frequency rights

- On the NCS
- Acquires in other geographical as needed

First step in a global-coverage network

- Expanding into other geographies
- Utilizing roaming agreements with 350 operators world-wide





# Mobile technology enables business reengineering

## Case : ROV operations

- 4G coverage – 40 mbps
- Moving ROV operation from offshore to onshore
  - Multi HD video streams possible
  - Low latency - ROV control signaling possible



## Significant benefits

- Saves cost – Personnel onshore, not offshore
- Easy access to expertise when needed – video streaming

## Case 4: Use same IT tools offshore and onshore

- 4G coverage – 40 mbps
- The digital divide is removed - Apply same tools everywhere



## Significant benefits

- saves on development, maintenance and training
- Improved workflows – always online

