

5G forsknings- og industriprosjekter

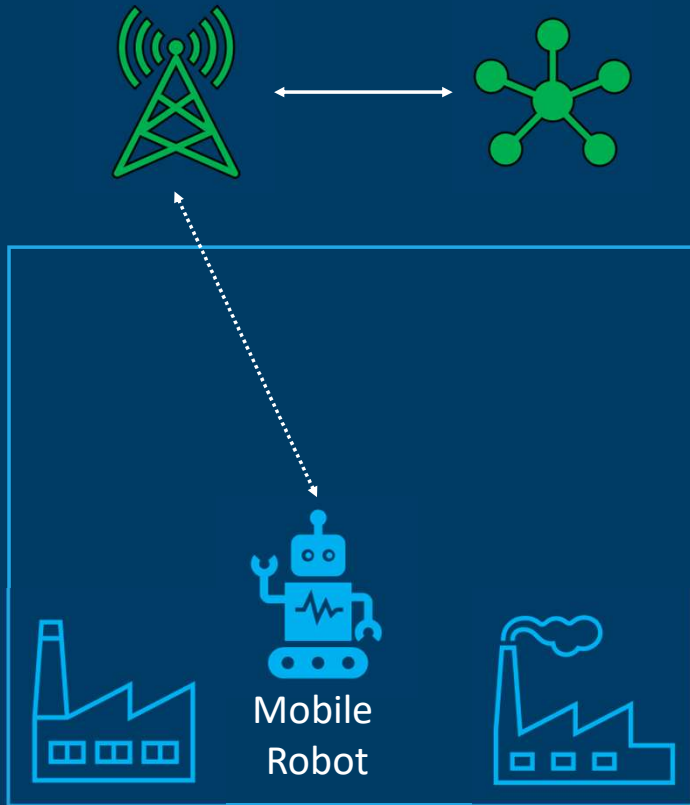


Stig Petersen, SINTEF Digital
stig.petersen@sintef.no

Mobile network components

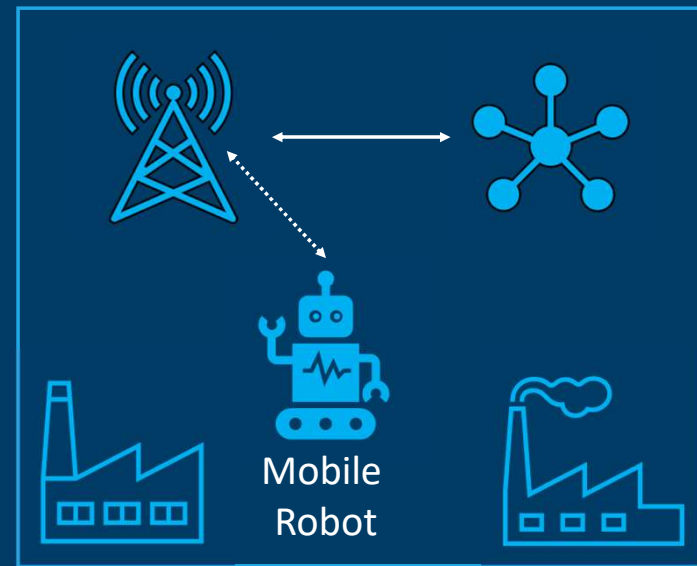


Public 5G



Private 5G

Krever lisens for privat frekvens fra Nkom
(3,8-4,2 GHz)



Maritime 5G with Kongsberg Maritime



Photo: Kongsberg Maritime



Ship-to-shore

Using public 5G infrastructure for coastal-near communication.

- Internet for crew and passengers
- Fleet control
- Condition monitoring
- Remote control and autonomy

Onboard

Private 5G network on ships.

- Instrumentation
- Condition monitoring
- Support systems for remote control and autonomy





Harbors

Private 5G-infrastructure for:

- Automatic docking and mooring
- Crane control
- Logistics on land

110 dispatch center in Trondheim



5G drones

Drones used for enhanced situational awareness in Search and Rescue (SAR) operations.

Public 5G network for drone control and video streaming.

Relevant with mobile private 5G base stations for areas with poor coverage.





5G technology evaluation with Equinor



Photo: Equinor



Use Cases

- Digital Field Worker
- Push-to-Talk communication
- Emergency communication
- Industrial IoT
- Robotics and drones
- Platform-to-platform
- Platform-to-ship
- Instrumentation

Private 5G infrastructure is a fundamental requirement.

Technology Qualification for Krafla

Private 5G-network from Nokia.

- Digital Field Worker
- Push-to-Talk communication
- Group calls for crane operations

Ongoing testing at Kårstø with trial license from Nkom.



Photo: Equinor



Technology for a better society