Group session A:

Technology challenges
Overview

- Objectives of this workshop
- Deliverables from Group session A
- Introduction to the infrastructure
- Industry presentations
- Discussion
Objectives of the workshop

• Inform about the research infrastructure COSMOS and the NOON network

• Provide a meeting place for industry partners and researchers

• Explore possibilities for the subsea industry as technology development partners and suppliers
Deliveries from Group session A

- Which companies and institutions are interested in the COSMOS project?

- What kind of expertise and technology can you provide?

- Ideas for R&D projects

- General feedback on the project
The COSMOS physical infrastructure
Neptune Canada

- Alcatel-Lucent Submarine Networks (backbone cable, branching units, spur cables, nodes, shore station)
- OceanWorks (junction boxes)
- SeaCon (connectors)
- ++ (instruments, sensors etc.)
- 800 km, 100 kW DC, 2 Gb/s prot. bw at each node
The COSMOS project

2010-2011: Fjord (MASFjorden, Hardanger)
2012-2016: Vesterålen Margin
Svalbard Margin
Ocean Ridge
After 2016:
Svalbard Ocean Ridge
Snøhvit
The COSMOS project

- Cost effective
- 25-year
- Reliable
- Easily serviced
- Flexible and expandable

2010-2011:
Fjord (Masfjorden, Hardanger)

2012-2016:
Vesterålen Margin
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After 2016:
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Diagram proposed by PANGAEA, identifying components (blue shapes) and workflows (blue arrow) and grouped into 4 focussed areas. Information in orange is outside the scope of PANGAEA’s contribution and is taken care of by other partners. The grey shaded box group the eInfrastructure
Possibilities

• Purchase of technology and services

• Joint R&D projects

• *In situ* test sites with realistic sub-sea conditions and infrastructure

• Industry relevant data

• Possible international marked

• Technology developed -> benefits for the industry
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