Local Contribution to the Aasta Hansteen development

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Presentation overview

Who are we
What is our role on Aasta Hansteen
Onshore activities and local contribution
What do we expect from our suppliers
Our capabilities

A global leader in seabed-to-surface engineering, construction and services
Subsea 7; The World’s Largest Subsea Contractor

40+ vessels

175 ROVs

14,000 people

2,000 engineers
Subsea, Umbilical, Riser and Flowlines (SURF) systems

We are experts in:
- Design
- Fabrication
- Installation
- Commissioning

SURF systems are the most significant proportion of our business and our largest growth market.
Subsea 7 operates internationally as one group – locally sensitive and globally aware
We believe in strong local, integrated teams, leveraging our global know-how and resources.
Subsea 7 in Norway

• Project office in Oslo (approx. 80 people growing to 140 in 2013)
• Project office in Northern Norway
• Marine office in Grimstad – vessel management (50 people)
• Bases in Dusavik and Kristiansund
• In total approx. 1250 people onshore in Norway
Vigra – North Sea spool base

- State of the art spool base in Vigra (Ålesund)
- 15 permanent and 75-300 project personnel
- Fabrication of 225 km pipeline in 2012
- Pipe fabrication for Norway and UK
Our differentiators

- People
- Technology
- Assets
- Local presence
A brief description of Subsea 7 Scope of Work on Aasta Hansteen vessels and schedule
Aasta Hansteen Field Lay Out

- Pioneer in deepwater
- Developed with 3 subsea templates tied back to a SPAR, processing platform
- Largest of its kind, the first SPAR on the Norwegian continental shelf
- Developed with Steel Catenary Riser system
Flowline and Marine Operations

- EPCI of Flowline initiation piles
- EPCI of flowlines and Steel Catenary Risers (SCR)
  - 3 off Production SCR’s 12¾”OD 825 Clad, 40mm coating
  - 1 off 14” OD X65 Gas Export SCR, Coating 5mm
  - 19 km 12” flowlines, mechanically lined pipe
  - Line pipe will be CPI, option for Subsea 7 to supply
- EPCI of PLETS
- EPCI of coating, anodes, strakes and SCR monitoring system

- Installation of Umbilicals and Umbilical Riser Base (CPI)
  - 3 off 7” static umbilicals (18 km)
  - 1 off 8” dynamic umbilical

- EPCI of horizontal anchors for flowlines and SCR
- Installation of manifolds (CPI)
- EPCI of spools (Linepipe is CPI)
- EPCI of FPSO Suction Anchors
- Pull-in and hang of of SCRs and Umbilical
- Tie-in (HCS)
- Pre-commisioning
- Survey
FPSO Tow to Field and Mooring Installation

- Transport and installation of mooring lines (17 off) for the Aasta Hansteen Spar FPSO at the Aasta Hansteen Field
- Tow-out of the Aasta Hansteen Spar FPSO to the Aasta Hansteen Field
- Hook-up of the mooring line system to the Aasta Hansteen Spar FPSO
- Mooring System consist of 17 moorings divided in 3 groups - each mooring line consist of a suction anchor, ground chain, 2000m polyester fibre rope and top chain
Offshore operations – 2015 and 2016

- 7 Subsea 7 vessels (construction and flexlay)
- 5 third party vessels (SPAR tow-out)
- 2015 operations
  - More than 220 vessel
  - More than 30 portcalls
- 2016 operations
  - More than 110 vessel
  - More than 13 portcalls
Aasta Hansteen

Onshore activities
Main onshore local activities

- Engineering and Supply Chain Management performed from North Norway office
- Main mobilisation ports for the vessels will be in ports close to the field
- Significant fabrication packages will be performed by local suppliers
- General supplies for ship operations and mobilisations
- Local procurement and supplies to Subcontractors
Local services, fabrication and procurement

- Large fabrication packages
  - SPAR, SCR and flowline anchors, Rigid spools, PLETs, sleepers

- Smaller fabrication packages
  - Temporary work, clamps, aluminium structures

- Procurement items
  - Rigging, ironware

- Mobilisation services
  - Storage, cranes, transport, welding, logistics support, security

- Vessel support
  - Hydraulic and electrical workshops and technicians

- General ship supplies
  - Fuel, oil, spares, provisions and domestic supplies

- Logistics, accommodation and travel for crew changes
We want to establish a long term relationship with our suppliers

Local services, fabrication and procurement schedule

2012
- Tender, design, Pre-qual,
- Prequalification of suppliers
- Large Fabrication packages

2013
- Anchor fabrication Contract awarded

2014
- Installation aids

2015
- Procurement

2016
- Future projects
Aasta Hansteen activities in Northern Norway

Potential suppliers locations

- Tromsø
- Harstad
- Bodø
- Mo i Rana
- Nesna
- Sandnessjøen

And there are more to come
Skandi Acergy in port