Making waves through turbulent times

Durham
Shaun Heywood
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How is the subsea vessel fleet changing?
How old is the fleet?

*Age of subsea fleet*

Source: ConstructionVesselBase
When will the newbuilds arrive?

Subsea fleet newbuilds

Source: ConstructionVesselBase

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How is the pipelay vessel fleet changing?
How old is the fleet?

Age of pipelay fleet

Source: ConstructionVesselBase
When will the newbuilds arrive?

Pipelay fleet newbuilds

Number of vessels

Source: ConstructionVesselBase

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Newbuilds – where have they gone?

Subsea and Pipelay fleet
Geographical distribution of new vessels – June 2011

Diving support and ROV support vessels (43 vessels)

Source: ConstructionVesselBase
Recently delivered vessels – current activity

Diving support and ROV support vessels (43 vessels)

- IRM, 33%
- Support, 16%
- Survey, 2%
- Idle, 19%
- Mobilisation, 5%
- Installation, 7%
- Commissioning, 2%
- Working - Other modes, 7%
- Maintenance, 7%
- Removal, 2%

Source: ConstructionVesselBase

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Geographical distribution of new vessels – May 2011

Pipelay vessels (20 vessels)

- Asia-Pacific: 55%
- West Africa: 10%
- Northwest Europe: 10%
- Middle East: 10%
- Latin America: 10%
- Caspian: 5%
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Recently delivered vessels – current activity

*Pipelay vessels (20 vessels)*

Source: ConstructionVesselBase
The drivers behind the market

*Demand*
Global Pipeline installations 2003-2015

Including export lines, flowlines and trunklines

For more information please contact your ODS-Petrodata account manager

Source: FieldsBase
Pipeline installations 2003-2015

**Brazil**

For more information please contact your ODS-Petrodata account manager

**Nigeria**

For more information please contact your ODS-Petrodata account manager

Source: FieldsBase

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IRM – a growing market

IRM demand 2006-2014

For more information please contact your ODS-Petrodata account manager.

Source: ODS-Petrodata
Subsea tree installations for 2010

*Subsea trees per geographical region*

- **Europe**: 23%
- **South America**: 15%
- **North America**: 17%
- **Med/Middle East**: 4%
- **Russia and Caspian**: 1%
- **Central America**: 1%
- **Asia-Pacific**: 10%
- **Africa**: 29%

*Source: FieldsBase*
Global subsea tree installations 2003-2015

For more information please contact your ODS-Petrodata account manager

Source: FieldsBase
Global subsea tree installations 2003-2015

**Brazil**

- Installed
- Tendering
- Planned
- Possible

For more information please contact your ODS-Petrodata account manager

**Nigeria**

- Installed
- Tendering
- Planned
- Possible

For more information please contact your ODS-Petrodata account manager

Source: FieldsBase
DSV demand 2003-2015

Global demand for the diving support vessel market

Source: ODS-Petrodata

For more information please contact your ODS-Petrodata account manager
ROVSV demand 2003-2015

Global demand for the ROV support vessel market

For more information please contact your ODS-Petrodata account manager

Source: ODS-Petrodata
Pipelay demand 2003-2015

Global demand for the pipelay vessel market

For more information please contact your ODS-Petrodata account manager

Source: ODS-Petrodata
Will the market cope with the oversupply?

*Utilisation*
Average utilisation by age in 2010

Global subsea fleet

Source: ConstructionVesselBase
Average utilisation by age in 2010

Global pipelay fleet

Source: ConstructionVesselBase
Utilisation 2007- May 2011

**Brazil**

- DSV
- ROV SV
- All pipelay

**Nigeria**

- DSV
- ROV SV
- All pipelay

Source: FieldsBase

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Utilisation

DSV, ROVSV and all pipelay vessels, including derrick pipelay

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Source: ODS-Petrodata
Decommissioning

A future demand builder
Decommissioning – an expense that has to happen

- DECC’s estimated total cost of decommissioning in the North Sea is USD 38-48 billion
  - USD 25 billion to decommission 253 offshore installations
  - USD 11 billion to remove 278 subsea production systems
  - USD 3-11 billion to remove 3,300 pipelines

- Less than 10% has been removed
- Water depth varies between 2-312 msw
- Yearly spend on decommissioning
  - UK – USD 500 million

### Fixed platforms in Northwest Europe

<table>
<thead>
<tr>
<th>Number of platforms</th>
<th>25-29 years</th>
<th>30-34 years</th>
<th>35-39 years</th>
<th>40+</th>
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<td>100</td>
<td>40</td>
<td>60</td>
<td>20</td>
</tr>
</tbody>
</table>

*Source: FieldsBase*
Decommissioning – a future demand builder

- Government pushing to get idle infrastructure out over a period of three years
- Benefits for operators include
  - Reduced insurance premiums
  - Increased workforce utilisation
  - Planned decommissioning is cheaper than decommissioning due to a hurricane
- Removal costs
  - 3,000+ wells – USD 200-300,000 = USD 600 million to 1.1 billion
  - 775 idle structures – USD 1.2-2.8 million per structure = USD 930 million to 2.2 billion
- Removals have and will be outpacing installations in this region
- Yearly spend on decommissioning
  - GoM – USD 600 million and rising

Source: FieldsBase
Attrition

Will it happen?
Attrition scenarios for diving support vessels

For more information please contact your ODS-Petrodata account manager

Source: ConstructionVesselBase
Attrition scenarios for ROV support vessels

For more information please contact your ODS-Petrodata account manager

Source: ConstructionVesselBase
Attrition scenarios for pipelay vessels

For more information please contact your ODS-Petrodata account manager

Source: ConstructionVesselBase

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Attrition scenarios for derrick pipelay vessels

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Source: ConstructionVesselBase

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Day rates
Day rates including full spread in Asia-Pacific

Shallow & benign vessel day rates

Harsh & deep vessel day rates

Source: ConstructionVesselBase

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Conclusions

• Oversupply, yes!

• But oversupply in older vessels operating in benign waters.

• Additional high-end tonnage may be required as we enter deeper waters, and definitely when the Arctic opens up.

• Estimated 25% of world’s petroleum reserves are in the Arctic regions.
  - 90 billion barrels of oil
  - 1,700 trillion cubic feet of natural gas
  - 44 billion barrels of natural gas liquids may remain to be found in the region

• The market is healthy, demand is on the rise and confidence has returned.

• Operators may restrict the age of tonnage they use.

• Decommissioning will be big business, for fabrication yards and vessel owners alike, despite reduced rates compared to installation work.
ODS-Petrodata – Field Development

Research for this presentation comes from the following databases and published ODS-Petrodata market reports:

Databases:
• ConstructionVesselBase
• FieldsBase

Online databases and news service combined. Updated daily

Published ODS-Petrodata market reports:
• The Aquanaut
• Offshore Field Development Monthly
• Petrodaily Subsea & Field Development

Monthly
Monthly
Live online news service
Contact Us

Should you have any questions or need additional information, please contact us at one of our regional offices or visit us online:

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