THE SUBSEA SUPPORT VESSEL MARKET FORECAST: IMPLICATIONS FOR AFRICA

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Global players and market trends

- The major players in the subsea support sub sector in Africa shall be reviewed in this session.
- I begin by reviewing the following citation by Infield:

  ‘In fact capital-intensive ultra-deepwater developments are expected to capture 48% of Capex and 23% of tree installations in 2013-2017, in contrast to 37% of Capex and 15% of installations in 2008-2012. The subsea industry therefore shows very positive prospects for growth in the next five years’, says a report by Infield.
Table 2: Leading OSV Operators in West Africa - Percentage share
Source: Clarkson’s Research services 2012

<table>
<thead>
<tr>
<th>Company</th>
<th>Percentage</th>
<th>AHTS Company</th>
<th>Percentage</th>
<th>PSV Company</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total S.A</td>
<td>19</td>
<td>Tidewater</td>
<td>20</td>
<td>Tidewater</td>
<td>10</td>
</tr>
<tr>
<td>Chevron</td>
<td>16</td>
<td>Bourbon</td>
<td>16</td>
<td>Bourbon</td>
<td>6</td>
</tr>
<tr>
<td>ExxonMobil</td>
<td>14</td>
<td>Sanko Line</td>
<td>8</td>
<td>Sanko Line</td>
<td>1</td>
</tr>
<tr>
<td>Eni</td>
<td>8</td>
<td>Swire Pacific</td>
<td>7</td>
<td>Swire Pacific</td>
<td>1</td>
</tr>
<tr>
<td>Perenco</td>
<td>6</td>
<td>Maersk Supply</td>
<td>4</td>
<td>Edison Chouest</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>37</td>
<td>Others</td>
<td>45</td>
<td>Others</td>
<td>81</td>
</tr>
</tbody>
</table>
Global market trends continued..

- ‘Latin America and West Africa account for over half of subsea capital expenditure (Capex) expected to be spent between 2013 and 2017. This is driven by large deepwater and ultra-deepwater discoveries offshore Brazil, particularly in the pre-salt basins, and offshore Angola and the Gulf of Guinea. As an operator, Petrobras dominates the subsea sector and is expected to account for 24% of global subsea Capex in the next five years to further key projects such as Papa Terra, Lula and Franco. However, the fast pace of development anticipated by the Brazilian government depends on Petrobras’ ability to overcome capacity constraints and keep costs under control.

- The highest investment levels and number of installations of subsea trees in Africa are expected to occur in 2017 driven by large developments such as the Kaombo and Cabaca fields in Angola, and the Bonga Southwest and Nsiko projects in Nigeria.’ continues the report by Infield.
Table 1: Number of offshore fields in Africa-by development types  
Source: Clarkson’s Research services 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>FPSO</th>
<th>Other MOPU</th>
<th>Subsea</th>
<th>Ext reach</th>
<th>Fixed</th>
<th>Other</th>
<th>Total</th>
<th>Share</th>
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<tbody>
<tr>
<td>West Africa</td>
<td>24</td>
<td>7</td>
<td>44</td>
<td>7</td>
<td>242</td>
<td>11</td>
<td>335</td>
<td>97.1%</td>
</tr>
<tr>
<td>East Africa</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>2</td>
<td>0.6%</td>
</tr>
<tr>
<td>Southern Africa</td>
<td>-</td>
<td>1</td>
<td>6</td>
<td>-</td>
<td>1</td>
<td>-</td>
<td>8</td>
<td>2.3%</td>
</tr>
<tr>
<td>Total for Africa</td>
<td>24</td>
<td>8</td>
<td>52</td>
<td>7</td>
<td>243</td>
<td>11</td>
<td>345</td>
<td>100%</td>
</tr>
</tbody>
</table>
Subsea support demand drivers

- Geir Sjurseth, Singapore-based gm of DVB Group Merchant Bank (Asia) Ltd., and md of the bank’s Offshore Support Group opined as follows: key demand drivers work in the offshore industry as follows:
  - Oil prices and energy demand drive exploration and production capex. In turn, this drives the rig market, which leads to offshore support vessel demand. According to him: “West Africa is said to belong to the “Deepwater Triangle” which also includes Offshore Brazil and the Gulf of Mexico.
  - “Africa and Latin America (led by Petrobras) continue to lead deepwater growth,” says a report by Douglas-Westwood, a UK-based energy research group.”
Age profile for DP2+ fleet

- ROV Support Vessels
- Diving Support Vessels
- Multiservice vessels
- Reel Lay Vessels
- Lay Barge

Year delivered:
- Before 1980
- 1980-89
- 1990-99
- 2000-09
- 2010
- 2011-13

No. of vessels
- 0
- 20
- 40
- 60
- 80
- 100
- 120
- 140
- 160
Sub sea vessel Age profile

- The sector as shown from the graph above is ROV support vessel dominated. Existing vessels of this type were built from the year 2000. The sector has been experiencing a rising trend ever since.

- Next in prominence is the DSV sub sector. The sector had a peak during the 80 decade; suffered a downturn in 90 decade and recovered a little in the 2000 decade. The sector is expecting recovery in the near future.
PORT TECHNOLOGY CONSULTANCY SERVICES

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Specialist vessel demand by type and capabilities

- Offshore support vessel market is expected to reach $91.2 billion market by 2018 with an anticipated firm annualized growth rate of 5.7% from 2013 to 2018. The US - Gulf of Mexico (GOM), with its thriving economies and rapidly expanding manufacturing base, is expected to experience the highest revenue growth during the next five years. In terms of vessel count (demand).
Subsea market growth

- Subsea Market Report dissects subsea capital expenditure into different components including subsea trees, manifolds, templates and the elements of subsea processing: subsea booster pumps, subsea compression and subsea separation.

[Infield](http://www.infield.com/market-forecast-reports/subsea-market-report)
Expected Subsea growth

- Africa 31%
- Asia 9%
- Australasia 4%
- Europe 12%
- Latin America 22%
- Mid East & Casp 1%
- North America 21%

Source: Infield
Deepwater capex to rise 90%

- According to Douglas (2013) Five-year Capex to total $223bn
  - ‘Golden Triangle’ $174bn of spend
  - Asia (20%) is a high-growth opportunity from a small base
  - $78bn on drilling & completion of subsea wells
- (Douglas Westwood)

121 units are forecast for installation.

Latin America 29% of units & 37% of the Capex.

FPSOs 94 units and 80% Capex.

FPS leasing sector needs a sustainable business model.

(Douglas Westwood)
Global deepwater* oil production (mbd)

Source: Pareto Securities 2013
Deepwater oil production forecast

- The sector is led presently by Brazil with an increasing trend of supply which shall up to and extending year 2020.
- Next in line are Angola and Nigeria in Africa.
- Followed by US Gulf coast all with expected production output forecasts.
- The sector which had a production output of less than 2mbd had exceeded 6mbd by 2014 and is expected to reach 11 mbd by 2020.
Orderbook update, prospects and opportunities

- The total worldwide subsea CAPEX is expected to triple over the next 5 years,
- reaching close to $20,000m in 2017. Recent years’ discoveries in South America and West Africa form a healthy backlog for the industry. These areas will therefore experience the highest growth in the next period.
- Fearnly (2013)
Total world wide Subsea Capex

Source: (Fearnley Offshore Supply)
North America

North Sea

South America

Africa/Medit.

Asia Pacific/ Middle East

Source: (Fearnley Offshore Supply)
Global Sub sea CAPEX up to 2017

- The highest CAPEX growth will come from Africa & Mediterranean
- Next in line will be South America
- Followed by Asia Pacific and Middle East
- The North sea and North America.
- All together the sector is expected to increase her CAPEX to $20billion by 2017.
## Newbuild AHTS worldwide

<table>
<thead>
<tr>
<th>BHP</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
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<td>&lt;8k</td>
<td>50</td>
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<tr>
<td>12k-16k</td>
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<td>9</td>
<td>5</td>
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<tr>
<td>+16k</td>
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<td>0</td>
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<tr>
<td>Total</td>
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<td>60</td>
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<td>0</td>
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## Newbuild PSV worldwide

<table>
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<tr>
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<th>2016</th>
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<tr>
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<tr>
<td>2-3.5k</td>
<td>52</td>
<td>38</td>
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<tr>
<td>3.5-5k</td>
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<tr>
<td>+5k</td>
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<td>42</td>
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<tr>
<td>Total</td>
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<td>159</td>
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</table>

Source: Fearnly (2013)
## New build SUBSEA VESSELS worldwide

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<th>2016</th>
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<td>DSV</td>
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<td>7</td>
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<tr>
<td>Heavylift/ Pipelay</td>
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<td>5</td>
<td>1</td>
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</tr>
<tr>
<td>Total</td>
<td>34</td>
<td>59</td>
<td>16</td>
<td>4</td>
<td>113</td>
</tr>
</tbody>
</table>

Source: Fearnly (2013)
Growth expectations: Subsea sector

- The subsea segment has grown tremendously. This market has been the best performing OSV segment supported by strong fundamentals.
- The fleet growth has consequently been high with a rush of vessel orders in 2012.
- Over the next three years the fleet is expected to grow by 55 vessels or ~22%.
- Pareto Securities (2013)
Fleet growth for Subsea vessels (LOA>90m; DP II+; Ship shape)

Source: Pareto Securities 2013
The Golden triangle of US Gulf coasts, Angola, Nigeria and Brazil are special growth sectors to watch in the next 5 years.

Growth in the subsea sector is highest among the offshore support vessel sectors.

Highest growth expected from West Africa in 2017.

Global fleet growth in the subsea sector still on the rise.

Growth in the sector to continue even up to 2015.
References

- Clarkson (2012) Clarkson’s Standard Club presentation p19
- Clarkson (2012) Clarkson’s OSV presentation p 21-22

No. 3 | 2013
References contd

- Fearnley (2013) Astrup Fearnley Offshore and Shipping Conference, presentation (15.01.2013)
- Infield http://www.infield.com/market-forecast-reports/subsea-market-report
- Pareto Securities (2013): Oil services research report (11.02.2013)
Thank you message

- John 3:16,17
- 16 For God so loved the world that He gave His only begotten son that whosoever believeth in him shall not perish, but have everlasting life.
- 17 For God sent not his Son into the world to condemn the world; but that the world through him might be saved.