### www.nofenergy.co.uk

...your gateway to the UK supply chain. Access leading edge technologies in Oil & Gas. With over 25 years' experience in providing products & services to the North Sea, our members have gained an enviable reputation for quality, unique solutions and innovative products and services. To find out more about NOF Energy and our members, please contact us:

### T: +44(0) 191 417 4254

E: business@nofenergy.co.uk W: www.nofenergy.co.uk

OTC 2007: Visit us on our stand No 2448 in the UK Pavilion



3rd Floor Pennine House Washington Town Centre Tyne & Wear NE37 1EP UK Tel: +44(0) 191 417 4254 Fax: +44(0) 191 417 4257

# SECTOR FORECASTS

# West African demand heads subsea project lists



Unrelenting growth in the subsea market has been in full flow for the last few years mainly due to the robust contribution of West Africa to global demand writes Dr Roger Knight (*left*) and George Venturas of Infield Systems (Booth 2559).

This level of demand is now causing severe delays in some projects because of longer lead times on delivery of many pieces of equipment and services fundamental to developing subsea fields. Spiralling costs have been prevalent, at levels not experienced, before leaving most operators reconsidering their positions in terms of expanding the rate of development of their offshore assets As such we see a backlog of assets in their development portfolios which gives rise to confidence in the long term viability of the market.

In terms of the total number of subsea wells brought onstream annually we expect to see a threshold limit of around 500 wells through to 2012 being breached, but not significantly, this is primarily due to constraints throughout the supply and installation chain. Where economies of scope and scale are creating efficiencies natural uncertainty still exists within the industry which essentially means that subsea trees and other equipment are likely to be over specified and as such face longer lead times. In addition long lead times exist in most areas of the market including flexible pipelines, umbilicals, special steel and production risers. Many manufacturing plants are working 24 hours a day and operating at full capacity to meet current demand and future plant expansions, into South East Asia for example, will take time to alleviate the situation.

Data supplied from Infield Systems (OFFPEX Energy Database) shows that in spite of current constraints there is a clear upward trend in the number of subsea wells forecast to come onstream in most regions up until 2011. However, we continue to anticipate a slight decrease in the number of subsea wells brought onstream in 2009 (compared to 2008 and 2010) especially in Africa, Europe and North America. The dip is a direct consequence of the delays of kev projects such as BP's Thunder Horse causing clustering of projects within 2008. The projected growth beyond 2009 reflects an expected easing of the supply constraint that will allow the market to expand towards the end of the five year period as investments in the drilling, installation and manufacturing markets begin to facilitate increased capability as more units and plants come onstream.

One example of the current supply constraint situation is that of the record day rates being demanded for drilling rigs. Such unprecedented high rates have appeared to slow the decision making processes for exploration and developments within the offshore market. Not only for the independents who run the risk that drilling two or three dry holes in a row at \$50 million a piece could be catastrophic. but also for seemingly cash rich majors who may be hedging against potentially adverse future conditions. It is currently difficult to drill a one or two well tie-back unless it can be fitted into a coordinated drilling campaign. This has had, and we believe is going to continue to have, a significant impact in some regions - particularly the Gulf of Mexico and the North Sea.

As a direct result of the very high drilling rates a trend can be seen to examine, at least at the FEED stage the potential replacement

## When produced water is your concern





Today's pioneers discovering tomorrow's technology.

Come Visit Us at OTC Booth #5657

#### C & C Technologies leads the way in survey and positioning technology for the oil and gas industry.

Frompioneering AUV technology to providing unprecedented levels of excellence in surveying, C& Chas created a "new vision" for the oil and gas industry. Our fleet of AUVs (CS-urveyor" II, III) has set new standards by reaching depths to 4,500 meters in ultradeep waters across the globe. We have also integrated CNaw" (globally corrected GPS service) into our services in pursuit of breakthrough technology for our clients. With more than 360 employees globally, we provide marine construction survey services, high-resolution multichannel geophysical surveys and geotechnical laboratory testing to bring you a complete package of services for your next project.



730 East Kaliste Saloom Road / Lafayette, LA 70508 / 337-210-0000 / 337-261-0192 fax 10615 Shadow Wood, Suite 100 / Houston, TX 77043 / 713-468-1536 / 713-468-1115 fax For more information on our full range of services, visit our website at www.cetechnol.com.





100,000lb Line Pull www.recoverywinch.com



Site, 2D Seismic & Deep Tow Surveys www.dwsii.com



Model 5050 High Speed Survey Winch www.i-winch.com

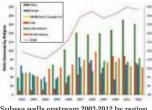
# SECTOR FORECASTS

This level of demand is now causing severe delays in some projects because of longer lead times on delivery of many pieces of equipment and services fundamental to developing subsea fields. Spiralling costs have been prevalent, at levels not experienced, before leaving most operators reconsidering their positions in terms of expanding the rate of development of their offshore assets As such we see a backlog of assets in their development portfolios which gives rise to confidence in the long term viability of the market.

In terms of the total number of subsea wells brought onstream annually we expect to see a threshold limit of around 500 wells through to 2012 being breached, but not significantly this is primarily due to constraints throughout the supply and installation chain Where economies of scope and scale are creating efficiencies natural uncertainty still exists within the industry which essentially means that subsea trees and other equipment are likely to be over specified and as such face longer lead times. In addition long lead times exist in most areas of the market including flexible pipelines, umbilicals, special steel and production risers. Many manufacturing plants are working 24 hours a day and operating at full capacity to meet current demand and future plant expansions, into South East Asia for example, will take time to alleviate the situation.

Data supplied from Infield Systems (OFFPEX Energy Database) shows that in spite of current constraints there is a clear upward trend in the number of subsea wells forecast to come onstream in most regions up until 2011. However, we continue to anticipate a slight decrease in the number of subsea wells brought onstream in 2009 (compared to 2008 and 2010) especially in Africa, Europe and North America, The dip is a direct consequence of the delays of key projects such as BP's Thunder Horse causing clustering of projects within 2008. The projected growth beyond 2009 reflects an expected easing of the supply constraint that will allow the market to expand towards the end of the five year period as investments in the drilling, installation and manufacturing markets begin to facilitate increased capability as more units and plants come onstream.

One example of the current supply constraint situation is that of the record day rates being demanded for drilling rigs. Such unprecedented high rates have appeared to slow the decision making processes for exploration and developments



Subsea wells onstream 2003-2012 by region. (Source: OFFPEX Market Modelling and Forecasting System.)

within the offshore market. Not only for the independents who run the risk that drilling two or three dry holes in a row at \$50 million a piece could be catastrophic, but also for seemingly cash rich majors who may be hedging against potentially adverse future conditions. It is currently difficult to drill a one or two well tie-back unless it can be fitted into a coordinated drilling campaign. This has had, and we believe is going to continue to have, a significant impact in some regions – particularly the Gulf of Mexico and the North Sea.

As a direct result of the very high drilling rates a trend can be seen to examine, at least at the FEED stage the potential replacement of wet tree schemes and with alternative dry tree solutions. The rationale for this is that as the costs of securing suitable drilling rigs for workover activity are becoming increasingly prohibitive it may be cheaper to spend more on the production facility and work over the wells from the platform. Within the Gulf of Mexico the desire to try

## COATED BOLTS HAVE JUST UNDERGONE A COMPLETE REVOLUTION.

### Introducing TuffCor—the ultimate low-maintenance bolt.

The promise of coated bolts has finally come true. TuffCor delivers performance that so outdistances other coated bolts, it has created a category unto itself. Look at these



photos from an independent test that simulated offshore conditions. The commonly specified bolt shows serious corrosion before it reaches 2,000 hours. While the TuffCor bolt barely has a blemish at 5,000 hours. Long life and low corrosion mean you're not constantly dealing with painting over rust bleed. And you're not torchcutting bolts because the nuts

break out fast and easy. These are the kinds of maintenance time and safety benefits your crew can really fasten onto.

So when you specify bolts, start a revolution. Go with TuffCor from Dan-Loc.

## BOLT & GASKET

(800) 231-6355 TOLL-FREE