



Review of the UK oilfield services industry

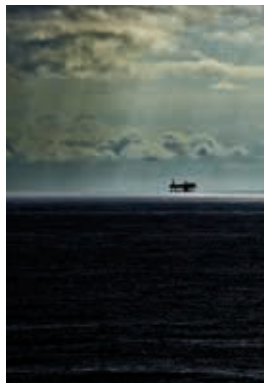
January 2019



Building a better
working world

Contents

The UK oilfield services sector by
supply chain category:



1

Introduction
page 1



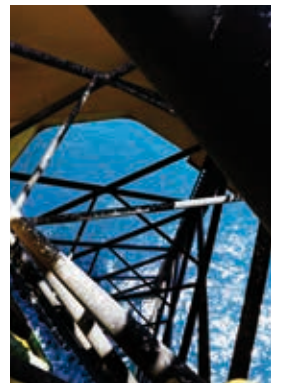
2

Overview
page 4



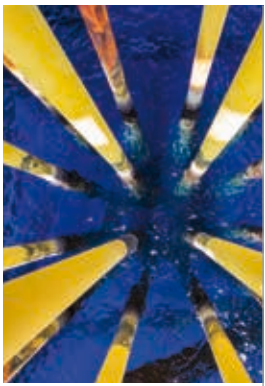
3

Reservoirs
page 13



4

Wells
page 17



5

Facilities
page 21



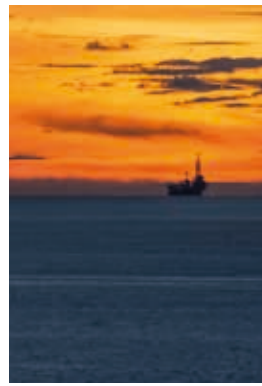
6

**Marine and
Subsea**
page 25



7

**Support and
Services**
page 29



8

**Comparison with
the Norwegian
and Dutch oilfield
services sectors**
page 33



9

**Methodology and
key assumptions**
page 36

Welcome to EY's eighth annual review of the UK oilfield services (OFS) industry. We review the 2017 trading performance of UK registered companies in the hugely diverse oilfield services marketplace and discuss the impact the changing oil market has had, and is expected to have, on their performance in the UK and internationally in 2018 and beyond.

Top 4 themes



1 Profitability

During 2018, upstream companies started to see the benefit of continued cost discipline and the increased oil price. However, this has not been fully replicated for OFS companies, which continue to experience margin pressure on existing and new projects.



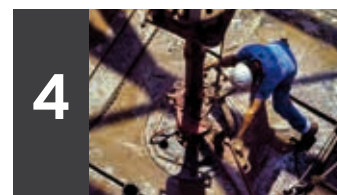
2 Technology

Digitalisation and technology are becoming increasingly important to prolonging field life by improving economics either through maximising uptime, reducing maintenance and support costs or enabling analytical insights through data acquisition and processing. In the near future, for example, services such as inspection of pipelines could be carried out autonomously and controlled onshore, with computer algorithms rather than humans detecting any changes to be investigated.



3 Sustainability

UK OFS companies have implemented major cost cutting initiatives in response to the lower oil price and further cost reductions may be limited within existing operating models. The focus on performing services more efficiently will need to continue to ensure the United Kingdom Continental Shelf (UKCS) remains competitive against other basins for capital allocation during the gradual recovery that is now being seen.



4 Skills

A large number of experienced people have left the sector over recent years as a result of redundancy programmes. In addition, the implementation of IR35 on contractors working through personal services companies could have a significant impact on the ability of companies to maintain a flexible workforce that can react to peaks and troughs of activity.

As upstream company margins and capital structures improve, will this translate into increased OFS margins where there are shortages in supply? Where overcapacity remains, such as with drilling rigs, will the increased upstream margins encourage incumbents to hang on or will it stimulate renewed efforts to remove excess capacity?

Although exploration and production (E&P) companies have historically been wary of trialling unproven technology, during this downturn they have seized on new technology as a means for them to cut costs and improve performance – how do OFS companies best engage with E&P companies' technology agenda and build trust to demonstrate the benefits their specific offering could provide? Given the scale of the technological opportunity and limited capital available to OFS companies, which opportunities present the best bet to secure a definitive competitive advantage?

How much of the structural cost savings are sustainable and which are just short-term company adaptations that will not continue during a sustained cyclical upturn? Costs are expected to increase, given the margin pressure OFS companies have been under, so how do companies ensure efficiencies are found to counteract this and maintain their competitive position?

What are the skills and composition of the workforce that will be needed for the future of the sector and how do companies attract the right mix of people given the competition from other industries? How do companies ensure that they don't return to paying excessive rates for talent due to shortages? Given the cyclical nature of the industry, how do companies maintain the investment necessary to respond to demographic challenges, increasing pace of technological change and the demands of a modern working environment?

1

Introduction



While there is a general sense of a gradual recovery in the oil and gas sector, our eighth annual review of the UK's OFS industry highlights that 2017 continued to be a tough year, and we expect that trend to continue into 2018.

Our report shows that turnover of the UK's OFS industry declined for a third successive year, albeit the rate of decline reduced, but more importantly the EBITDA margin decline in 2017, dropping by 2.2 percentage points, was the largest since the downturn started in 2014.

Despite a growth in worldwide turnover in Global OFS companies in 2017 and further forecast growth in 2018 to 2020, the sector share price index saw a significant reduction in 2018 demonstrating concerns about the speed of recovery in the sector and the underlying margin issues.

It's not unusual for the recovery in the OFS sector to lag behind the recovery in the E&P sector but the continued concerns with regard to global economic growth and thus demand for crude, and the ability for OPEC and other countries to achieve demand/supply balance has ensured that a very strong focus on cost control and capital spend has maintained a downward pressure on OFS margin.

In the UKCS there is clear evidence of returning confidence in the E&P sector with a significant increase in the number of sanctioned developments in 2018 and an increase in the number of blocks applied for in the 31st licensing round. However, operating costs per barrel has been maintained at 2016 levels, and reflect a 49% reduction from the high of 2014.

The UK upstream sector has emerged from the downturn with the highest production efficiency in a decade, with a much clearer focus on project execution, a willingness to adopt new technology and a steely resolve to maintain cost discipline.

While the OFS sector has most probably come through the bottom of the cycle, in 2017 there is clearly no let up in the pressure on costs. Therefore the strategy for the sector remains broadly the same: focus on competitive advantage; obtain pricing uplift through integrated service offerings; achieve economies of scale and have a clear commitment to technological innovation aligned with the agendas of the E&P companies. Of course the sector must also maintain a focus on people – the downturn saw a significant reduction in headcount and the consequent loss of a great deal of skill and experience from the OFS sector. The companies that have a clearly articulated strategy around their employees and can demonstrate dynamic and rewarding career paths will be the most successful.

With some of the global E&P companies exiting the UKCS and new investors entering the market, the changing of the guard, alongside an increasing focus on digital and commercial innovation presents opportunities for the UK OFS industry. Moreover, with exports still only averaging 40% of turnover, internationalisation into markets with stronger growth potential is an attractive proposition where companies can differentiate their offering to build scale quickly.

Derek Leith
EY Global Oil & Gas Tax Leader

Introduction



Diversification and growth

This report highlights the UK's oil and gas supply chain's importance to the economy, both in creating value in the UK and through exports. Despite the downturn, OFS generated revenue of £27 billion and contributed over £300 million in taxation. Exports represent nearly 40% of turnover, a remarkable achievement considering the major headwinds here and globally.

The supply chain's resilience is testimony to its hard work and ingenuity. Transitioning from cost cutting to greater efficiency has been key. This collaborative problem-solving approach is helping cost base improvements become sustainable.

2017 was a low point for the supply chain (with employment 20% below peak). EBITDA revealed margins under severe pressure with facilities and reservoirs nearly unsustainable in a capital-intensive industry.

The wells sector has contracted and retrenched but there's a risk some of the capacity required to support the upturn has been lost. For the supply chain to recover and achieve its potential there must be an upswing in margins.

It's heartening the sector is growing after three years of contraction. Reflecting the improvement in competitiveness, major new investments including Shell Penguin and Fram, Apache Garten, Nexen Buzzard phase 2 are progressing with others imminent. The £3.5 billion of new investment sanctioned last year will take time to filter through the supply chain.

Looking ahead, global activity is increasing. Our supply chain has competitive advantage in offering full lifecycle services including exploration, decommissioning and brownfield, with a reputation to match. As global spend picks up, there's a great opportunity to make the most of these readily exportable OFS capabilities.

Oil & Gas UK helps its members diversify and grow. Along with promoting their competitive capabilities, we're supporting the first Energy Exports conference and representing our members' interests to incoming trade missions and government international trade bodies.

Vision 2035 presents a picture of the prize at stake at home, in exports abroad and diversifying into new energy and utility markets. Realising these opportunities and achieving sustainable margins is the target for supply chain companies as the global market recovers.

Matt Abraham
Supply Chain Director,
Oil & Gas UK



The next phase

I co-chair, with Neil Sims, the MER UK Supply Chain & Exports Taskforce. A key priority for us is supporting Vision 2035's target to double the UK's share of exports from 3.7% to 7.4% – generating an additional £150 billion for the UK economy.

The latest projections, using data from EIC, point to the potential for an additional £100 billion through future core oil and gas projects, which is hugely positive but is £50 billion below the goal. Our taskforce believes diversification into associated sectors such as offshore wind, the broader underwater sector and clean technologies is key to closing this gap.

We often talk about the future energy transition, but the reality is that it's something we're in the middle of already, and our sector has a pivotal role to play. As well as producing the majority of energy to heat homes, power businesses and move people today we have the skills and technology to ensure that this continues in an increasingly lower carbon context tomorrow.

This transition period demands that our society – from policy makers to producers, from technologists to consumers, get the balance right to ensure economic prosperity, ever-reducing carbon emissions and better use of technology.

This period, where the role of gas in the UK is vital and where maximising the recovery of oil from our own waters is a priority, should be seen not as a threat to those in our sector but as the road map to the next phase of our story – providing energy to the UK and the world.

Stuart Payne
Director of HR and Supply Chain
Oil & Gas Authority



2

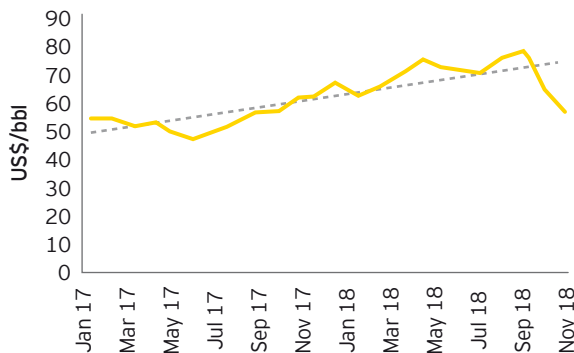
Overview

Global trends

The global OFS sector is emerging from a period of considerable pressure. Whilst the future dynamic is perhaps less hostile, it remains uncertain, creating both challenges and opportunities for OFS companies. Demand projections, energy mix, commodity prices (spot and forward), infrastructure security, geopolitics, and capital markets, among other items, will all play key roles in shaping the complex path that OFS companies must navigate.

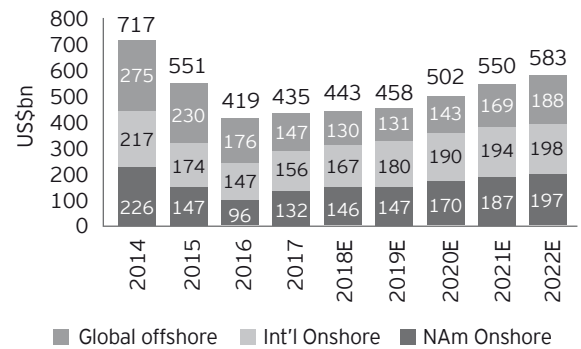
As such, it is over-simplistic to correlate OFS performance or outlook to any one data point. Nonetheless, the oil price is certainly a key factor influencing market sentiment. Brent crude oil prices averaged around US\$72/bbl in 2018, reaching a high of US\$86/bbl in October 2018, before declining to around US\$60/bbl in December 2018 following concerns over supply levels and faltering demand.

Figure 1: **Monthly Brent oil prices**



Market management by OPEC and Russia will heavily influence prices and OPEC's renewed leadership in actively managing global oil supply will continue to support prices. If OPEC's historically apolitical stance is viewed as compromised by the US, then market credibility will be lessened and its influence may not be as effective.

Figure 2: **Global upstream capital expenditure**



Source: Rystad Energy, Morgan Stanley Research estimates

Compared to the last two cycles where compound annual growth rates (CAGR) ranged between 11% and 18%, the recovery in global spending between 2016 and 2018 has been restrained.

However, the global upstream energy sector does appear to be undergoing a substantial investment rebound as confidence in a sustainable cyclical recovery builds. Spending growth is expected to be driven by the oil majors and national oil companies (NOC), particularly in the Middle East and certain offshore markets, as smaller E&P companies may continue to be constrained by shareholder pressure for returns.

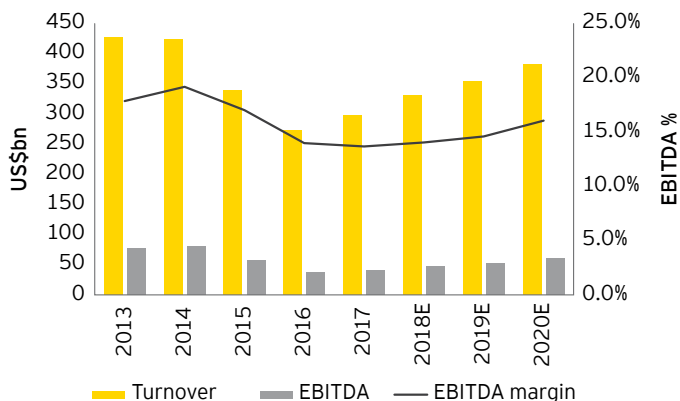
There are also signs that exploration is beginning to recover with increased licensing activity, data acquisition and drilling globally. This is crucial to replenish oil and gas reserves following a number of years of underinvestment. However, to date, the level of activity is still limited, with exploration primarily being carried out on existing fields or through rerunning of existing seismic surveys.



Global OFS companies

For the top 80 listed OFS companies, we analysed the reported results from 2013 to 2017 and the forecast results (based on analyst's expectations) for 2018 to 2020. Global OFS companies experienced turnover growth of 9.5% in 2017, in part driven by consolidation and in part through growth in certain geographic locations. Turnover is forecast to increase by 11% in 2018, with further growth in both 2019 and 2020.

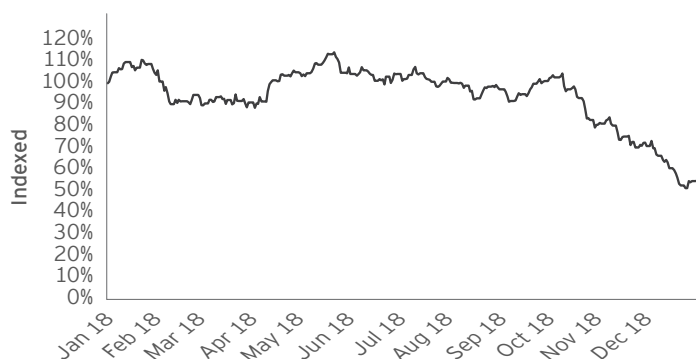
Figure 3: **Top 80 listed companies actual and forecast results**



Source: CapitalIQ

Although turnover growth is forecast for 2018, with EBITDA margin remaining constant, this was not reflected in the share price performance of listed OFS companies. The PHLX oil service sector index has shown a 45% decline between January 2018 and December 2018, reflecting investors' concerns about the recovery and the OFS sector in general.

Figure 4: **PHLX oil service sector index**



Source: CapitalIQ

2018 did not see a repeat of 2017's consolidation activity; instead companies are making smaller strategic acquisitions or entering alliances or joint ventures to collaborate on projects. Some notable exceptions include Transocean's acquisition of Ocean Rig to strengthen its portfolio of ultra-deepwater and harsh environment floaters, and WorleyParsons' acquisition of Jacobs Engineering Group's Energy, Chemicals and Resources segment to strengthen key business lines and expand its integrated solutions offering.

Technological advances, together with the margin pressure OFS companies continue to face, has led to a number of key digital initiatives being seen in the market, such as:

- ▶ Condition-based monitoring and maintenance to reduce downtime-related costs and improve operational efficiencies
- ▶ Remote ROV operations and remote monitoring to minimise manual intervention and reduce costs
- ▶ Pressure pumping automation and modelling software to optimise production

Overview

Viewpoint

Global oil field services transition in process

Despite the volatility seen during 2018, the OFS sector leaves the year in a largely similar position to the one it was in at the start of it. What has stayed the same, what is changing and what has changed? At the top of the list of things that have stayed broadly the same is the market. Despite price gyrations, the operators have continued to pursue the strategies they adopted in response to the price crash and which we discussed in last year's report, e.g.

- ▶ Capital discipline – with capex budgets held flat/marginal growth
- ▶ Reluctance to allocate capital to exploration and long lead time projects
- ▶ Focus on the accessible cost advantaged basins
- ▶ Relentless focus on cost control and production performance

What is changing or has changed during the year? We would list the following as the changes that have had an impact on the OFS sector during 2018:

- ▶ **Oil and gas price outlook.** Will a slowing global economy and oil demand balance out with the very public signal from OPEC+ producers that they are prepared to take the necessary actions to balance the market is hard to say. Operators appear to be working on the view current market levels will persist and making budgeting decisions accordingly.
- ▶ **Accelerating roll out of new technology and digital technology.** Whether it is subsurface or back office, the operators have seized on new technology as a means to cut costs and improve performance, with pilot programs beginning to move to full scale roll out. However, it is likely to come with the requirement for the OFS sector to invest to align with different operator systems. Industry wide formats do not look like they are gaining much traction at the moment.
- ▶ **Tightening US\$ monetary conditions.** While it may not seem to be the most immediate factor in OFS performance, given the majority of oil and gas projects are financed by debt (in particular US\$ denominated debt), tighter monetary conditions do have an impact, especially for those dependent on expensive and riskier debt finance.
- ▶ **Transition of operator ownership in mature basins.** Another factor that has amplified the impact of changing debt market conditions in the mature basins has been the continued

migration of asset ownership from Majors with access to cheap balance sheet financing to independents and private equity backed companies with a greater reliance on external financing.

Taken together, these factors leave the OFS sector in a challenging place. While the threat of insolvency has receded for most, the challenge of delivering an acceptable return to investors remains. In particular, the sector as a whole struggles to articulate how it will deliver the kind of earnings growth that could support a higher valuation, as can be seen from the decline in the share price of its publicly listed components during the year, despite improved financial performance. We think that the best responses to this remain broadly as we set out at the beginning of the year and companies should:

- ▶ Focus on technologies or activities where they have the kind of competitive advantage that supports activity and acceptable margins
- ▶ If scale permits, extend the scope of integrated service offerings that can attract premium pricing
- ▶ Where a definitive technological or operative advantage cannot be sustained, build scale to enable a lower cost base that can allow sustainable margins. Where possible use digital technologies to control costs too
- ▶ Engage with the Operator's technology agendas. Initially as a defensive measure to ensure market access but also to explore areas where a differentiator can be established.

The implications for the M&A agenda continue to be:

- ▶ Consolidation by activity or area to drive competitive advantage and costs
- ▶ Bolting on entities with adjacent viable technologies
- ▶ Exit markets or areas where activities are subscale or undifferentiated

Finally, during the year, discussion and commentary has continued around the overall energy transition. While the scale of this is unquestioned, both its precise nature and the speed at which it will happen remain subject to considerable uncertainty. Despite this, OFS companies have technologies and skills that will be key to the roll out of the changing energy mix (including the continued scale up of natural gas and build out of renewables). If the sector wishes to articulate a growth story, then demonstrating a presence in this supply chain is likely to be key and selected and disciplined M&A activity around this space would be well received by investors.

Andy Brogan

EY Global O&G leader for Transaction Advisory Services



Celine Delacroix

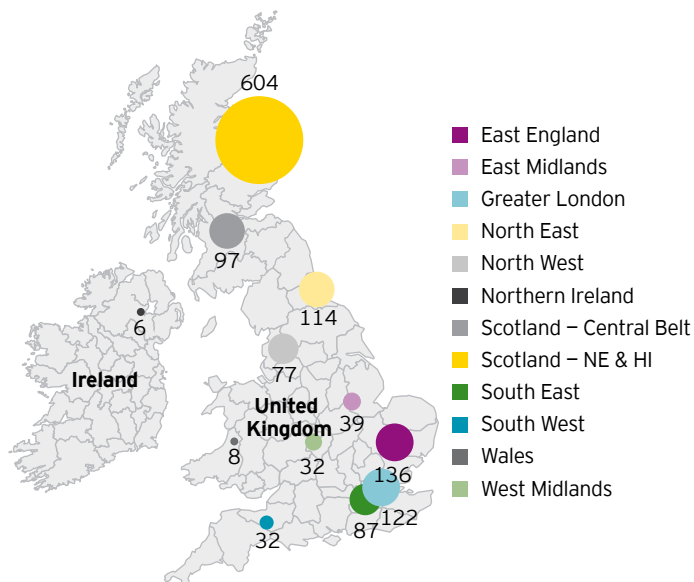
EY Global Oilfield Services Transformation Leader and EY EMEA Head of Oilfield Services



UK trends

The United Kingdom Continental Shelf is one of the world's most mature basins, with more than 50 years of extracting oil and gas. The UK is a world leader in the offshore OFS industry with many renowned businesses located across the country, with Aberdeen in particular, recognised as a centre of excellence for the OFS supply chain.

Figure 5: OFS companies by region



UKCS production

Since 2015, 3.7bn barrels of production has been added to the UKCS, worth an estimated £84bn. Production is expected to increase again in 2018 following major developments, such as, Quad 2014, Kraken and Catcher ramping up performance towards peak rates during the first half of 2018, improved production efficiency of existing assets (74% in 2017, the highest in a decade) and new fields commencing production including:

- ▶ **January 2018** – First oil from Varadero followed by Burgman coming on-stream in May 2018. These are both part of the Catcher Area and are tied back to a leased FPSO
- ▶ **August 2018** – First oil from Harrier, a satellite field in the Greater Stella Area (GSA) development tied back to the GSA production hub via a pipeline

- ▶ **November 2018** – First oil from Clair Ridge. This is one of the biggest developments in the history of the basin and included investment of nearly £5bn in new platforms and pipelines in the harsh waters west of Shetland. Clair Ridge is the second phase of development of the Clair field, 45 miles off Shetland and the partners are considering whether to invest in a third phase of development, Clair South, with the final investment decision (FID) being expected at the end of 2019 or in 2020

- ▶ **December 2018** – First oil from the Gannet E redevelopment that is tied back to the Triton FPSO

There are a number of other developments underway including:

- ▶ Equinor's Mariner heavy oil field, which is expected to commence production during the first half of 2019
- ▶ Total's discovery of potentially 1 trillion cubic feet of recoverable gas from Glendronach in September 2018. An appraisal well will be drilled in 2019 to firm up initial estimates
- ▶ Hurricane Energy's Lancaster Early Production System, which is on track for first oil in 2019. This is the first phase of the development
- ▶ Total's Culzean field where first gas is expected in 2019, and at its peak is expected to produce enough gas to meet 5% of total UK demand
- ▶ Nexen's Buzzard Phase two development that could extend the life of the Buzzard field by up to ten years. First oil from the project is expected in the first quarter of 2021
- ▶ Shell's Penguins redevelopment, required when Brent Charlie ceases production, will see an additional eight wells drilled and be tied back to a new FPSO vessel, expected to arrive in 2021

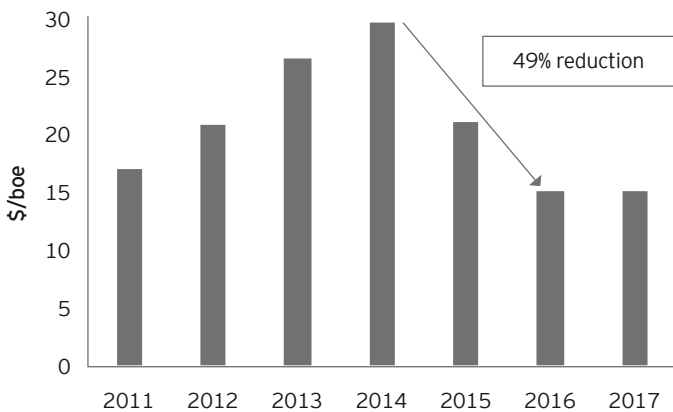
Although production is expected to be strong through to 2020, there are longer term concerns over production trends given the lack of new capital investment in the UKCS in recent years. As the UKCS is a mature basin, smaller developments such as tie-backs are increasingly more likely, given they are more economic than building and installing new platforms.

Overview

UKCS operating costs

Operating costs per barrel in the UKCS stabilised in 2017 at around US\$15/boe, after halving between 2014 and 2016 following cost reductions by operators and the supply chain. In addition, the year-on-year increases in production efficiency have transformed the profitability of late life fields.

Figure 6: Operating costs per barrel in the UKCS



Within the UKCS, operating costs range from US\$6/boe from the lowest cost operator to around US\$37/boe for the highest cost operator, reflecting the different environments in the basin and the age of the infrastructure.

However, during 2018, there have been a number of workforce engagement issues. Industrial action, some officially authorised and some not, has taken place a number of times and in November 2018, dive crews rejected a pay deal offered on behalf of six employers. Negotiations with the Offshore Contractors Association (OCA) have been ongoing since January 2018, with several pay offers rejected. However, a further offer was made in December 2018, which was accepted in January 2019. Although the OCA dispute has now been settled, the engagement issues seen in 2018 do raise concerns for investors over the stability of the workforce and the likelihood of future issues.

UKCS Investment

Capital investment is expected to remain in line with 2017 levels due to a lack of new projects being sanctioned and ongoing projects reaching the end of their development cycle, coupled with capital efficiency in new investments.

However, there have been positive signs in 2018, with at least 17 new developments approved in 2018, as compared to around 7 in 2017. In addition, progress on areas plans has been a significant highlight, with stranded fields now being able to be tied back to existing infrastructure. Collaboration has also generated benefits, such as, the £62mn project to re-route gas from the Clipper South field that will extend the life of the field following the closure of the Theddlethorpe Gas Terminal in October 2018. This was a joint project between a number of operators in the SNS area which worked together to successfully deliver the project.

There is also increased activity from major E&P companies readjusting their portfolios, with a number of assets currently up for sale or expected to come up for sale in the near future. Private equity funding is playing an increasingly active role in the UKCS due to major developments, such as in the west of Shetland, demonstrating the world class nature of the basin. These new players are looking to invest to prolong the life of mature fields, which would bring a much needed increase in activity for UK OFS companies.

Nevertheless, there has been a lack of exploration drilling in 2018, with activity being at an all-time low. Data from a £20mn UK Government-funded seismic programme was released in November 2017 to support the 31st UK offshore licensing round and this generated a 50% increase in the number of blocks applied for, when compared to the last frontier auction in 2016. The Oil and Gas Authority (OGA) is also releasing data to help unlock up to 300 million additional barrels from the Greater Buchan Area, which it believes has significant potential for redevelopment, as well as a number of subsurface data packages on its website in December 2018, ahead of the supplementary 31st licensing round expected in 2019.

Technology

Since opening in February 2017, the Oil & Gas Technology Centre (OGTC) has co-invested more than £50mn in a wide range of technology projects to assist with unlocking the full potential of the UKCS. Current projects include:

- ▶ Artificial intelligence to boost production by providing recommendations during the well design process, helping to reduce costs and increase productivity
- ▶ A machine learning solution that aims to increase production by reducing unexpected equipment failure and downtime, extend the lifespan of equipment and improve efficiency by eliminating unnecessary maintenance
- ▶ An 18 month project to develop and trial a mobile robot for autonomous operational inspection of facilities on an onshore gas plant and an offshore platform

Fiscal

In the 2018 Budget (published in November 2018), HM Treasury confirmed the current headline tax rate would continue. This stability will support new investment through the continued reduced tax rates, as well as the transferrable tax history mechanism that is expected to be enacted in the Finance Act 2019. Any licence transfers given OGA consent after 1 November 2018 should benefit from the ability for the seller to transfer part of its tax-paying history to the buyer, enabling the buyer to obtain effective relief for its decommissioning costs. New buyers are expected to revitalise investment in older fields and new exploration, both of which would positively impact the OFS supply chain.

IR35 legislation will apply to the private sector in April 2020 and aims to stop employees operating through personal service companies in order to pay less tax. The oil and gas sector is expected to be one of the industries most affected but it has time to prepare given the implementation date.

Decommissioning

The pace of decommissioning is expected to be slower over the next decade than previously envisaged due to higher oil prices and the focus on efficiency. This has attracted a number of private equity backed companies looking to prolong production from the older fields they bought, leading to the deferral of dismantling work. In its 2018 Decommissioning Insight, Oil & Gas UK estimated expenditure would reach £15.3bn over the period, a reduction of 20% on previous estimates. 49% of the total spend is expected to be on well plugging and abandonment (P&A) (1,465 UK wells to be decommissioned through to 2027) and P&A costs have reduced by 26% due to the experience being built up through the volume of decommissioning work performed to date.

UK OFS companies have an opportunity to become global champions in decommissioning excellence given the UKCS is the world's most mature basin and they will have the opportunity to build capacity and capability to deliver decommissioning at the right time and in a cost effective manner. The global decommissioning market is expected to be worth over £60bn in the next decade and companies that demonstrate the skills needed could well be in a position to take advantage of this opportunity

Are green shoots appearing?

2017 was another tough year for the UK OFS sector. Yet there are signs in 2018 that the bottom has been reached: upstream margins have improved and capital structures repaired, the transfer of upstream assets to North Sea focussed operators continues, the number of projects reaching FID has increased, significant cost restructuring has been completed and investor appetite in private OFS companies has picked up.

However, while opportunities are certainly increasing for the more nimble companies in the UK, it is uncertain when these factors may translate into increased activity levels and it is unlikely that overall activity is going to return to 2014 levels anytime soon. This makes it all the more important to have a clear strategy for long-term growth, whether through developing and implementing new technology, expanding geographic presence, diversifying into adjacent markets or driving consolidation and building scale. The ability to partner with customers in their preferred ways and offer multiple commercial models will also be a critical differentiator and might even be the key to survival for many contractors.

With margins still tight, these long-term imperatives need to continue to be balanced with rigorous cost discipline. Focus will need to remain on exiting unprofitable or subscale activities, ensuring cost savings are sustainable, managing liquidity carefully and resolving any legacy issues with capital structures. The challenges facing management in navigating through this period don't look like abating anytime soon.



Stuart White

*Transactions Advisory Services
Director, Ernst & Young LLP*

Overview

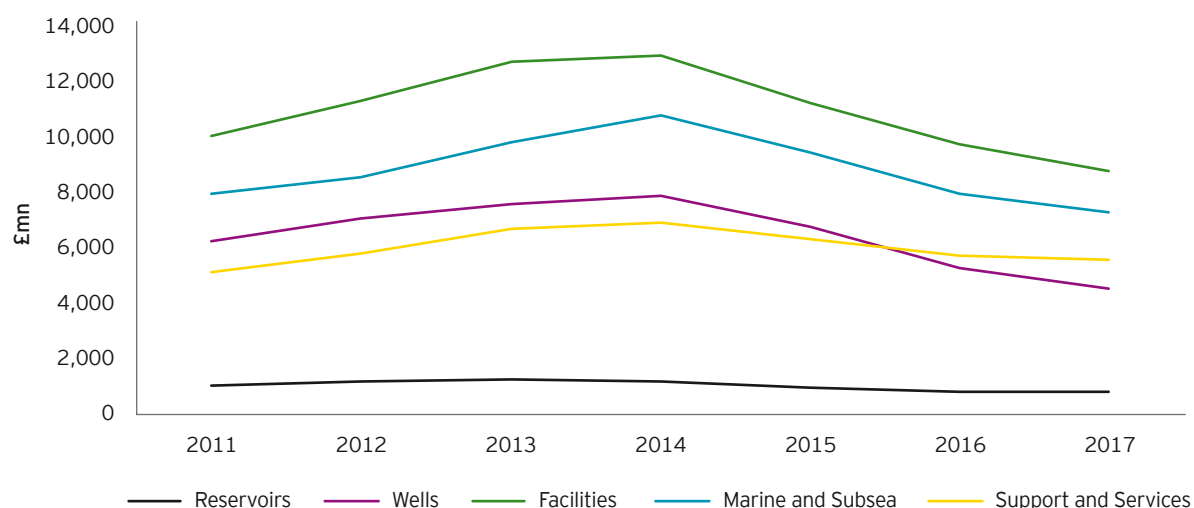
Summary of results

Figure 7: Summary of results 2011-17

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	1,285	1,322	1,325	1,324	1,326	1,348	1,355
Reservoirs	1,023	1,134	1,263	1,178	971	800	773
Wells	6,213	7,092	7,618	7,919	6,772	5,282	4,542
Facilities	10,079	11,299	12,753	12,950	11,258	9,748	8,794
Marine and Subsea	7,999	8,584	9,808	10,795	9,486	7,992	7,278
Support and Services	5,123	5,770	6,722	6,911	6,353	5,704	5,571
Turnover	30,437	33,878	38,165	39,753	34,839	29,526	26,958
Growth trends – turnover	n/a	11.3%	12.7%	4.2%	(12.4%)	(15.3%)	(8.7%)
EBITDA	2,765	3,431	3,972	4,158	3,331	2,596	1,785
Reservoirs	14.5%	13.6%	18.2%	9.1%	6.3%	6.7%	5.9%
Wells	9.9%	12.0%	12.5%	15.9%	17.0%	15.5%	15.7%
Facilities	8.2%	8.9%	8.5%	6.0%	5.3%	4.7%	2.9%
Marine and Subsea	9.3%	10.9%	11.3%	13.2%	10.4%	11.4%	7.3%
Support and Services	8.3%	8.4%	8.9%	8.6%	8.3%	6.2%	4.4%
EBITDA margin	9.1%	10.1%	10.4%	10.5%	9.6%	8.8%	6.6%
Tax on profits	470	669	591	647	377	299	304
Number of employees	108,633	116,083	127,161	133,876	133,798	119,846	109,705
Wages	5,076	5,608	6,469	6,933	7,040	6,169	5,612

The completeness of the data depends on the financial information disclosed in companies' annual accounts submitted at Companies House. Consequently, the analysis is likely to be understated as opposed to overstated. For example, not all companies disclose headcount information and companies that file abbreviated accounts (those typically with less than £6.5mn turnover) do not disclose the financial information included in the above table.

Figure 8: 2011-17 revenue trends



Key highlights

In 2017, the UK OFS sector experienced a further decline of 9% in turnover, with reductions across each of the supply chain categories. Demand continued to be affected by capital budget restrictions that resulted in oversupply and intense pricing competition for projects that were coming to market. There were some success stories during the year from companies that had either managed to internationalise successfully, secure new long-term vessel contracts or be involved in large scale UKCS projects; nonetheless, for the majority of UK OFS companies, 2017 was another challenging year.

EBITDA margin also decreased in 2017 by 2.2 ppt as the continued decline in turnover could not be mitigated by further cost saving measures, given the extent of the cuts in 2015 and 2016. In addition, the impact of lower margin projects awarded during the downturn and now being executed also had a detrimental impact on EBITDA margin.

The key trends by supply chain category are as follows:

- ▶ **Reservoirs** has seen a 3% turnover decline in 2017 as a result of the reduction in investment in exploration activity, which has had a detrimental impact on pricing. EBITDA margin reduced by a further 0.8 ppt due to a combination of margin pressure and the adverse impact of foreign exchange movements and we would expect the 2018 results for the companies in this category to continue to be impacted by pricing pressures and insufficient demand. The divisional results for the nine months to September 2018 for the listed parents of the top five companies in this segment showed recovery in certain sectors and signs of a gradual exploration market recovery for 2019. In particular, frontier and deepwater plays and in multiclient late sales as companies look for high-quality seismic data to manage and develop their portfolios.
- ▶ The **Wells** segment experienced a turnover reduction of 14% between 2016 and 2017, due to fierce competition for new work continuing, a decrease in overseas activity, declining equipment sales and a lower level of service activity in the UKCS. EBITDA margin was broadly flat as a result of margin improvement by drilling contractors, linked to their low cost base, and the majority of other subsectors experienced declines due to adverse foreign exchange movements, higher raw material costs and a lack of opportunities for any further cost cutting measures. The results from the listed parents of the top five companies for the nine months to September 2018 show a 6% growth in turnover and 6.3ppt EBITDA margin improvement due to an increase in utilisation and new equipment orders, which more than offset the continued low day rates. Backlogs for these listed companies have increased by 21%, which suggests a continued improvement in 2019, albeit this is expected to be gradual.
- ▶ Turnover for **Facilities** declined by nearly 10% between 2016 and 2017, driven by the uncertainly caused by the prolonged oil price curtailing capital spend, non-essential maintenance being delayed and the deferment of a large pipeline project. EBITDA margin declined by 1.8 ppt due to adverse challenges on project close outs leading to higher than anticipated costs, contractual difficulties that resulted in a significant loss being recorded and overseas project set up costs. The listed parents of the top five companies results for the six months to June 2018 showed a 2.9% improvement due to consolidation in the sector and strong project execution; tender activity has increased but pricing remains very competitive. We would expect UK companies in the Facilities segment to continue to be negatively impacted in 2018, with project execution, which was a significant negative factor in 2017, being key to managing EBITDA margins.
- ▶ **Marine and Subsea** turnover decreased by 9% in 2017 as customers continued to restrict the level of new investment and discretionary spend, and the low order intake in 2015 and 2016 impacted 2017 turnover both in terms of vessel utilisation and the scale of projects. EBITDA margin also declined by 4.1 ppt due to projects awarded during the downturn at significantly lower margins now being executed and there being limited scope for further significant structural changes to reduce the cost base, given the scale of cuts in 2015 and 2016. We would expect to see a further decrease in turnover in 2018 as the backlog gets depleted and companies will continue to be affected by the competitively priced projects that are now being executed. Although there are encouraging signs with the number of FIDS in 2018 increasing, project sanctioning lead times may result in a significant increase in activity only materialising beyond 2019.
- ▶ **Support and Services** turnover declined by 2% in 2017. Recruitment was particularly affected by a number of large projects demobilising, a low number of new projects being awarded and rate reductions on existing projects. EBITDA margin declined by 2.1% due to investment in international growth and technology, poor management of overseas projects and increased costs that could not be passed onto the customer. As the majority of the top five customers do not have listed parents, there is no financial information available in relation to 2018 trends. However, we expect these companies to follow the overall global listed trends and see further turnover decreases in 2018, given the levels of demand in the UK are not expected to increase significantly in the short-term.

Overview

Geographic analysis of turnover

Figure 9: The analysis of turnover between UK and exports

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
UK	16,208	19,133	22,884	24,064	20,837	17,382	16,366
Exports	14,229	14,745	15,281	15,689	14,002	12,144	10,592
Turnover	30,437	33,878	38,165	39,753	34,839	29,526	26,958
Exports as a percentage of turnover	47%	44%	40%	39%	40%	41%	39%

UK companies operate globally in Europe, the Americas, Africa, the Middle East and Asia-Pacific reflecting the internationalisation of the UK OFS sector and the demand for the specialist skills the companies in our analysis provide in the global arena.

Exports levels vary across the supply chain, with Reservoirs being the most active in overseas markets due to the ease of which its services can be utilised on a global basis. Support and Services has the lowest level of exports in percentage terms as the nature of the services provided results in these companies being more reliant on UKCS activity.

Although exports as a percentage of turnover has averaged around 40% between 2014 and 2017, in monetary terms, it has declined by £5.1bn as a number of the overseas markets were also affected by the lower oil price.

The effect of the lower oil price has been felt on a global basis and this contraction in activity has resulted in fierce competition for capital. The UKCS is a mature region, with high operating costs on a comparative basis and, although there has been an increase in projects reaching FID as compared to recent years, UK OFS companies cannot rely on growth in the UK: they must continue to focus on generating revenues from export activity or diversifying into other sectors to survive in the long-term. It is concerning that, since the downturn, there has not yet been evidence of a significant increase in exports as a percentage of total turnover.

Figure 10: 2017 UK and export turnover by supply chain category

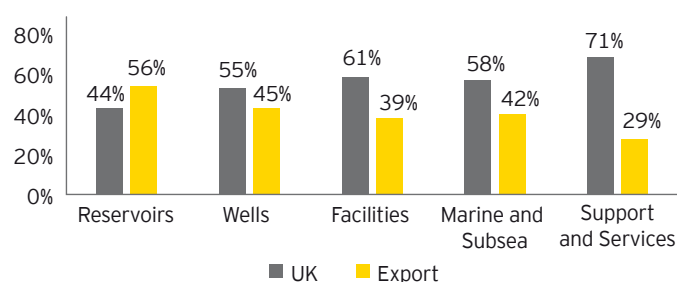


Figure 11: UK and export turnover 2011-17



Reservoirs



3

Reservoirs

Figure 12: UK upstream oil and gas supply chain subsectors

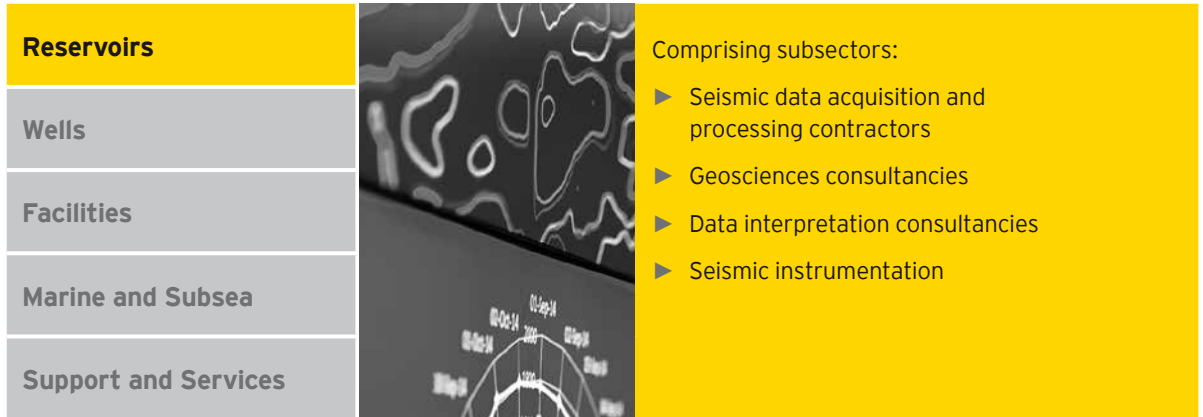


Figure 13: The analysis of Reservoirs turnover and EBITDA margin by subsector

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Seismic data acquisition and processing contractors	662	715	779	606	545	500	469
Geosciences consultancies	142	180	166	188	154	65	57
Data interpretation consultancies	121	139	194	244	150	133	156
Seismic instrumentation	98	99	124	139	122	103	91
Turnover	1,023	1,134	1,263	1,178	971	800	773
<i>Seismic data acquisition and processing contractors</i>	13.0%	12.3%	19.2%	4.1%	5.9%	7.9%	0.4%
<i>Geosciences consultancies</i>	10.8%	11.4%	11.6%	14.2%	6.3%	5.4%	3.4%
<i>Data interpretation consultancies</i>	23.0%	23.2%	22.2%	15.5%	11.6%	7.0%	26.2%
<i>Seismic instrumentation</i>	19.5%	13.5%	14.8%	12.5%	1.1%	1.4%	0.7%
EBITDA margin	14.5%	13.6%	18.2%	9.1%	6.3%	6.7%	5.9%



Summary of results

In 2017, the Reservoirs supply chain comprised 3% of the total UK upstream oil and gas supply chain turnover.

Figure 14: **Summary of results 2011-17**

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	66	66	66	65	69	69	69
UK turnover	369	521	543	489	410	368	340
Export turnover	654	613	719	688	560	433	433
Total turnover	1,023	1,134	1,263	1,178	971	800	773
Growth trends – turnover	n/a	10.8%	11.4%	(6.7%)	(17.6%)	(17.5%)	(3.4%)
EBITDA	148	155	230	107	61	54	46
EBITDA margin	14.5%	13.6%	18.2%	9.1%	6.3%	6.7%	5.9%
Tax on profits	25	29	40	17	3	4	8
Number of employees	3,895	4,486	4,880	5,468	5,027	4,252	3,848
Wages	186	221	250	275	256	214	189

Key highlights of the Reservoirs supply chain category results

The large seismic acquisition vessel owning companies are typically based in the US or Europe (e.g., Norway, Netherlands). The UK companies in our analysis are not typically vessel owners and will lease vessels from their international parents when required and are more involved in either data processing, data interpretation, multi-client library data, other consultancy services or providing specialised seismic equipment.

Since 2014 when turnover peaked for the majority of Reservoirs subsectors, typically there has been a year-on-year decline due to the impact of the oil price on investment levels in exploration activity. Seismic data acquisition and interpretation, the largest of the subsectors, continued to face challenges in 2017, with weak vessel utilisation, continued pressure on pricing and limited multiclient acquisition projects. However, there were signs of recovery towards the end of 2017, with order books improving and an increase in pre-funded multiclient programs. The data interpretation consultancies subsector was the one area where turnover increased in 2017, primarily driven by funded multiclient projects in Gabon (3D) and Mozambique (2D).

Export turnover as a percentage of total turnover (56%) is the highest amongst all the supply chain categories. This is driven by

the specialist nature of the services and the ease to which they can be transferred and utilised on a global basis. Although UK revenue declined by 8% in 2017, export turnover was maintained at 2016 levels as a result of the number of projects undertaken overseas, particularly in Africa.

Excluding data interpretation consultancies, where EBITDA was positively impacted by the increase in revenue due to its relatively stable cost base, all other subsectors experienced a further EBITDA decline in 2017. Seismic data acquisition and interpretation was particularly affected by a combination of continued pressure on pricing and activity levels as well as the adverse impact of foreign exchange movements, with companies continuing to simplify and streamline their organisations in response to this.

The number of employees has decreased by 1,620 between 2014 and 2017, following following redundancy programmes and structural changes implemented by a number of companies in response to the decline in activity. The average salary in 2017 was £49,000, reflecting the skilled nature of the work and it has declined slightly over the last two years due to a number of companies introducing wage freezes and salary reductions.



Turnover decreased by 34% between 2014 and 2017.



Export turnover accounted for 56% of 2017 total turnover.



Number of employees decreased by 1,620 between 2014 and 2017.

Reservoirs

Key trends in Reservoirs

Global

Reservoirs has been one of the most affected segments due to the delays or cancellations of exploration programmes. Traditionally the seismic market would represent between 2% and 3% of global E&P spending but it is now less than 1%. As a result of the prolonged slump in oil prices since June 2014, seismic spending is becoming increasingly dependent on economic factors and less contingent on technical and operational factors.

Figure 15: **Listed Reservoir companies results for the period from January 2018 to September 2018 (9m2018) versus the period from January 2017 to September 2017 (9m2017)**

Currency: US\$m	9m2018	9m2017	Variance	Variance (%)
Turnover	7,603	7,611	(9)	(0.1%)
EBITDA	1,789	1,487	301	20.3%
EBITDA margin	23.5%	19.5%	4.0	n/a
Backlog (where disclosed)	7,406	7,880	(473)	(6.0%)

Where available, we have analysed the divisional results of the listed parents of the top five companies in the Reservoir supply chain category. Turnover was flat in 9m2018 as compared to 9m2017, which was a combination of recovery in certain sectors, offset against a backdrop of continued competitive pricing and contract signing delays. EBITDA margins improved by 4.0 ppt as the benefits from restructuring activities, such as, headcount reductions, resizing of fleets, divestment of non-core activities and implementing efficiency measures in 2016 and 2017 positively impacted EBITDA. However, backlogs have continued to decline reflecting the very challenging market that these companies are operating in.

Following a number of years of underinvestment, there are signs of a gradual recovery in exploration, particularly in frontier and deepwater plays. Oil and gas companies will need to maintain their reserve base and develop new fields in order to counter production decline from existing fields. Reservoir companies are seeing this as an opportunity to provide modern high-quality seismic data to assist companies with managing their risk and a number have been investing in their multi-client data libraries, with the belief that this investment will generate returns as the market starts to strengthen. This, coupled with the total value of bids and leads for contract work at its highest level for more than three years for a number of the companies, has resulted in an optimistic outlook for 2019 onwards.

UK

The OGA, with funding support from the UK Government, invested a total of £40mn in separate seismic surveys in 2015 and 2016 and this has generated a large volume of seismic data that has been made available to companies as part of the 31st bidding round that closed in November 2017. This has resulted in a 45% increase in blocks applied for compared to the 2016 round, which was the last time frontier acreage was made available. In addition, we have seen examples in 2018 of the potential in the UKCS being unlocked using advanced data gathering and analytics, with the application of a number of technologies including 3D seismic to uncover high value near-field prospects.

Although we would expect the 2018 results for the companies in the Reservoirs supply chain to continue to be impacted by pricing pressures and insufficient demand, there are signs of a recovery for 2019. Those companies operating internationally should be able to benefit from the increasing activity overseas, e.g., in Brazil and Africa. Furthermore, the increase in M&A transactions that we are also seeing in the North Sea could trigger growth in multiclient late sales as these new players look to develop their portfolios.

Wells

4



4

Wells

Figure 16: UK upstream oil and gas supply chain subsectors

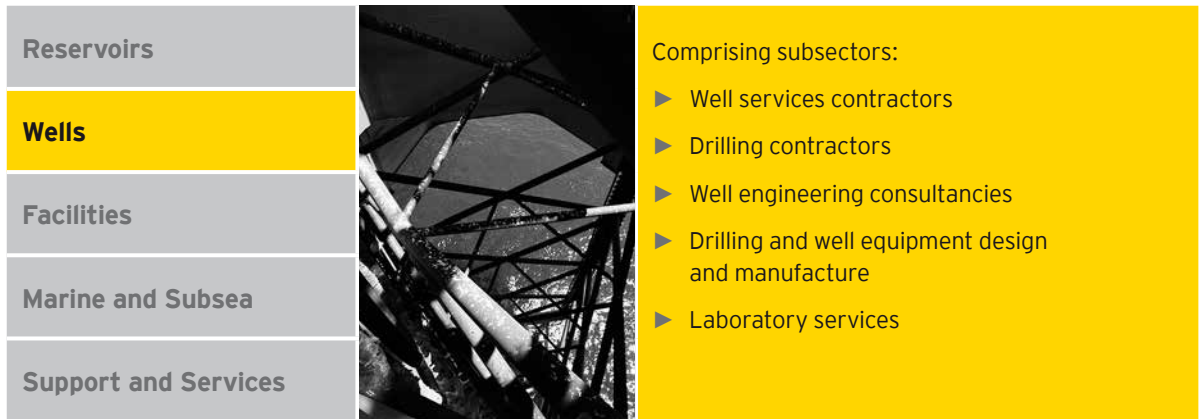


Figure 17: The analysis of Wells turnover and EBITDA margin by subsector

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Well services contractors	2,357	2,547	2,703	2,888	2,380	2,071	1,866
Drilling contractors	1,946	2,363	2,462	2,739	2,417	1,784	1,444
Well engineering consultancies	225	198	168	201	155	51	27
Drilling and well equipment design and manufacture	1,575	1,847	2,116	1,924	1,645	1,240	1,077
Laboratory services	110	137	170	167	175	136	129
Turnover	6,213	7,092	7,618	7,919	6,772	5,282	4,542
<i>Well services contractors</i>	10.7%	12.0%	10.4%	12.4%	11.5%	9.3%	4.9%
<i>Drilling contractors</i>	5.4%	8.2%	10.2%	15.2%	23.1%	26.8%	33.9%
<i>Well engineering consultancies</i>	9.1%	8.5%	7.0%	13.7%	20.1%	21.8%	16.2%
<i>Drilling and well equipment design and manufacture</i>	14.3%	17.5%	18.6%	22.0%	16.2%	9.2%	10.6%
<i>Laboratory services</i>	10.3%	8.5%	10.3%	18.3%	14.7%	16.9%	10.3%
EBITDA margin	9.9%	12.0%	12.5%	15.9%	17.0%	15.5%	15.7%



Summary of results

In 2017, the Wells supply chain comprised 18% of the total UK upstream oil and gas supply chain turnover.

Figure 18: **Summary of results 2011-17**

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	182	183	186	185	188	188	188
UK turnover	2,786	3,287	3,726	4,114	3,633	2,784	2,511
Export turnover	3,427	3,805	3,892	3,804	3,140	2,498	2,032
Total turnover	6,213	7,092	7,618	7,919	6,772	5,282	4,542
Growth trends – turnover	n/a	14.1%	7.4%	3.9%	(14.5%)	(22.0%)	(14.0%)
EBITDA	615	850	954	1,256	1,154	819	712
EBITDA margin	9.9%	12.0%	12.5%	15.9%	17.0%	15.5%	15.7%
Tax on profits	112	161	121	189	123	77	63
Number of employees	19,000	19,353	21,613	21,579	20,226	16,826	15,393
Wages	948	1,023	1,166	1,243	1,226	1,037	954

Key highlights of the Wells supply chain category results

The UK companies in our analysis cover the full range of Wells activities, ranging from pure rig or ship owners/lessors to manufacturers of drilling and completion equipment, as well as providing services in relation to the installation and operation of this equipment. Drilling contractors generate a large portion of turnover from the UK (c.70%) as they tend to use their UK entities to lease units in the UKCS, whereas the remaining Wells companies typically service both the UK and global markets.

There was a further 14% decline in turnover in 2017 affecting all of the Wells subsectors, with the fierce competition for new work continuing, compounded by additional price concessions being requested by customers on existing contracts. The wells services contractors subsector was negatively impacted by a reduction in overseas activity as well as a decline in equipment sales (also affected drilling and well equipment design and manufacturing subsector) and lower level of service activity in the UK and Netherlands. Within the drilling contractors subsector there were mixed results, with a number of companies significantly increasing activity due to vessels being operational for a longer period, with a number under contract until 2020. However, this was offset by a number of other companies stacking vessels during 2017 as contracts completed or downtime for rig surveys was planned.

Although EBITDA margin was broadly flat in 2017, this was primarily due to the 7.1ppt improvement in Drilling contractors EBITDA, with the remaining subsectors experiencing further EBITDA margin erosion. A number of the drilling contractor companies are fleet owners (as opposed to incurring bareboat charter expenses) and can generate EBITDA margins in excess of 70% when the fleet is highly utilised, due to the relatively fixed low cost base. As a number of these companies substantially improved vessel utilisation in 2017, this resulted a significant EBITDA margin improvement. The key factors negatively impacting the other subsectors, in addition to the revenue declines noted above, include adverse foreign exchange movements, higher raw material costs and lack of opportunities for any further cost cutting measures.

There has been a reduction of over 6,100 employees between 2014 and 2017, as companies looked to right size their organisations in response to activity declines. The average salary in 2017 was £60,000, in line with 2016, as companies looked to control salary costs either through wage freezes or minimal annual increases. Due to the specialist nature of a large number of the subsectors, Wells average salary is the highest out of all the supply chain categories.



Turnover decreased by 43% between 2014 and 2017.



Export turnover accounted for 45% of 2017 total turnover.



Number of employees decreased by 6,186 between 2014 and 2017.

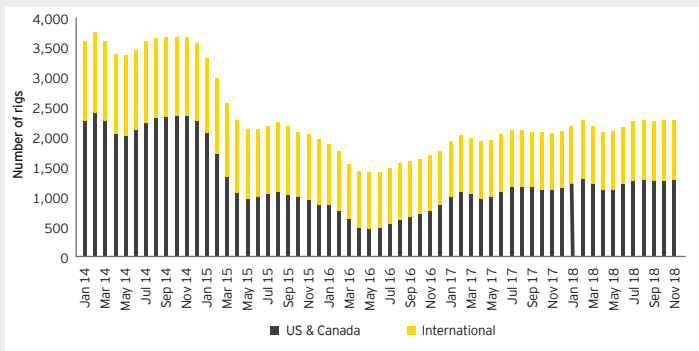
Wells

Key trends in Wells

Global

Oil price declines typically result in a reduction in drilling activity and excess supply, with a knock-on effect on day rates. In 2018, the only rigs able to extract premium economics have been limited to high specification harsh semis or jack-ups. Although the number of active rigs began to stabilise in 2018, as can be seen from Figure 19, current levels are still well below the over 3,500 active rigs in January 2014, meaning a large number are still stacked or have been scrapped.

Figure 19: Worldwide rig count for January 2014 to November 2018



Source: Baker Hughes Incorporated

Figure 20: Listed Wells companies results for the period from January 2018 to September 2018 versus the period from January 2017 to September 2017

Currency: US\$m	9m2018	9m2017	Variance	Variance (%)
Turnover	19,181	18,036	1,145	6.4%
EBITDA	2,342	1,062	1,280	120.5%
EBITDA margin	12.2%	5.9%	6.3	n/a
Backlog (where disclosed)	44,661	36,949	7,712	20.9%

We have analysed the divisional results of the listed parents of the top five companies in the Wells supply chain category. There has been an improvement in turnover primarily driven by the North American market, with the global rig count rising since May 2018. While day rates (outside of the harsh environment markets) have remained depressed due to excess supply, the increase in the number of rigs being leased, coupled with an increase in new equipment orders, has resulted in a gradual improvement in turnover levels. 9m2017 EBITDA margin was negatively impacted

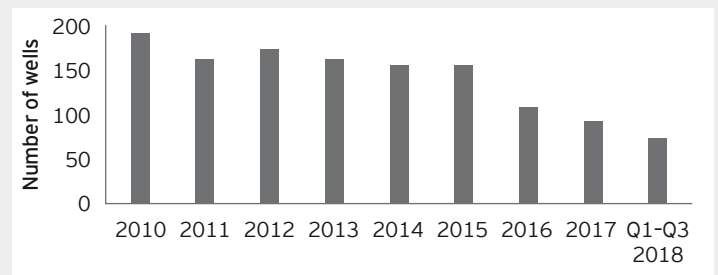
by rig impairment write offs of more than US\$1m by one of the drilling contractors and, excluding this, there has been a small improvement in EBITDA margin resulting from the increased activity levels.

Backlog has shown an increase of 20% for 9m2018 against 9m2017, which implies the turnover improvement will continue in 2019. Despite recent consolidation, such as, Transocean's acquisition of Ocean Rig and the EnSCO Rowan merger, the segment remains competitive and the future recovery is expected to be gradual. Although the indications are that operators are moving forward with FIDs and increased levels of activity given higher, stable oil prices, the acceleration in inquiries and tenders is measured. The Wells companies are continuing to invest in new drilling and production automation technologies as they believe this is critical for future growth.

UK

Drilling activity has been declining in the UKCS (see Figure 21), with the number of wells drilled reducing from c160 in 2014 to 77 for the 9 months to September 2018. The level of exploration activity in particular has been disappointing for the sector, although there is an improved E&A programme for 2019. There are 600 out of 2,700 active wells in the North Sea shut in, which means they are capable of producing but currently are not. However, a recent success in this area is the redevelopment of Gannet E, which came back online in December 2018 after production was halted in 2011 following a pipeline leak.

Figure 21: Drilling activity on the UKCS from 2010 to September 2018



Source: OGA

We would expect the 2018 results for the companies in the Wells supply chain to continue to be affected by rig rate and pricing pressures but an increase in exploration drilling activity, coupled with the impact of 17 new developments that have been approved by OGA in 2018 with associated capital of £3.7bn, could start to signal an improvement for this sector.

Facilities

5

5

Facilities

Figure 22: UK upstream oil and gas supply chain subsectors

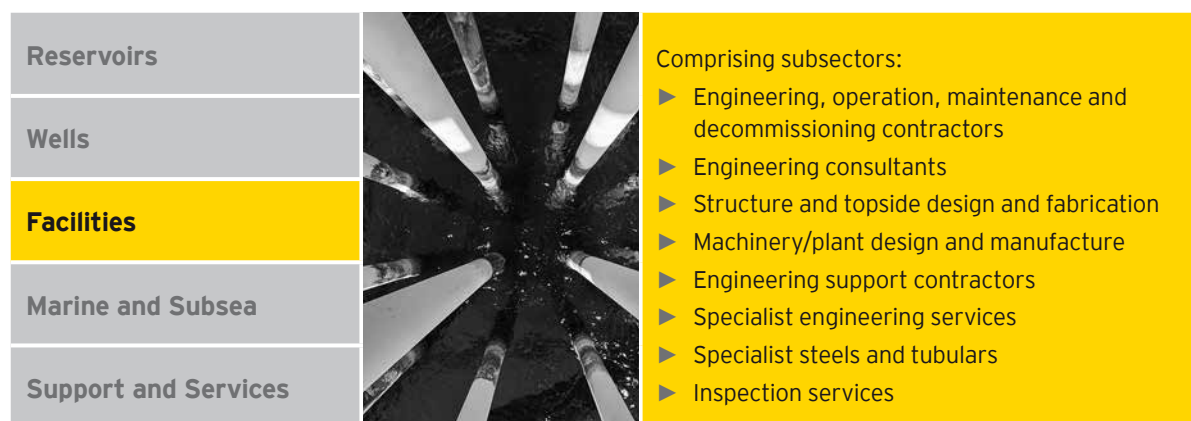


Figure 23: The analysis of Facilities turnover and EBITDA margin by subsector

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Engineering, operation, maintenance and decommissioning contractors	4,749	5,252	5,767	5,463	4,735	4,101	3,482
Engineering consultants	274	330	339	366	318	241	184
Structure and topside design and fabrication	364	426	501	610	503	392	380
Machinery/plant design and manufacture	2,216	2,475	2,428	2,736	2,322	2,064	1,990
Engineering support contractors	964	1,178	1,358	1,436	1,410	1,170	1,208
Specialist engineering services	625	800	1,079	1,285	1,067	851	818
Specialist steels and tubulars	519	374	752	544	471	566	363
Inspection services	369	463	530	510	432	363	369
Turnover	10,079	11,299	12,753	12,950	11,258	9,748	8,794
Engineering, operation, maintenance and decommissioning contractors	6.5%	7.0%	6.5%	0.5%	1.9%	4.2%	1.8%
Engineering consultants	3.6%	3.4%	2.1%	1.2%	(2.3%)	1.8%	(12.2%)
Structure and topside design and fabrication	7.7%	7.8%	9.6%	8.8%	2.0%	(1.6%)	(13.6%)
Machinery/plant design and manufacture	12.6%	13.4%	13.6%	11.6%	8.8%	5.5%	5.1%
Engineering support contractors	6.6%	7.0%	7.2%	7.7%	6.7%	6.3%	5.1%
Specialist engineering services	8.1%	10.5%	9.9%	11.0%	12.1%	4.9%	3.0%
Specialist steels and tubulars	5.5%	5.0%	4.8%	4.7%	3.4%	2.9%	5.5%
Inspection services	17.4%	16.5%	15.1%	17.9%	14.0%	11.6%	15.5%
EBITDA margin	8.2%	8.9%	8.5%	6.0%	5.3%	4.7%	2.9%



Summary of results

In 2017, the Facilities supply chain comprised 33% of the total UK upstream oil and gas supply chain turnover.

Figure 24: **Summary of results 2011-17**

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	460	469	471	471	467	478	481
UK turnover	6,470	7,252	8,574	8,575	7,299	6,131	5,326
Export turnover	3,609	4,046	4,180	4,375	3,959	3,617	3,468
Total turnover	10,079	11,299	12,753	12,950	11,258	9,748	8,794
Growth trends – turnover	n/a	12.1%	12.9%	1.5%	(13.1%)	(13.4%)	(9.8%)
EBITDA	831	1,003	1,085	771	600	456	252
EBITDA margin	8.2%	8.9%	8.5%	6.0%	5.3%	4.7%	2.9%
Tax on profits	173	203	130	136	68	51	107
Number of employees	52,059	55,443	57,352	60,106	60,297	55,387	50,253
Wages	2,334	2,545	2,842	3,026	3,038	2,746	2,540

Key highlights of the Facilities supply chain category results

Large construction works are typically carried out overseas, usually in lower cost geographies. The UK companies in our analysis are typically involved in either an engineering role, construction of topside equipment including modules, or the operations and maintenance of the facilities. EOMD contractors generate a large portion of turnover from both UKCS capital projects and long-term operations and maintenance contracts and, as such, only around 25% of turnover for this subsector is generated outside the UK. However, the machinery/plant design and manufacture subsector tends to service the global market and nearly 70% of its 2017 turnover was from exports.

Turnover declined by 10% in 2017 and, apart from the engineering support contractors subsector that only increased turnover as a result of a change in group structure which resulted in overseas entities being included in the results for the first time in 2017 (c£140m positive impact), the majority of the other subsectors were negatively impacted. The largest subsector, engineering, operation, maintenance and decommissioning contractors (EOMD), experienced a decrease in turnover of 15%, driven by curtailed capital spending, non-essential maintenance being delayed and, following the merger of two UK companies, Wood and AmecFosterWheeler, the transfer out of a portion of the UK

business in anticipation of its divestment. The specialist steels and tubulars subsector was particularly affected (36% decline) due to a delay in a large pipeline project resulting in one of the companies only achieving 35% of its budgeted turnover.

EBITDA margin for Facilities is the lowest out of all the supply chain categories primarily due to the low margin multi-year duty holder contracts that a large number of players operate under. EBITDA decline of 1.8 ppt in 2017 was driven by adverse challenges on project close out leading to higher than anticipated costs, contractual difficulties on one contract that resulted in c£36m lifetime loss being recorded in 2017, overseas set up costs and adverse foreign exchange movements.

There has been a reduction of nearly 10,000 employees between 2014 and 2017, with the majority of companies that report headcount reducing their workforce in response to the contraction in activity. Only three companies increased headcount by more than 100 between 2016 and 2017 and this tended to be operational staff, in response to project activity. The average salary in 2016 was £50,000 and there is a significant fluctuation between average salaries across the subsectors within Facilities, with employees involved in the more specialised niche subsectors typically receiving higher salaries.



Turnover decreased by 32% between 2014 and 2017.



Export turnover accounted for 39% of 2017 total turnover.



Number of employees decreased by 9,853 between 2014 and 2017.

Facilities

Key trends in Facilities

Global

Figure 25: **Listed Facilities companies results for the period from January 2018 to June 2018 (1H2018) versus the period from January 2017 to June 2017 (1H2017)**

Currency: US\$m	1H2018	1H2017	Variance	Variance (%)
Turnover	11,947	11,644	303	2.6%
EBITDA	788	735	53	7.2%
EBITDA margin	6.6%	6.3%	0.3	n/a
Backlog (where disclosed)	14,366	13,935	430	3.1%

We have analysed the divisional results for the listed parents of the top five companies in the Facilities supply chain category – as a number of the companies do not publish results for 9m2018, we have compared the results for the first six months for each of 2017 and 2018.

There has been a 2.6% improvement in turnover, despite the market remaining competitive, as a result of lower breakeven cost of projects and higher oil prices providing a spur for project sanctions and good progress on lump sum contracts. The companies are seeing a recovery in their core oil and gas market, as well as contract awards in other sectors. There has also been significant consolidation in the sector (e.g., Wood and AmecFosterWheeler), which has resulted in revenue synergies that have positively impacted 1H18 revenue.

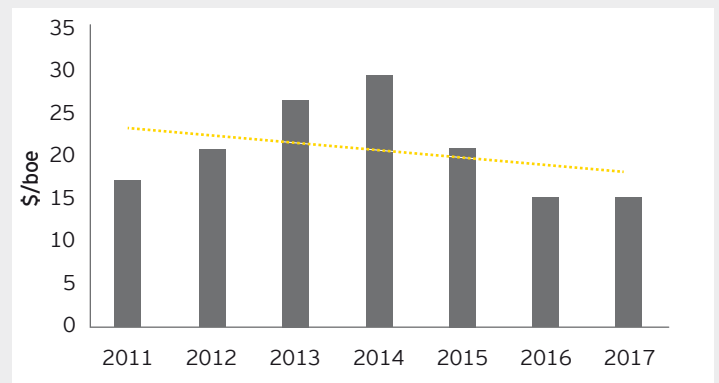
EBITDA margin has also seen a small improvement as a result of sustainable structural cost reductions implemented from 2015, coupled with additional phases of cost efficiencies being implemented and cost synergies as a result of consolidation (Wood announced in its 1H18 results that it was on track to deliver cost synergies of \$50mn in 2018). In addition, the continued focus on operational excellence is providing strong project execution and cost control for their customers and is reflected in improved margins.

Where available, we have analysed backlog and this has shown an improvement of around 3% for 1H2018 compared to 1H2017. There appears to be greater visibility in 2H18 turnover as compared to 2H17 (one company noted 85% of 2018 forecast turnover had been delivered or secured at Jun18) and there are several bids to be submitted before the year end, with the listed parents seeing signs of growth in markets such as Brazil, the UK, Africa and Asia Pacific. However, pricing on new work remains very competitive.

UK

As the UKCS is a mature basin, Facilities spend is mainly operating cost driven, with a focus on production and the maintenance required on ageing infrastructure.

Figure 26: **UKCS unit operating costs 2011-17**



Unit operating costs (UOC) declined from US\$29.60/boe in 2014 to around US\$15.2/boe in 2017 as a result of cost reduction and efficiency initiatives implemented and are expected to stabilise around US\$15-16/boe in 2018, which is the lowest in USD terms since 2011. However, with oil prices stabilising and recovery being seen in the market, there is a question as to how sustainable these reductions are. Costs are expected to rise given the margin pressure OFS companies have been under but this will need to be matched by efficiencies to ensure there is no return to the 'boom and bust' cycle.

We would expect 2018 results for the companies in the Facilities supply chain segment to continue to be affected by the reduction in capital projects and non-essential maintenance work. However, there will be a level of protection from the number of long-term contracts that are in place and any companies that can take advantage of the growth in the UKCS from redevelopment projects and/or new projects or from overseas activity, should be well placed. The benefits from the costs savings implemented in prior years are already embedded and there may be limited scope for further cost reductions. As such, project execution, which was a significant negative factor in 2017, will be critical to managing EBITDA margins.

Marine and Subsea

6



6

Marine and Subsea

Figure 27: UK upstream oil and gas supply chain subsectors

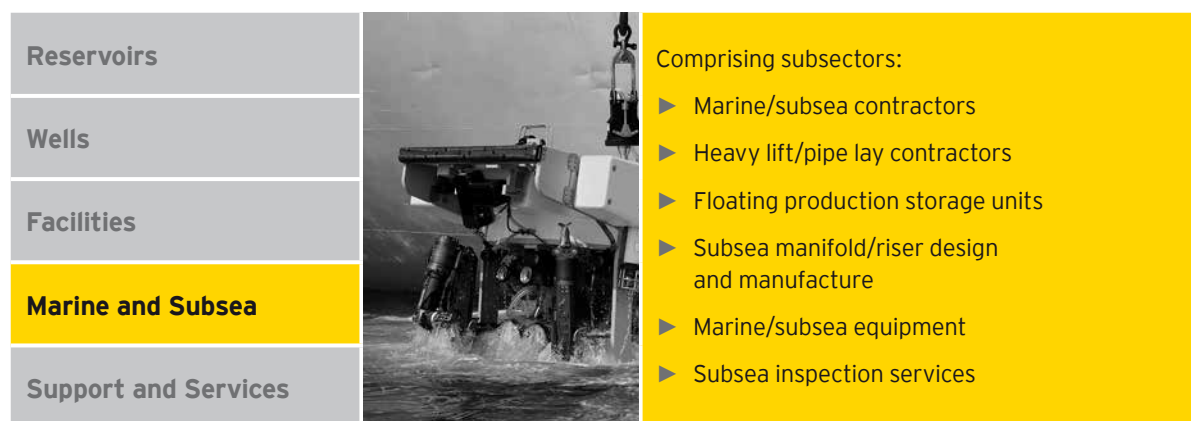


Figure 28: The analysis of Marine and Subsea turnover and EBITDA margin by subsector

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Marine/subsea contractors	4,623	4,893	5,373	5,848	4,984	4,289	4,352
Pipe lay/heavy lift contractors	132	91	94	56	25	10	4
Floating production storage units	297	262	452	389	406	404	346
Subsea manifold/riser design and manufacture	78	99	113	146	117	75	61
Marine/subsea equipment	2,666	3,051	3,561	4,139	3,742	3,035	2,350
Subsea inspection services	204	187	215	219	212	179	166
Turnover	7,999	8,584	9,808	10,795	9,486	7,992	7,278
<i>Marine/subsea contractors</i>	10.0%	13.1%	11.5%	14.9%	12.5%	11.2%	10.1%
<i>Pipe lay/heavy lift contractors</i>	4.8%	4.9%	5.1%	5.8%	7.8%	1.7%	(9.5%)
<i>Floating production storage units</i>	0.9%	(33.4%)	(5.7%)	(8.8%)	(5.2%)	1.6%	(3.9%)
<i>Subsea manifold/riser design and manufacture</i>	23.1%	20.5%	22.1%	16.2%	4.4%	(3.0%)	(8.4%)
<i>Marine/subsea equipment</i>	9.0%	11.4%	13.0%	13.1%	9.9%	14.0%	4.3%
<i>Subsea inspection services</i>	8.2%	6.8%	11.4%	9.8%	3.8%	1.3%	4.9%
EBITDA margin	9.3%	10.9%	11.3%	13.2%	10.4%	11.4%	7.3%



Summary of results

In 2017, the Marine and Subsea supply chain comprised 27% of the total UK upstream oil and gas supply chain turnover.

Figure 29: **Summary of results 2011-17**

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	193	198	197	200	201	203	204
UK turnover	3,286	4,282	5,665	6,382	5,219	4,076	4,244
Export turnover	4,713	4,301	4,144	4,413	4,267	3,915	3,034
Total turnover	7,999	8,584	9,808	10,795	9,486	7,992	7,278
Growth trends – turnover	n/a	7.3%	14.3%	10.1%	(12.1%)	(15.8%)	(8.9%)
EBITDA	744	938	1,108	1,428	987	913	529
EBITDA margin	9.3%	10.9%	11.3%	13.2%	10.4%	11.4%	7.3%
Tax on profits	116	206	205	209	117	118	90
Number of employees	18,413	19,658	24,100	26,250	25,687	22,959	20,352
Wages	879	988	1,269	1,326	1,372	1,134	943

Key highlights of the Marine and Subsea supply chain category results

The UK companies in our analysis cover the full range of marine and subsea activities and include a large number of fully integrated subsea contractors and suppliers of subsea products, as well as more niche providers of specialised equipment and services. The majority of subsectors within the marine/subsea supply chain segment (excluding the floating production storage units subsector that is exclusively based in the UK) have high levels of exports due to the highly technical and specialised nature of the products and services supplied.

Turnover declined by 9% in 2017 across all subsectors, apart from marine/subsea contractors which experienced minimal growth, as customers continued to restrict the level of new investment and discretionary spend and the low order intake in 2015 and 2016 impacted 2017 turnover. There were mixed performances from companies in all subsectors with a large number being negatively impacted by low vessel utilisation, reduced volume of international projects, small projects being executed in 2017 as compared to medium and large projects in 2016 and a significant reduction in product sales related to deepwater production systems. However, there were a number of companies that generated increased revenues in 2017 as a result of diversification outside of oil and gas

and executing large offshore projects in the UKCS, including the Beatrice windfarm project. The marine/subsea equipment subsector was also adversely affected by an accounting period change for one of the largest companies, resulting in only six months of activity being included in 2017 as opposed to 12 months in 2016, with a corresponding decrease in revenue of c£400mn.

EBITDA margin declined by 4.1ppt between 2016 and 2017 due to projects awarded during the downturn at significantly lower margins now being executed, adverse exchange rate movements (£70m impact for one of the companies), loss of revenue and associated costs (repairs and maintenance and dry dock) during FPSO shutdowns and limited scope for further significant structural changes to reduce the cost base and mitigate the turnover decline, given the scale of cuts in 2015 and 2016.

Although there was a small decline in headcount in 2015 as the initial headcount restructuring involved decreasing contractor numbers, there has been a decrease of nearly 6,000 employees between 2015 and 2017 in response to the contraction of activity. The average salary in 2017 was £46,000, a decline of 13% compared to 2015 due to salary reductions and wage freezes.



Turnover decreased by 33% between 2014 and 2017.



Export turnover accounted for 42% of 2017 total turnover.



Number of employees decreased by 5,898 between 2014 and 2017.

Marine and subsea

Key trends in Marine and Subsea

Global

The oil price decline resulted in a sharp reduction in global capital expenditure in 2015 and 2016, with only a minimal recovery in 2017. Modest growth is likely in 2018 to 2020 as large projects start to reach FID supported by improved project economics.

Figure 30: **Listed Marine and Subsea companies results for the period from January 2018 to September 2018 versus the period from January 2017 to September 2017**

Currency: US\$m	9m2018	9m2017	Variance	Variance (%)
Turnover	29,286	24,626	4,660	18.9%
EBITDA	2,246	2,919	(673)	(23.1%)
EBITDA margin	7.7%	11.9%	(4.2)	n/a
Backlog (where disclosed)	103,360	99,802	3,558	3.6%

We have analysed the divisional results of the listed parents of the top five companies in the Marine and Subsea supply chain category. Between 9m2017 and 9m2018, there has been an upturn in turnover through an increase in activity and higher vessel utilisation, following a rise in tender award activity. However, the majority of 2018 projects awarded related to delivering incremental production on existing developments rather than being for large greenfield projects. Although we did not see major consolidation as was the case in 2017, there have been smaller targeted acquisitions, such as, Halliburton's acquisition of Athlon Solutions and alliances to expand production solutions and geographic presence.

Despite the 19% turnover increase, EBITDA margin declined by 4.2 ppt, which was primarily due to the execution of more competitive priced projects that were awarded during the downturn, adverse weather conditions during offshore installations resulting in additional costs and a lower level of projects in the final stages of completion, partly offset by execution of key projects remaining robust.

We have also analysed backlog and this has shown an improvement of around 4% for 9m2018 against 9m2017. Inbound orders are exceeding revenue for the first time in a number of years and the level of tendering demonstrates the continued signs of recovery. Several large projects are anticipated to come to market in 2019 and there is improved visibility over timing of awards but medium term engineering, procurement, construction and installation (EPCI) projects in Europe have been delayed due to ownership and approval changes. Pricing remains under pressure with subsea umbilicals, risers and flowlines (SURF) and conventional project pricing not expected to improve in the near term.

UK

Figure 31: **Selected UKCS projects reaching Final Investment Decision (FID) in 2018**

Project	Operator	Expected start-up	Concept
Penguins	Shell	Q120	Redevelopment
Alligin	BP	2020	Tie Back to Schiehallion and Loyal subsea infrastructure
Finlaggan	Zenner Petroleum	2020	Subsea production wells tied back to Britannia
Tolmount	Premier	2020	Platform
Vulcan and Blythe	IOG	2020	Platform
Arran	Shell	2021	Subsea pipeline to Shearwater platform
Buzzard Phase 2	Nexen	2021	Subsea development tied back to existing Buzzard complex
Cheviot	Alpha Petroleum	2021	FPSO
Fram	Shell	2021	Subsea pipeline to Starling field

A number of large scale developments have completed in recent years and there have been encouraging signs in the number of projects reaching FID in 2018, a selection of which are noted above. This is a significant increase on 2017 and supports the recovery in the market, as well as improved project economics resulting from cost efficiencies implemented over the last three years. There are a number of companies looking to implement another step change in the subsea sector, using technologies such as autonomous vehicles, to give them a competitive advantage and further reduce project costs.

We would expect 2018 results for the companies in the Marine and Subsea supply chain segment to continue to be affected by projects awarded during the downturn that were competitively priced and which are now being executed. Although there are encouraging signs with the number of FIDs in the UK and globally, project sanctioning lead times may result in a significant increase in activity only materialising beyond 2019.

Support and Services



7

Support and Services

Figure 32: UK upstream oil and gas supply chain subsectors

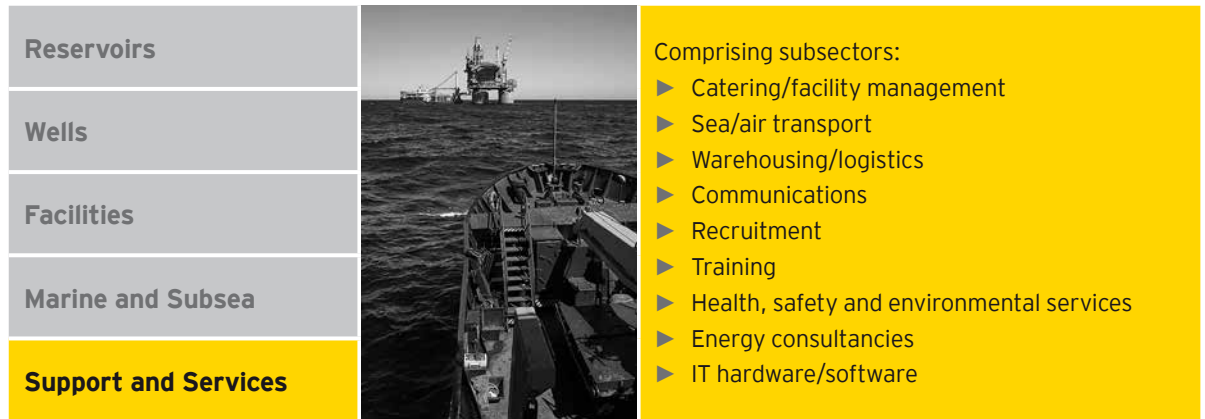


Figure 33: Analysis of Support and Services turnover and EBITDA margin by subsector

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Catering/facility management	143	184	199	242	251	216	202
Sea/air transport	865	973	1,014	982	1,104	954	831
Warehousing/logistics	865	912	964	947	764	684	776
Communications	86	127	118	132	119	118	125
Recruitment	1,934	2,151	2,791	2,851	2,503	2,296	2,163
Training	46	56	61	81	63	46	42
Health, safety and environmental services	514	569	627	692	699	616	621
Energy consultancies	464	551	621	636	529	465	454
IT hardware/software	206	247	324	349	319	309	358
Turnover	5,123	5,770	6,722	6,911	6,353	5,704	5,571
Catering/facility management	6.9%	7.9%	6.7%	6.1%	8.3%	7.4%	5.3%
Sea/air transport	8.6%	8.8%	8.7%	8.5%	5.7%	1.3%	(11.0%)
Warehousing/logistics	3.4%	4.2%	4.4%	4.2%	5.0%	5.7%	4.2%
Communications	7.7%	6.2%	14.5%	16.4%	8.7%	(1.0%)	9.8%
Recruitment	3.5%	3.2%	3.2%	2.8%	2.9%	1.7%	1.8%
Training	12.3%	20.0%	19.7%	20.6%	9.9%	(1.0%)	(0.5%)
Health, safety and environmental services	12.1%	13.1%	15.4%	14.7%	18.8%	16.7%	12.6%
Energy consultancies	24.3%	23.5%	25.1%	25.0%	23.6%	22.6%	22.2%
IT hardware/software	27.9%	21.8%	24.3%	22.5%	19.2%	13.8%	17.5%
EBITDA margin	8.3%	8.4%	8.9%	8.6%	8.3%	6.2%	4.4%



Summary of results

In 2017, the Support and Services supply chain comprised 19% of the total UK upstream oil and gas supply chain turnover.

Figure 34: **Summary of results 2011-17**

Currency: £mn	2011	2012	2013	2014	2015	2016	2017
Number of companies	384	406	405	403	401	410	413
UK turnover	3,297	3,791	4,376	4,502	4,276	4,022	3,946
Export turnover	1,825	1,979	2,346	2,409	2,077	1,682	1,625
Total turnover	5,123	5,770	6,722	6,911	6,353	5,704	5,571
Growth trends – turnover	n/a	12.6%	16.5%	2.8%	(8.1%)	(10.2%)	(2.3%)
EBITDA	426	485	595	596	529	354	246
EBITDA margin	8.3%	8.4%	8.9%	8.6%	8.3%	6.2%	4.4%
Tax on profits	42	71	94	96	65	48	36
Number of employees	15,266	17,143	19,216	20,473	22,561	20,422	19,859
Wages	729	830	941	1,063	1,148	1,038	986

Key highlights of the Support and Services supply chain category results

The Support and Services supply chain segment excludes companies involved indirectly in the UK upstream oil and gas supply chain (e.g., hospitality and infrastructure) and those which do not specifically disclose financial performance from oil and gas (e.g., legal, insurance, accountancy and banking organisations). Due to the nature of the services supplied, a large number of the subsectors within this segment are more reliant on activity in the UKCS than export markets, with customers typically using local companies to provide a large majority of their support services.

Revenue decreased by 2.3% in 2017, with each of the subsectors affected to varying degrees:

- ▶ The largest subsector, recruitment, experienced a 6% decline in turnover due to a number of large projects demobilising, a low number of new projects commencing and rate reductions on existing projects.
- ▶ The sea/air transport subsector was negatively impacted (13% decline) by the reduced offshore workforce and change in shift patterns, decreasing the number of flights required.
- ▶ Although the warehousing subsector achieved 13% growth, this was due to an increase in direct fuel sales (previously indirect fuel sales were netted against the fuel cost as there is minimal markup on these sales).

As well as the impact of the revenue decline on the relatively fixed nature of the remaining cost base, the EBITDA margin decrease of 2.1 ppt in 2017 was also driven by poor management of overseas projects resulting in additional costs, investment in international growth and technology that is expected to generate returns from 2019 onwards, increased operating lease costs (sea/air transport subsector) that could not be passed onto the customer and adverse foreign exchange movements.

The agency staff contracted out by the recruitment subsector are not included in our analysis of employees and only management and administrative employees are included. For the remaining subsectors, the increase in 2015 primarily related to the catering/facility management subsector that flexes headcount to match activity levels. There was a sharp reduction in headcount in both the catering/facility management and the health, safety and environmental services subsectors in 2016 (which continued in 2017) due to activity declines and right sizing of organisations. There is a wide variation in average salaries within Support and Services subsectors, with employees typically receiving lower salaries in the catering, training and warehousing/logistics subsectors, compared with the highest average salaries received in the sea/air transport and energy consultancies subsectors.



Turnover decreased by 19% between 2014 and 2017.



Export turnover accounted for 29% of 2017 total turnover.



Number of employees decreased by 2,702 between 2015 and 2017.

Support and Services

Key trends in Support and Services

Unlike the other supply chain categories, the top five companies do not have listed parent companies. Even for those companies within our analysis that do have listed parents, the support and services divisional results are typically reported as part of another division (geographic or business unit) and, as such, we are unable to analyse divisional trends for support and services subsectors on a standalone basis. However, in general, our analysis has historically shown these companies will typically follow the trends of the global listed OFS companies.

For the largest subsectors within support and services, the key trends in the market we see are as follows:

Recruitment

Prior to the downturn, there was a global 'war for talent' with high contract day rates being paid to obtain the resources required. However, over the last three years, due to projects being shelved or reduced in scope in response to the oil price reduction, there was a sharp decline in contract roles. Cost efficiency programmes also resulted in companies decreasing headcount on projects and reducing remuneration levels. As signs of a gradual recovery are being seen, there are a number of issues facing companies:

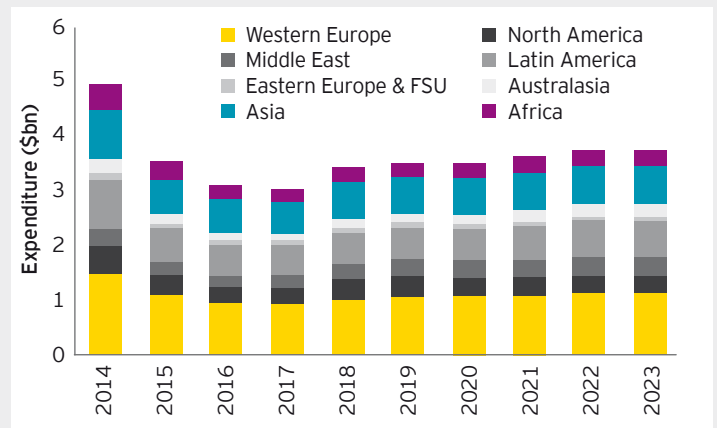
- ▶ **Impact of IR35** legislation on contractors working through personal service companies.
- ▶ Loss of **technical knowledge** as a result of the redundancy programmes, given a number of these workers have changed industry and are unlikely to move back into oil and gas due to its cyclical nature.
- ▶ **Demographic shifts** mean that employees are demanding changes in the working environment. However, there are opportunities such as advancements in technology (e.g., increased digitalisation) that may create remote working opportunities that are desired.
- ▶ **Climate change** agenda and lack of attractiveness of the oil and gas sector as a career option to the next generation.

Given the effort undertaken to reduce costs during the downturn, no one wants to see a return to high day rates to satisfy increased demand. The impact of the IR35 legislation could have significant implications for the sector and Recruitment companies could be well placed to assist companies to maintain a flexible workforce if they can ensure their resource pool has the skill set needed, at competitive rates. In addition, recruitment companies may need to consider potentially diversifying into new markets and geographic locations to obtain profitable growth, as high contract day rates are unlikely to return in the oil and gas sector in the near term.

Sea/air transport

As a result of over-ordering during the peak oil and gas years, the offshore helicopter market continues to struggle with low utilisation. Helicopters tend to have long service lives that means, in the absence of significant external factors such as new regulations or E&P activity, little can be done to alter the current over-capacity.

Figure 35: **Global offshore O&G helicopter expenditure by region 2014-2023**



Source: Westwood

For oil and gas, it appears any future growth will be incremental, such as new developments as opposed to any major change in outlook for existing operations. These new oil and gas opportunities lie within non-traditional and undeveloped areas such as the Guyana or East Africa and the newer fleets with modern safety and comfort standards and lower operating costs are likely to be favoured over the older 'heavy' fleets.

Offshore wind continues to increase in relevance and scale with 5,661 turbines to be installed globally over 2019-2023 and while the UK continues to dominate activity for both operations and maintenance and construction activity, other regions are also set to experience rapid growth, albeit on a much smaller scale.

Helicopter companies have restructured and implemented reorganisation to counteract the decline in activity but risks still remain due to lower contract values and a more competitive environment.

UK sea/air transport companies will need to proactively expand their geographic footprint and diversify to benefit from the forecast growth, given that levels of demand in the UKCS are not expected to increase significantly in the short-term.

Comparison with the Norwegian and Dutch oilfield services sectors

8



8

Comparison with the Norwegian and Dutch oilfield services sectors

Figure 36: **Summary of results**

(All data for 2017 and in £ billion unless stated otherwise)	UK	Norway*	The Netherlands**
Number of companies***	484	1,194	326
Number of employees	106,334	95,288	64,255
Turnover	27	27	16
Turnover decline 2015 to 2016	(8%)	(13%)	n/a
Exports as a percentage of turnover (estimated)	39%	35%	n/a
EBITDA	1.8	1.9	Not disclosed
EBITDA margin	7%	7%	Not disclosed

* The exchange rate used to convert the Norwegian data is NOK 10.6 per £

** As data for The Netherlands for 2017 is not yet available, we have shown 2016 data for comparison purposes. The exchange rate used to convert the Dutch data is EURO 1.14 per £

*** Only companies with turnover greater than £10mn in any year from 2012 to 2017 are included

Figure 37: **Turnover by basin**

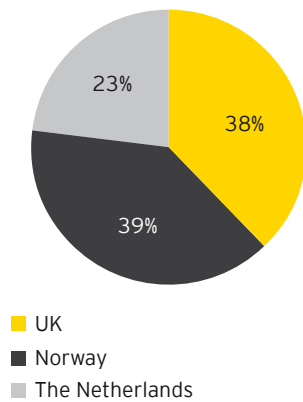
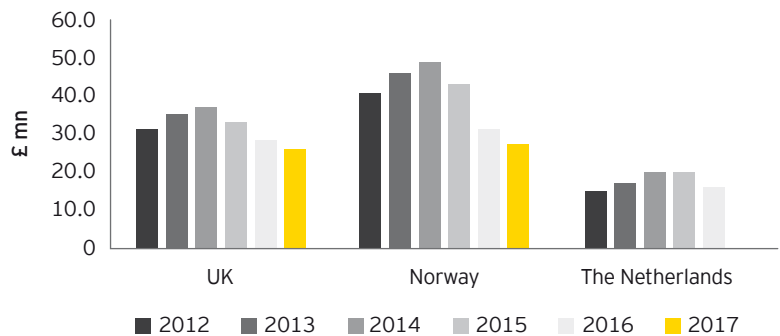


Figure 38: **2012-17 revenue trends**



The capital allocation battle

The 2014/15 downturn in the Norwegian OFS industry continued through 2017, but with diminishing strength. The strong growth in revenues in the period 2011-2014 when oil prices averaged well above \$100 per barrel has been reversed, and current aggregate revenues are now back to 2007 levels. We note that 2017 has been yet another challenging year for all segments in the OFS value chain. However, the sharp decrease in revenues from 2015 and 2016 have somewhat flattened out, as revenues fell 13.3% compared to 26.7% last year.

The cost inflation observed up until 2014 has also challenged OFS companies' ability to generate profits. This can be explained by the swap from older and lucrative contracts to lower day-rates and short time horizon contracts. Consequently, several cost-saving programs have been initiated by the industry operators in order to meet with the E&P companies lower-for-longer regime. As a result, the large restructuring programs we have observed have led to a net job reduction of more than 36,000 employees. This is equivalent to a 27% reduction of jobs from the peak in 2014.

The overall cost levels have come down significantly the last two years, and new development projects have hence regained competitiveness in the capital allocation battle. Recent efficiency gains are likely to be sustainable, but could potentially challenge the classic supply and demand analysis for offshore services. With more efficient assets and processes, these efficiency gains may offset some of the increase in the demand for offshore services.

We expect E&P spending to remain at current levels until investments in existing facilities and new subsea facilities start to pick up in 2019 and beyond. However, consensus investment forecasts do not expect a return to such levels witnessed in 2013 and 2014 in the foreseeable future.

Espen Norheim
Partner
Ernst & Young AS



Sentiment could be turning

Over the past few years the E&P spending levels have remained low, putting pressure on the market for OFS. Consequently, margins in the sector have been squeezed and many companies focused on short-term transformations with immediate cash results. The number of employees dropped severely. Moreover oil price level seems to have stabilized on a new lower level (~60 USD/bbl), hampering investments in new more difficult reservoirs and impacting the OFS project pipeline.

We expect that OFS companies will continue to focus on cost discipline, including managing headcount, but the focus of (Dutch) OFS companies will shift towards more structural transformations, such as creating more integrated offerings and innovating in technology and commercial arrangements, in order to sustainably out-perform in this new lower oil price environment.

There are signs that sentiment could be turning. 2018 was a low point for exploration, but there appears to be a renewed confidence and appetite for exploration across the North Sea region. Moreover, CAPEX levels are expected to increase in 2019 albeit at moderate levels. Price levels in the OFS sector are projected to improve but still remain effected by overcapacity in many sub-segments. In addition, we observe an appetite of privately backed/owned investors, eager for North Sea assets, who are breathing new life into the region and also bring a ruthless focus on cost control. Renewable energy will continue to provide market opportunities to exploit knowledge, technology and assets. The question is whether the Dutch OFS companies can benefit from this 'cautious optimism' in the short term and strengthen their position in the value chain, since it is unlikely that overall activity is going to return to 2014 levels anytime soon.

Given its strong heritage and innovative and flexible character, the Dutch OFS industry will remain an significant factor in the Dutch economy and will continue to play an important role in the global oil and gas industry. Through focusing on innovation, sustainability and consolidation, companies are looking to lay the foundation for future success in the Dutch OFS industry.

René Coenradie
Partner
Ernst & Young Nederland LLP



9

Methodology and key assumptions

The purpose of our analysis of the UK OFS sector has been to define, qualify and quantify a sector of significant importance for the UK North Sea and the UK economy and to provide insight both to the industry itself as well as to other relevant parties.

The financial data in this report is based on UK registered company's annual accounts filed at Companies House, which has been categorised into 2011, 2012, 2013, 2014, 2015, 2016 and 2017 for financial year ends within each of these calendar years. Where a company has not yet filed its 2017 annual accounts and it had turnover in excess of £21mn in 2016, we have included its results based on the following assumptions:

- ▶ For turnover, we have applied the relevant subsector turnover growth or decline rate to the company's 2016 revenue.
- ▶ For EBITDA, we have applied the 2016 EBITDA margin to 2017 turnover.
- ▶ For wages and employees, we have included 2016 values.

We applied the following criteria to each company to determine whether it should be included in the analysis:

- ▶ It is a UK registered company.
- ▶ At least 50% of its turnover is generated in the upstream oil and gas sector.
- ▶ It has filed 2017 accounts with Companies House (apart from the exception noted above).

As it is not possible to accurately extract the portion of financial information relating to the upstream oil and gas sector from each company's annual financial statements, we include the full results for any company included in the analysis. Although this will overstate the financial information for companies which are not 100% engaged in the sector, it excludes those companies that do not have the majority of their business in the sector. Overall, we believe this results in a fair reflection of the UK OFS sector.

We have assigned each company to a subsector based on its main activity, with the 32 subsectors derived from Oil & Gas UK's supply chain categorisation. Many companies do have activities across the supply chain but this is not accounted for in this analysis.

For export analysis, we analysed the geographic disclosure within the annual accounts of the largest 300 companies (by 2017 turnover). Where this did not result in at least 80% coverage of the turnover in each of the 32 supply chain subsectors, additional companies were also analysed.

The export information based on annual accounts averaged approximately 75% of turnover in each of the financial years, with the remainder being extrapolated as noted below:

- ▶ Where a company only disclosed revenue at Europe level rather than at a UK level, the average split of UK and Europe revenue for the specific subsector was applied to calculate the UK only portion.
- ▶ If a company did not disclose geographic information or was excluded from the export analysis, the average split of UK and export revenue for the subsector, based on the information extracted from the annual accounts, was applied.

Tax on profits represents tax charged in the accounts filed at Companies House and does not represent tax paid. There are a number of differences between the effective tax rate and tax paid, including:

- ▶ Tax allowance
- ▶ Utilisation of tax losses from prior years
- ▶ Group relief
- ▶ Deferred tax



EY oil and gas professionals across the globe

The EY commitment to oil and gas across the globe

As an organisation, we are highly committed to the oil and gas sector and have more than 10,000 focused EY professionals across the globe.



Your EY contacts

Transaction Advisory Services	Assurance	Tax	Advisory
Andy Brogan + 44 20 7951 7009 abrogan@uk.ey.com	Kevin Weston + 44 1224 653 062 kweston@uk.ey.com	Derek Leith + 44 1224 653 246 dleith@uk.ey.com	Marlon Richardson + 44 02 7951 6317 mrichardson@uk.ey.com
Jon Clark + 44 20 7951 7352 jclark5@uk.ey.com	Moira Lawrence + 44 1224 653 147 mlawrence@uk.ey.com	Colin Pearson + 44 7799 476 563 cpearson1@uk.ey.com	Andrew Deane + 44 7976 296 751 adeane@uk.ey.com
Stuart White + 44 1224 653 199 swhite1@uk.ey.com	Gemma Noble + 44 1224 653 174 gnoble@uk.ey.com	Robert Cardno + 44 1224 653 248 rcardno@uk.ey.com	Simon Millage + 44 131 777 2021 smillage@uk.ey.com
Céline Delacroix + 44 20 7806 9204 cdelacroix@uk.ey.com	David Lister + 44 131 777 2308 dlister@uk.ey.com	Shannon Dowdles + 44 1224 653 038 sdowdles@uk.ey.com	Jill Douglas + 44 1224 653 130 jdouglas1@uk.ey.com
Chris Durling + 44 1224 653 113 cdurling@uk.ey.com	Rob Haden + 44 1224 653 052 rhaden@uk.ey.com	Niall Blacklaw + 44 1224 653 293 nblacklaw@uk.ey.com	Ian McCowen + 44 20 7951 3052 imccowen@uk.ey.com



How EY can help

Their global teams of oil and gas professionals, coupled with closely linked transactions advisory, tax and advisory services teams mean EY is equipped to provide independent, whole-life support and advice to their oil and gas clients. EY has proven skills covering the entire breadth and depth of their oilfield services clients' businesses.

Transaction advice

Opportunity identification, advising on execution of mergers, acquisitions, divestments and carve-outs, joint ventures and alliances, as well as undertaking buy- and sell-side due diligence.

Financial and operational restructuring

Advising corporates, banks, bondholders, private equity, alternative capital providers and other stakeholders on financial and operational restructurings, including assessment of existing restructuring programs, evaluation and execution of cost savings initiatives, negotiations with corporates, banks and capital market providers of capital, and other capital providers, accelerated M&A processes.

Integration

Determining and analysing post-acquisition and merger integration and portfolio realignment.

Capital agenda

Improving capital needs at the corporate, portfolio, asset, project and business unit levels, including working capital, cash flow improvements, and debt and equity raising and/or refinancing.

Strategy and performance management

Strategy development and assessment, market access study, competitor analysis, asset portfolio management, organisational improvement, supply chain improvements in procurement, logistics, engineering, field operations, manufacturing and distribution; improving work processes, identifying key risks to facilitate services of major capital projects, improving overall financial and management reporting, supporting key business and operations improvements by effectively deploying information technology.

Risk management services

Advising on business risks and developing plans to accept, identify or capitalise on them, including assessments (assessing risk potential and processes), improvements to achieve business objectives) and monitoring (evaluating if processes, initiatives and functions are operating as expected), as well as undertaking internal audit programs to augment clients' internal capabilities.

Tax advisory

Advising on country fiscal regimes, tax structuring, transaction planning and impact of alternative energy, as well as managing international assignments for key employees and understanding tax considerations in expanding operations to new countries.

Forensic and integrity services

Successful organisations depend on their reputation for keeping promises, respecting laws and behaving ethically to maintain stakeholder trust. EY Forensic & Integrity Services professionals help organisations protect and restore enterprise and financial reputation. We assist companies and their legal counsel to investigate facts, resolve disputes and manage regulatory challenges. We put integrity at the heart of compliance programs to help better manage ethical and reputational risks.

Digital transformation

Development and implementation of digital strategies covering all operational and functional areas including asset performance management, digital supply chain, operations and field ticketing, digital tax, intelligent process automation, integrated planning and portfolio management, cybersecurity and data analytics.

Authors



Susan Moseley

Transactions Advisory Services Assistant Director, Ernst & Young LLP

Susan is an Assistant Director in Transaction Advisory Services, with more than 10 years of experience advising a range of OFS companies. Prior to EY, Susan worked for a large US OFS company and held both UK and overseas roles.





Stuart White

Transactions Advisory Services Director, Ernst & Young LLP

Stuart is a Director in Transaction Advisory Services, with over 15 years working with upstream, midstream and OFS companies in the UK and globally.

 Follow us on Twitter @EY_OilGas

 Visit us on LinkedIn

 See us on YouTube

About EY

EY is a global leader in assurance, tax, transaction and advisory services. The insights and quality services we deliver help build trust and confidence in the capital markets and in economies the world over. We develop outstanding leaders who team to deliver on our promises to all of our stakeholders. In so doing, we play a critical role in building a better working world for our people, for our clients and for our communities.

EY refers to the global organization, and may refer to one or more, of the member firms of Ernst & Young Global Limited, each of which is a separate legal entity. Ernst & Young Global Limited, a UK company limited by guarantee, does not provide services to clients. For more information about our organization, please visit ey.com.

How EY's Global Oil & Gas Sector can help your business

The oil and gas sector is constantly changing. Increasingly uncertain energy policies, geopolitical complexities, cost management and climate change all present significant challenges. EY's Global Oil & Gas Sector supports a global network of more than 10,000 oil and gas professionals with extensive experience in providing assurance, tax, transaction and advisory services across the upstream, midstream, downstream and oilfield subsectors. The Sector team works to anticipate market trends, execute the mobility of our global resources and articulate points of view on relevant sector issues. With our deep sector focus, we can help your organization drive down costs and compete more effectively.

© 2019 EYGM Limited.
All Rights Reserved.

EYG no. 000308-19Gbl
EY-000077595-01.indd (UK) 01/19.
Artwork by Creative Services Group Design.
ED None



In line with EY's commitment to minimize its impact on the environment, this document has been printed on paper with a high recycled content.

This material has been prepared for general informational purposes only and is not intended to be relied upon as accounting, tax or other professional advice. Please refer to your advisors for specific advice.

ey.com/oilandgas

The views set out in this publication are not necessarily the views of the global EY organization or its member firms. Moreover, they should be seen in the context of the time they were made.