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UKCS upstream supply chain collaboration survey 2018

Collaboration at a crossroads – Which way next?

December 2018

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About this report

Methodology
The report is based on the results of a confidential electronic survey conducted with industry participants in the UK Continental Shelf (UKCS) in August and September 2018. The data and analysis of the results are presented in the report anonymously in an aggregated format.

Demography
There were 217 respondents to the Survey. Most came from logistics/supply chain, procurement and operations functions, followed by engineering and projects, and back office – finance, HR and legal. The majority were senior managers, with an equal split between board level/executives and project managers and specialists.

In this publication, references to Deloitte are references to Deloitte LLP, the UK affiliate of Deloitte NWE LLP, a member firm of Deloitte Touche Tohmatsu Limited.

Foreword

Welcome to the fourth edition of the UKCS Upstream Supply Chain Collaboration Review and Index.

Activity levels in the UKCS are slowly picking up and some oil and gas companies are now starting to post positive financial results – further supported by the recent increase in oil prices. Operating in the mature North Sea basin is still challenging and many businesses are still struggling to keep their heads above water. Prudent cost management in recent years and a strong focus on improving operational efficiency have led to significant reductions in lifting costs. These topics continue to dominate boardroom conversations, alongside renewed interest in investment opportunities driven by returning confidence in the sector.

Since the Wood report in 2014, supply chain collaboration has been recognised as critical to transforming the business performance of the UKCS. Industry-wide initiatives to promote improvements have undoubtedly played a pivotal role in raising awareness. They include the work of the Efficiency Task Force (ETF), focusing on Cooperation, Culture & Behaviours, and the Engineering Construction Industry Training Board (ECITB), which developed the Project Collaboration Toolkit to provide guidance on best practice for collaboration in the oil and gas industry.

Deloitte and Oil & Gas UK have once again worked together to produce this year's Review and Index, which is based on a Survey that we conducted in August and September 2018. The partnership of Oil and Gas UK and Deloitte provides a unique combination of industry engagement with a trusted survey and analytics capability – ensuring good participation and insight for the industry. We are pleased to see survey participation up by 30 per cent from 2017.

As with previous years, the 2018 report has three main parts:

- **The Collaboration Review** covers attitudes and actions toward collaboration across the UKCS. This year we have expanded the questions on cost reduction, business transformation and barriers to change, in order to understand better the actions that companies have already taken and are planning for the future.

- **The Collaboration Index** (Index) measures the effectiveness of companies as partners in collaboration. The aggregated Index scores published here give an indication of how effectively operators and suppliers collaborate.

- **The Framework for Action** has been updated to provide guiding principles and actions that companies can follow to make collaboration more effective and to deliver tangible change and performance improvements in supply chain performance.

We would like to thank Oil & Gas UK for their support and the survey participants for providing us with their views.

I hope you find this year's report insightful and helpful, and as ever, we welcome your feedback and comments.

Graham Hollis
Office Senior Partner, Aberdeen

Executive summary

Executive summary

The results of the fourth annual survey show that the behavioural and cultural improvements in 2017 have been sustained at an industry level even as activity in the basin picked up significantly in 2018.

This is encouraging, but there has been no improvement in the Collaboration Index (CI), despite much effort from industry bodies and companies. This warrants some attention, and we have analysed the survey data and interviews with key respondents to investigate the root causes. In doing so we have tried to highlight what needs to be done to continue to improve performance.

Last year's report highlighted the real progress that had been made in collaboration and emphasised the need to move even faster to extend and embed the change. This year's results suggest that there is a need to build on the work of the last three years and deliver a sustainable transformation.

The changes the industry makes to improve supply chain collaboration must be sustainable, which means that they should be fully implanted and add value throughout the business cycle. Collaboration should not be forgotten when oil prices rise and the industry gets busier; this would lead to a reversal of the efficiency gains of the last three years.

To this end, this year's report contains encouraging evidence that the industry recognises the need to continue investing in sustainable change and that focussing solely on cost reductions will no longer deliver the outcomes needed for the future.

The appetite for collaboration remains very high and continues to be recognised as integral to business performance by well over 90 per cent of respondents.

Yet companies continue to find collaboration difficult to achieve in practice. This year the number of respondents saying more than half their collaboration efforts were successful has fallen to 36 per cent from 43 per cent.

Where collaboration has been successful, trust is still cited as the most important reason, followed by the mutual benefits that accrue to both parties.

Company efforts to engender and improve collaboration were split fairly equally between initiatives to simplify the terms and processes around tendering and contracting, and those to increase internal capabilities or to reorganise the business.

Typically, once tactical cost reduction has been exhausted, we see organisations move more towards business transformation as a way to squeeze out further savings, rationalise activities and drive real productivity gains. Companies in the UKCS applied both approaches in the previous 12 months to a fairly equal extent, but many more are planning to engage in business transformations in the coming 12 months.

Surprisingly perhaps, many respondents do not consider 'digital' as a significant driver for improving performance or reducing costs: 45 per cent of respondents do not believe or do not know if their firm has the right capabilities in this area. They do not appreciate the relevance or application of digital technology to their day-to-day business or how it can change what they do. This suggests that a significant opportunity is being missed. Addressing this issue should be one of the top priorities for industry going forward.

The Industry Collaboration Index score, which measures overall collaboration among all participants, remained the same in 2018 as in 2017. However, the Supplier score moved up, meaning that Suppliers are once again scoring higher than Operators, as they were in 2015 and 2016.

This suggests that the focus on the right behaviours may have slipped somewhat. This would not be unusual where new ways of working have not been fully embedded into regular practice, which means they are then impacted as activity picks up or as priorities shift. It is particularly encouraging to see that Operators and Suppliers continue to look to alternative commercial models and contract terms that incentivise the right collaborative behaviours.

Conversely, Suppliers scores were up in all areas. Their efforts have been recognised by their Operator partners and they are increasingly seen as helping to improve their business.

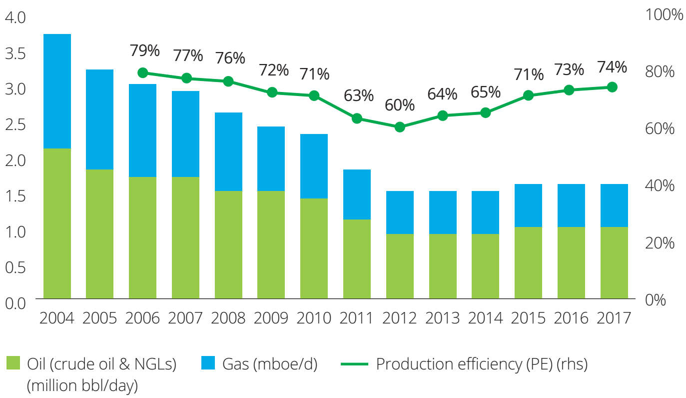
Just over half the companies surveyed have started investing in decommissioning activities. Both Suppliers and Operators like the concept of industry bodies supporting decommissioning. There is a slight divergence of opinion over who should drive this, as Operators tend to think that companies should lead it, and Suppliers are more inclined to prefer government/regulator leadership.

Collaboration Review

Backdrop to this year's survey

The UK Continental Shelf (UKCS) is a mature area with well-established fields and infrastructure. In February 2014 the Wood Report was commissioned by the UK government to identify how to Maximise Economic Recovery (MER) from the UKCS and sustain the life of the basin. Collaboration was identified as one of the key capabilities that the industry needed to develop, in order to achieve this objective. The report also identified the need for a dedicated regulatory body to support MER, and the Oil and Gas Authority (OGA) was created to meet this need. With the fall of oil prices in 2015 and the sustained period of low prices that followed, companies working in the UKCS faced increasing pressure. In this challenging environment the industry, supported by the OGA and the industry body Oil and Gas UK, embarked on a programme to improve efficiency and increase production. And it worked: production efficiency has risen for five consecutive years to 74 per cent in 2017 from a low of 60 per cent in 2012, as shown in Figure 1.[1]

Figure 1. UK North Sea production efficiency
Oil & gas (MBOE/day)



Source: OGA

These efficiency gains were achieved largely through efforts made by Operators and Suppliers, and supply chain collaboration has been a key part of this. Progress has not been entirely smooth and the industry has seen considerable reduction in its workforce and scale since 2015 as a result of low oil prices.

The lack of a collaborative culture in the UKCS meant that the initial efforts by Operators to respond to the 'new normal' centred on aggressive cost reduction – a strategy they had deployed in the past. As low prices persisted, the need to adopt new ways of working became evident. This change is evident from Collaboration Survey results over the past four years, suggesting that in an era of severe price constraints, greater collaboration between Operators and Suppliers is an effective way to do more with less and achieve improvements.

Yet such a substantial transformation in ways of working can take years for changes to become embedded. One of the biggest concerns has been whether the new collaborative approaches have sufficient time to take root before oil prices rise and behaviours return to the 'old ways'.

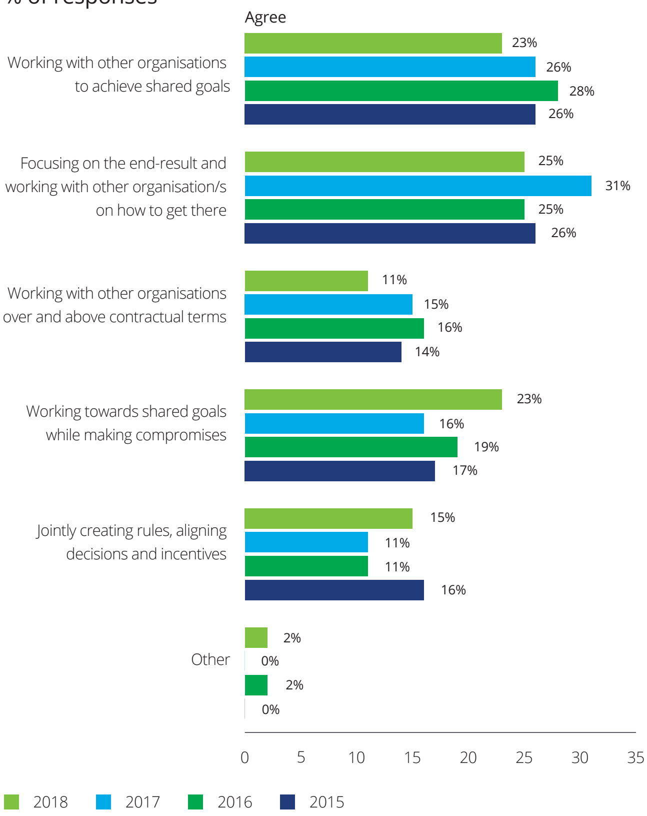
This year's survey results should encourage industry to step up its efforts to build on positive changes seen over the past three years, extend them across the basin and embed them as standard practice so they add value when oil prices are high, and not just when they are low.

The key messages

Attitudes towards collaboration remain positive in general although there have been some dips in sentiment. For the first time we have seen a fall from 95 per cent to 89 per cent in the proportion of respondents stating that 'Collaboration is integral to their day to day business'. The fall is greater for Suppliers than for Operators, and could indicate a slight change in attitudes between the two as prices have picked up. This could be a warning sign for industry to re-assess how the two sides work together as the market changes.

The Survey tracks two broad aspects of collaboration: what companies say and what they actually do in their commitment to collaboration. While companies may claim to value it, they frequently fall short in practice, for example in the financial incentives and commercial terms they offer their partners to perform better.

Figure 2. What defines effective collaboration?
% of responses



2015 n=99 responses; 2016 n=216 responses; 2017 n=257 responses; 2018 n=396 responses
Source: Deloitte analysis

Definitions of collaboration

Collaboration has different meanings, depending on who you speak to and whether they are an Operator or a Supplier. Most respondents have the same idea, as shown in Figure 2. Broadly speaking, it means working together to achieve mutually-agreed outcomes. It does not mean jointly setting the rules or incentives to achieve an outcome, nor does it necessarily mean going above and beyond their agreed contractual terms. Suppliers (19 per cent) tend to be slightly more willing than Operators (14 per cent) to compromise when working towards shared goals.

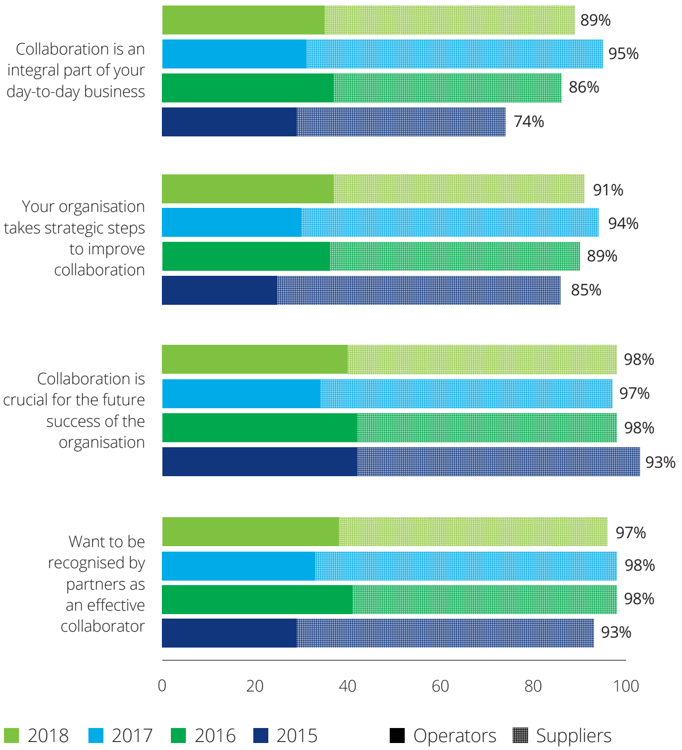
Attitudes to collaboration

Attitudes to collaboration remain very positive. Scores have slipped in two unexpected areas. This could be a sign that attitudes have shifted somewhat as activity has picked up in the basin, or that behavioural change is not yet complete. Companies should be aware of this and monitor it.

Companies are still quite enthusiastic about collaboration, although somewhat less so than in 2017. See the depiction in Figure 3. Operators (92 per cent) tend to value collaboration more than Suppliers (86 per cent). Many respondents, both Operators and Suppliers, undertake strategic steps to foster collaboration. Respondents see collaboration as an important part of the future success of their business. This has been a consistently-held view since 2016. And almost all companies want to be recognised as a good collaborator.

"Being seen as effective collaborators is a hugely positive statement that conveys a will to learn from each other." — Supplier

Figure 3. Attitudes to collaboration
% of respondents

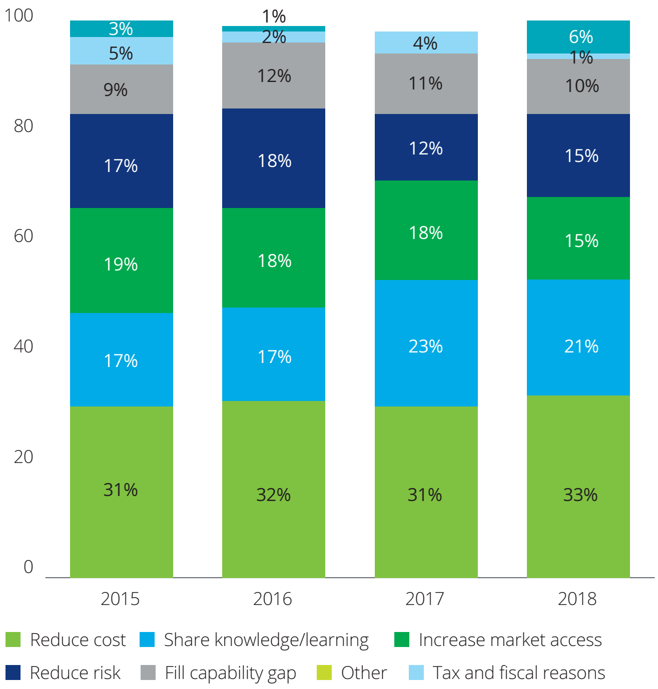


2015 n=58 respondents; 2016 n=107 respondents; 2017 n=127 respondents; 2018 n=175 respondents
Source: Deloitte analysis

Why do companies collaborate?

The number one reason continues to be to reduce costs. This seems to be more important in 2017-2018 than in previous years, reaching its highest level in our surveys to date. Risk reduction has also increased in perceived importance. Market access remains a strategic reason for Suppliers to collaborate, but less so this year. The top reasons have remained consistent over time: see Figure 4. Increases in the percentages for cost reduction and risk reduction could be seen as a step backwards when looking at the trends over four years, although the sustained high percentage for knowledge-sharing/learning is a positive result.

Figure 4. Principal reasons for collaboration in the UKCS
% of responses



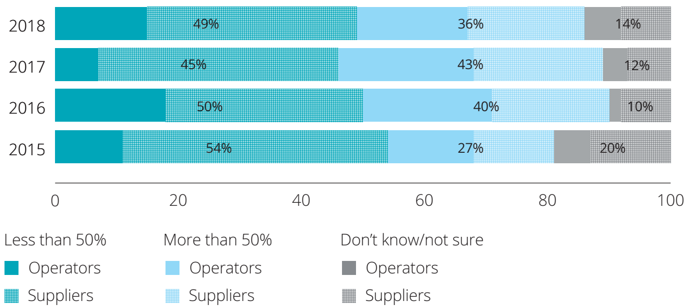
2015 n=108 responses; 2016 n=191 responses; 2017 n = 236 responses; 2018 n = 343 responses
Source: Deloitte analysis

How successful is collaboration?

Collaboration is difficult. Just because a company values it, wants to be known for it, and tries to achieve it does not mean that effective collaboration can be achieved.

This year the proportion of respondents saying that more than half of their efforts at collaboration were successful fell to 36 per cent from 43 per cent in 2017. This percentage in 2017 was high, but we would have expected it to increase further given the efforts that companies are making in this area. See Figure 5.

Figure 5. Successful collaborations, past 12 months
% of respondents



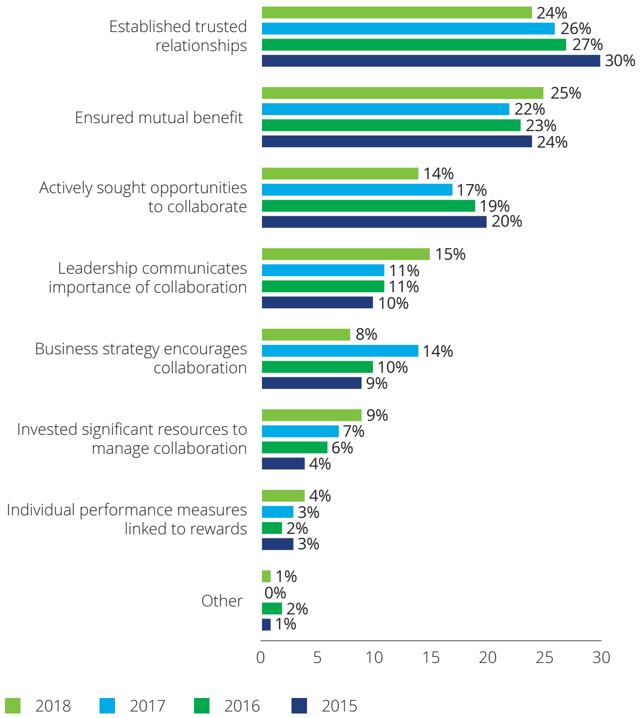
2015 n=55 respondents; 2016 n=101 respondents; 2017 n=121respondents; 2018 n=166 respondents;

Source: Deloitte analysis

This shift in percentages suggests a possible reversion to old behaviours. This could relate to changes in market conditions and the uptick in activity in the industry.

The main reasons why attempts at collaboration fail remain consistent with previous years: they centre on misaligned expectations, commercial terms benefiting one party more than the other, and a general lack of trust: see Figure 6.

Figure 6. Principal reasons for successful collaboration in the UKCS
% of responses



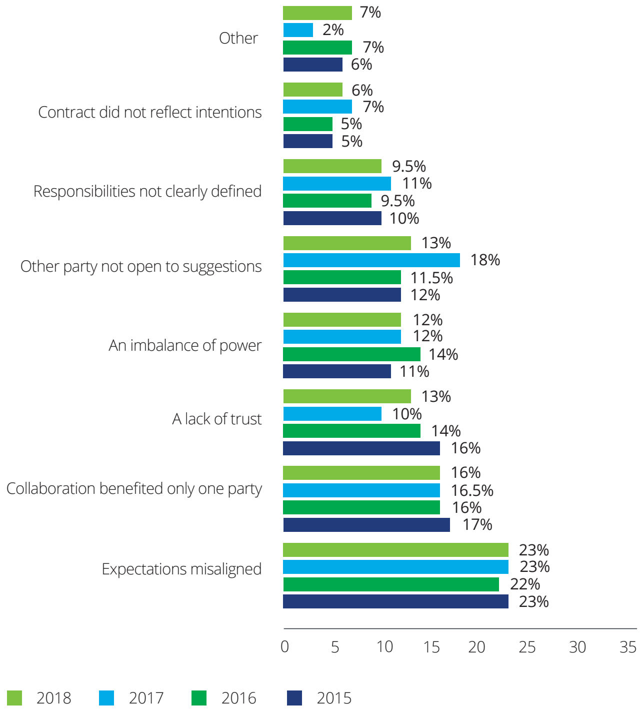
2015 n=100 responses; 2016 n=216 responses; 2017 n = 277 responses; 2018 n = 413 responses
Source: Deloitte analysis

"Within the UK, the intention is there. However, the commercials, culture and trust are often the blockers for success between parties." — Supplier

"Collaboration has worked when the respective organisations have senior personnel actively championing and supporting the process."
— Supplier

Yet when collaboration does go well, the main reasons are strong relationships built on trust, and mutual benefit accruing to both parties: see Figure 7. For the first time since this Survey began, the main factor is not trust but rather the willingness to ensure mutual benefits for both parties. Leadership is now seen as more important than business strategy in driving collaboration. This supports the view we stated in last year's report that the presence of 'Heroes' can be a major factor in driving successful collaboration – though, from experience in other basins, this lessens over time, as collaboration becomes more entrenched.

Figure 7. Principal reasons for unsuccessful collaboration in the UKCS
% of responses



2015 n=105 responses; 2016 n=229 responses; 2017 n=243 responses; 2018 n=345 responses
Source: Deloitte analysis

Old assets in new hands

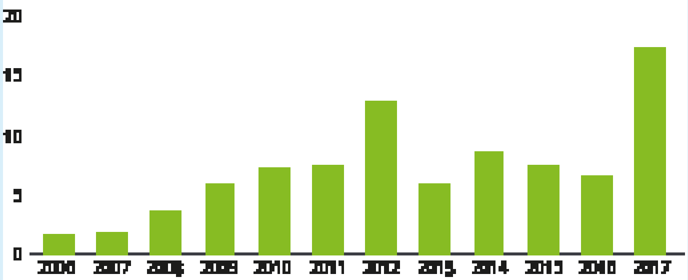
In the past two years, the UK and Norwegian Continental Shelf has seen a sharp rise in mergers, acquisitions and divestments: see Figure 8. This increase in activity has been driven by a combination of increased market confidence as oil prices have risen, and greater competitiveness across the basin.

There is also a clear desire from some of the larger global operators to sell what they see as non-strategic assets. As these established players re-orient their efforts to new areas of the UKCS, they are selling to new players, including independents and private equity houses, that bring new approaches to exploiting the assets.

Such changes could be critical to breaking through some of the barriers, specifically historical behaviours, that inhibit collaboration and performance improvement. Changes in ownership historically extend average field life by nearly five years, as the new owners work hard to maximise value from their acquisitions.[2] Figure 9 shows a sample of some of these deals.

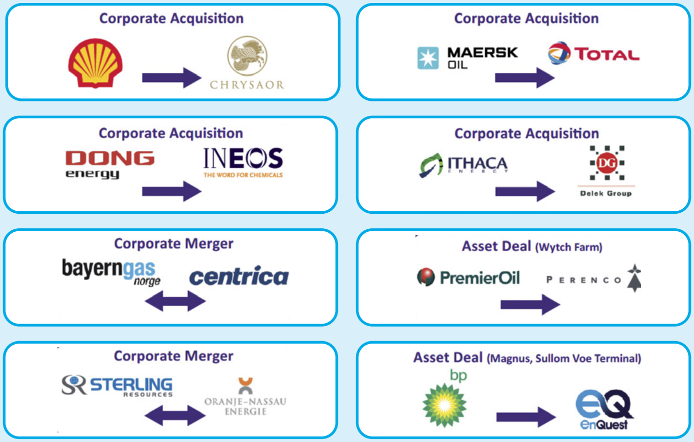
The favourable treatment offered in the 2018 UK Budget to transferable tax history should encourage even more M&A activity during the rest of 2018 and throughout 2019. Figure 10 shows a map of where assets have changed hands, and where the established players are redeploying their efforts.

Figure 8. Value of M&A deals on the NCS and UKCS, 2006-2017
US$bn



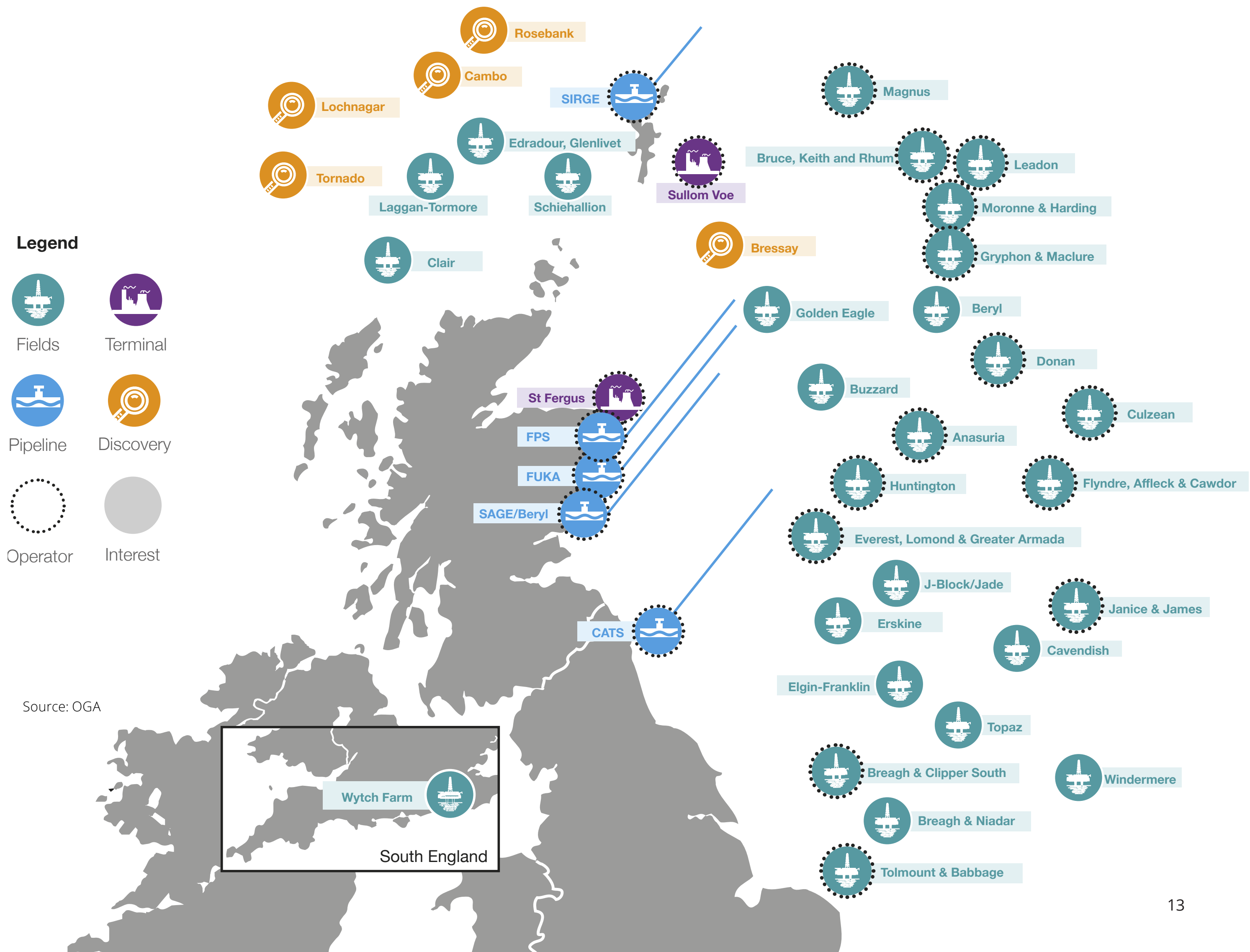
Source: Wood Mackenzie, Pareto Securities Equity Research

Figure 9. Mergers, acquisitions and asset deals involving UKCS companies



Source: O&G UK Business Outlook 2018

Figure 10. Assets changing hands, 2017



Source: OGA

From attitude to action

In the second part of the survey, we explored some of the tangible steps that companies take to realise collaboration in practice, and drive associated business benefits.

Initiatives by companies

To improve collaboration, companies can change the terms and processes for tendering and contracting, making it easier for partners to deal with them. They can also develop their own internal capabilities, making it easier for them to deal with partners.

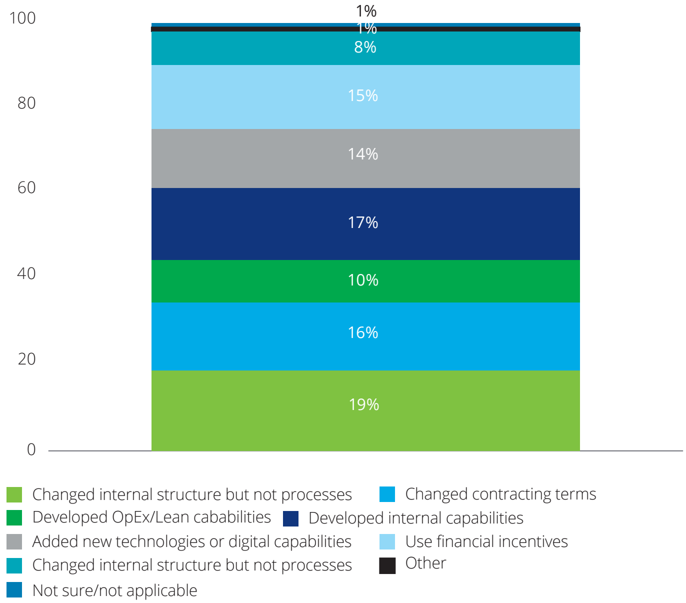
As indicated in Figure 11, Suppliers and Operators have opted to do both in fairly equal measure. They have changed terms and processes, including financial incentives, and they have bolstered internal capabilities (operational improvements, the use of new technologies, different company structure).

Cost cutting versus business transformation

There is a limit to how far companies can cut costs. After a certain point, cost-cutting becomes counter-productive and companies must find other ways to improve efficiency. Over the past couple of years companies have therefore shifted from tactical cost reductions to efficiency improvements and then on to more substantive transformation. But it is clear from our conversations with companies in the Survey that this is not happening across the board.

Figure 11. Initiatives taken to increase supply chain collaboration

% of responses



2018 n = 549 responses
Source: Deloitte analysis

This year we asked a set of questions around cost reduction and business transformation over the last 12 months and intentions for the next year.

We found that in the past year, companies engaged to a fairly equal extent in both cost reduction (deferring or reducing spend, requesting reductions from suppliers, reducing workforce and similar activities) and business transformation (digital enhancements, streamlining the organisation or processes, and improving performance): see Figure 12.

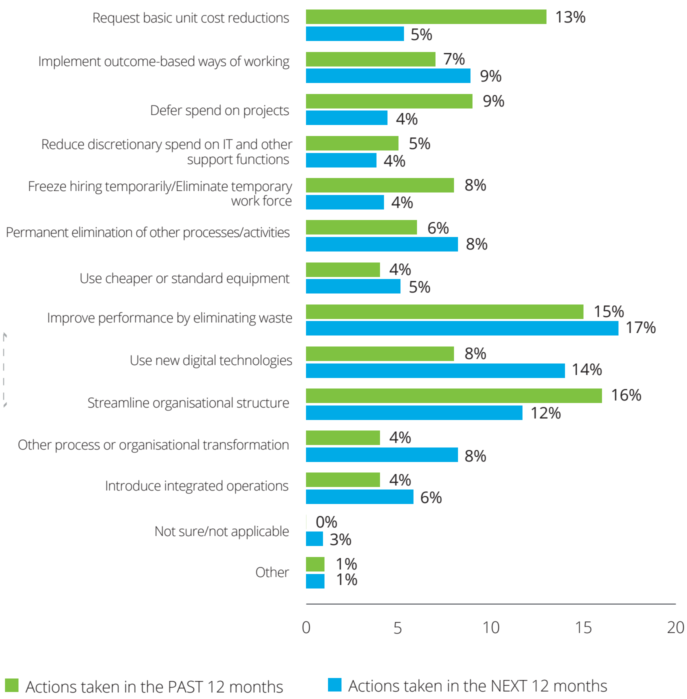
Our discussions with industry suggest that a bias towards cost reduction remains and that overcoming traditional ways of working built up over many years, remains a big challenge.

"Our collaborations have been successful when there has been a willingness on behalf of the customer to step away from the conventional contracting process. There is often interest in doing things differently and taking a different approach, but when it comes to a commitment they revert to standard practices and all benefits are lost." — Supplier

Yet 60 per cent of respondents (ten percentage points more than in 2017) said their activities in the next 12 months will focus much more on business transformation: see Figure 12. Suppliers expect to carry on with their internal transformation programmes, and more Operators now plan to make it a priority.

Figure 12. Actions taken in the PAST and NEXT 12 months to reduce cost

% of responses



2018 n=549 responses

Source: Deloitte analysis

There was a large increase in the number of companies who plan to use digital technologies to reduce costs – up by six percentage points. See 'Developing digital capabilities' on page 18 to understand the benefits companies can acquire.

Barriers to business transformation

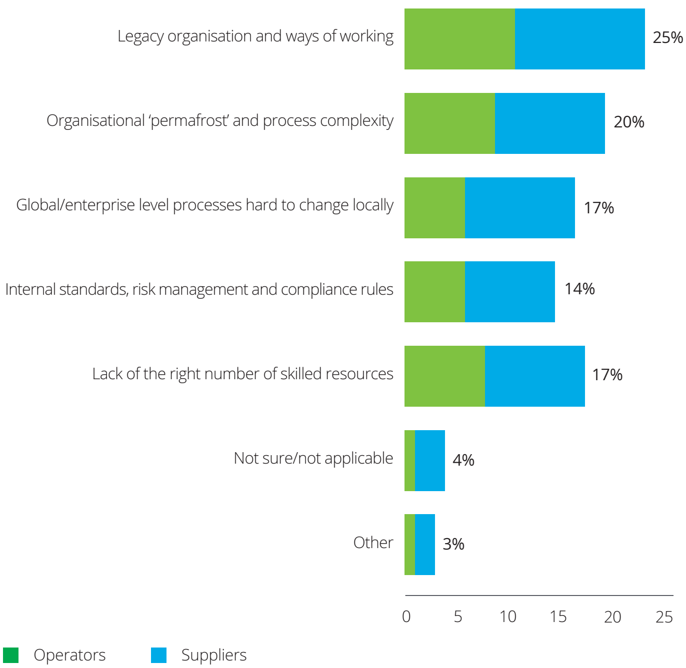
The results from the last three years of Surveys show strong evidence in some areas of real transformational change: see Figure 13. 45 per cent of respondents cited legacy structures and ways of working and bureaucratic complexity as the biggest barriers to transformational change. Both Operators and Suppliers struggle with rigid and complex business structures that inhibit change.

This is not an issue unique to the UKCS: many legacy industries struggle with bureaucracy and find it difficult to exploit opportunities that arise from digital transformation and new ways of working.

"Some Operators have a way of engaging that has become standard how they do business. Changing to collaborative models is difficult to introduce within their system." — Supplier

Figure 13. Barriers to transformational change

% of responses



2018 n = 326 responses

Source: Deloitte analysis

Many companies in our Survey are global concerns or have recently been the buyer or seller in an acquisition: we note that 17 per cent of respondents state that global processes can be ill-suited to local operations.

The availability and capability of staff is also an issue. The industry is now having to deal with the fallout from workforce reductions made in the past three years: 17 per cent of respondents say that this is a barrier to business transformation.

As skills requirements change and employee expectations evolve, many industries will need to re-assess their talent pool, and how and where they recruit. Survey participants have linked the ability to attract the right types of resources with attitudes toward technology and approaches to working.

An opportunity for the industry is to reconsider changes to traditional recruitment models as activity in the basin picks up, so that it can attract the right combination of engineering and technology skill sets.

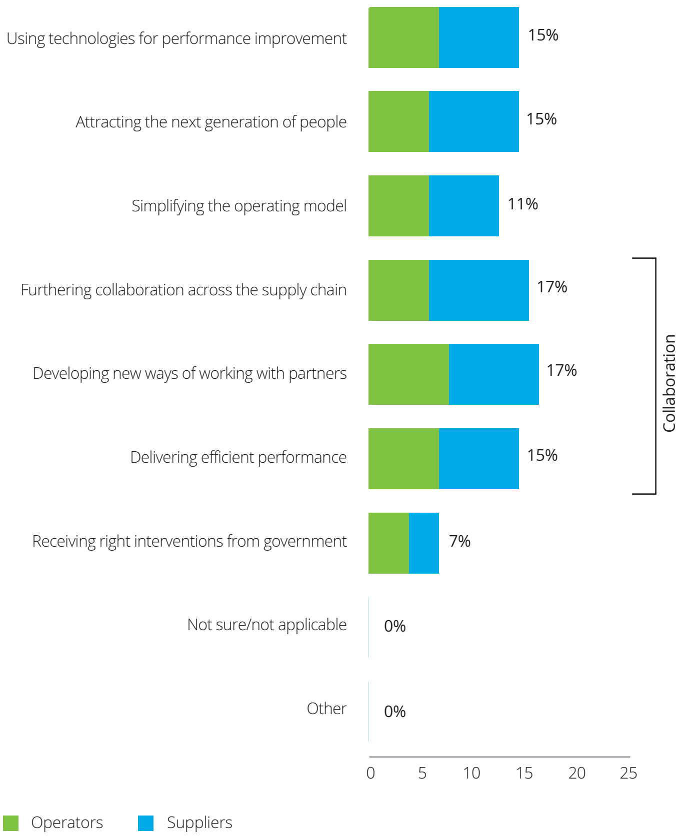
"Some organisations have reduced capability so much that they struggle to provide the base services, so the focus becomes delivering rather than being collaborative." — Operator

Critical enablers for performance improvement

When it comes to key actions that can help improve performance, companies rate a number of activities fairly equally: new technologies, new talent, and new business models. Yet the top choices were furthering collaboration and developing new ways of working with partners, a sign that the real benefits of collaboration are understood, even if the implementation is inconsistent. See Figure 14.

Figure 14. Future performance enablers

% of responses



2018 n = 600 responses

Source: Deloitte analysis

Developing digital capabilities

"Digital is very topical and a buzzword, but it's not clear the industry has really worked out how it reduces cost or improves efficiency as yet." — Supplier

There has been a large increase in the intention to use new digital technologies from last year to this year, from eight per cent to 14 per cent. We expected to see greater awareness among respondents about the value of digital technologies. Yet around 45 per cent of respondents in both 2017 and 2018 chose 'Not sure/Not applicable' or 'Disagree' when it came to assessing their own firm's digital capabilities.

Only 55 per cent of survey respondents agreed that their organisation had the digital capabilities to drive collaboration. More Suppliers (58 per cent) than Operators (51 per cent) rated their own abilities: see Figure 15.

Digital technology has the potential to drive a new wave of productivity across the industry. Organisations do not necessarily need large upfront investments of time and capital to test and roll out new technologies and processes. The impact of more modest trials can often be dramatic and encompass the entire value chain.

For example:

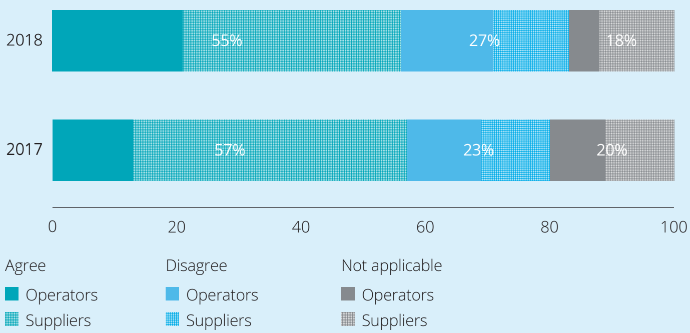
Increased production efficiency: Improvements in measurement, connectivity and analytics can help reduce downtime, through predictive maintenance, real time monitoring and integrated operations.

Lower costs: Asset value optimisation, improving sub-surface modelling and reducing silos between exploration, drilling and production are all made possible, and can reduce project cycle times as well as operating cost.

Higher recovery rates: Using the 'Internet of Things' (IOT) to make existing systems smart and integrated with reservoir models can help substantially with optimising and maximising recovery of hydrocarbon from a specific field.[3]

Figure 15. Does your organisation have the right digital capabilities?

% of respondents



2018 n=156 respondents;
Source: Deloitte analysis

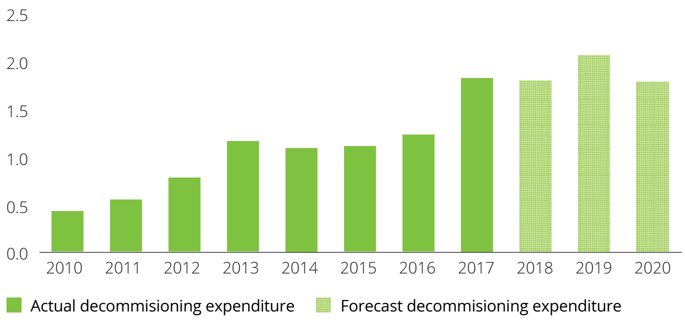
Decommissioning

As a mature basin, decommissioning activity in the UKCS has been increasing steadily, with annual expenditure for 2018 expected to be in the region of £1.8bn to £2bn.

More than half our survey respondents are already investing in decommissioning activities, with a relatively small proportion (15 per cent) planning to start investing within the next five years. See Figure 17.

More than half our respondents support the need for specific industry-supported entities to carry out decommissioning for the basin as a whole: see Figure 18.

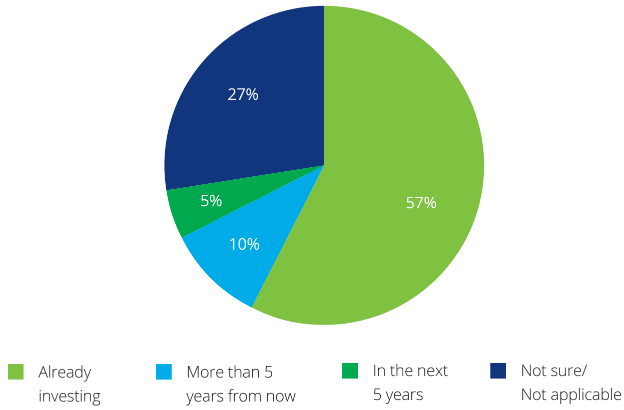
Figure 16. Decommissioning expenditure
£bn



Source: Oil & Gas UK

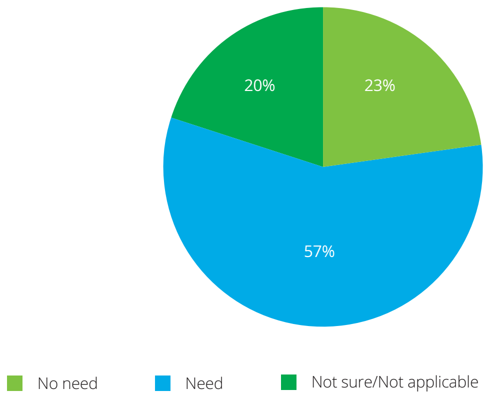
"For the supply chain, which holds the specialist skills, knowledge and equipment to execute the work, there is a clear and sizeable opportunity to develop an efficient, low cost and exportable industry capability."[4]

Figure 17. Plans for decommissioning investment
% of responses



2018 n = 143 responses
Source: Deloitte analysis

Figure 18. Need for industry-supported entities
% of responses



2018 n = 143 responses
Source: Deloitte analysis

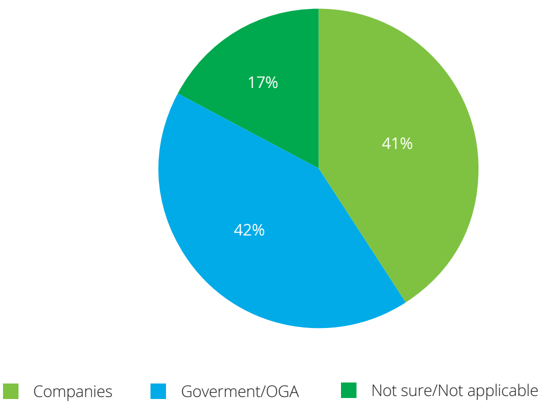
But opinion diverges as to who should be responsible for these entities. 60 per cent of respondents, mostly Operators, think it should be company-led, but 58 per cent of Suppliers want the government or the regulator to drive decommissioning.

Technology and physical decommissioning were seen as the main areas in which Operators and Suppliers can collaborate, with capability gaps a distant third option. See Figure 20.

There is an opportunity for collaboration to help provide a lower cost base for decommissioning in the UKCS, in the areas identified. This could range from Supplier consortia offering services through to Operators pooling demand to support optimisation of decommissioning activity and cost.

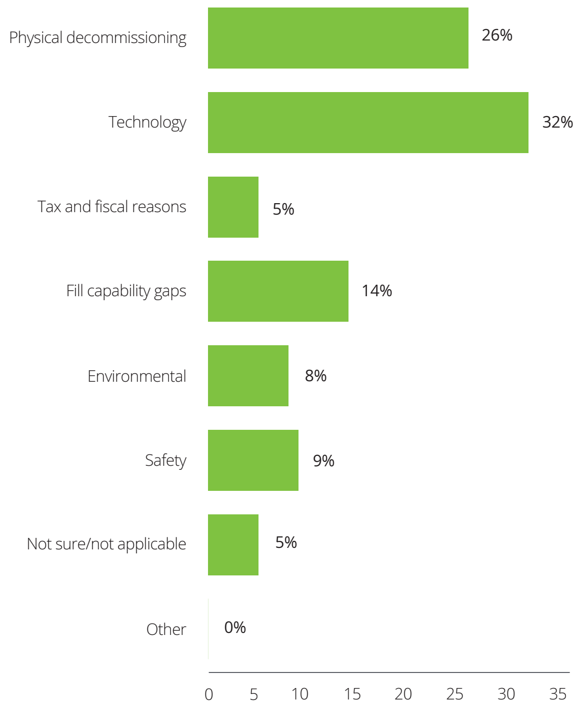
Suppliers who gain experience in these projects can then bring this enhanced capability to bear in their activities in other parts of the world.[5]

Figure 19. Who should be responsible for decommissioning?
% of responses



2018 n = 143 responses
Source: Deloitte analysis

Figure 20. Areas of collaboration
% of responses



2018 n = 265 responses
Source: Deloitte analysis

The Collaboration Index

The Collaboration Index

What is the Collaboration Index?

The second part of our Survey is the Collaboration Index, for which respondents confidentially rate their partners as collaborators.

We presented 12 positive statements to respondents across three main domains: Openness, Incentives and Business processes. They were asked to select a group of partners from among 22 Operators and 20 Suppliers and then score them across each statement on a scale of 1 to 10. Operators rate Suppliers and Suppliers rate Operators.

The ratings are then aggregated to provide a numerical score for each company: the higher the score, the better the rating of a company as a collaborator by its partners. These scores form an Operators league table and a Suppliers league table. The scores for individual companies remain confidential. However, we provide aggregated scores for each of the 12 statements. These overall scores, broken down by Operators and Suppliers, and the statements, are shown in Figure 21 to Figure 23.

Companies are given their individual Index scores and their position in the league table at follow-up meetings. We do not reveal the scores of other participants.

Why does the Index matter?

The Index measures supply chain collaboration and efficiency over time and provides a yearly snapshot of how well companies are seen to be doing by their partners. The Index highlights areas of under-performance and helps companies assess their own position against their peers. This in turn can help organisations identify areas where closer collaboration with the supply chain/operators can help improve performance.

Companies that have been Index leaders in successive years tend to have some of the lowest operating unit costs in the UKCS. Organisations using highly collaborative principles, in project management and commercial models, tend to complete projects below budget and ahead of schedule. For an example, see the case study on page 31.

Openness

- F1 Is a partner that communicates well with you.
- F2 Are willing to collaborate with you.
- F3 You can trust them when working together.
- F4 Overall, a good level of openness exists between you and them.

Incentives

- F5 They incentivise you financially to collaborate.
- F6 The terms of your commercial agreement with them effectively promote collaboration.
- F7 Collaborating with them enhances your reputation.
- F8 Overall, they help you improve your business.

Business processes

- F9 They encourage input from you early in the project.
- F10 They proactively seek out new ideas and solutions.
- F11 They have a track record of implementing change effectively.
- F12 Overall, it is easy for your organisation to work together with them.

Collaboration Index 2018 results

The industry-wide Index score in 2018 at 7.1 is the same as in 2017, indicating no improvement. As Figure 21 shows, the highest scores tend to fall in the Openness domain, where there were small upticks in 'Willingness to collaborate' (F2) and 'Levels of openness' (F4) but 'Trust' (F3), the highest scoring item in 2017, saw the largest drop.

Conversely, in the Incentives domain, typically the lowest scoring indicators as a group, there was an uptick in 'Enhances the reputation' (F7) and more impressively, 'Financial incentives' (F5).

There was a slight fall in the indices in the Business Processes domain, which includes behaviours such as encouraging early input into projects, proactively seeking out new ideas and solutions and a track record of implementing change.

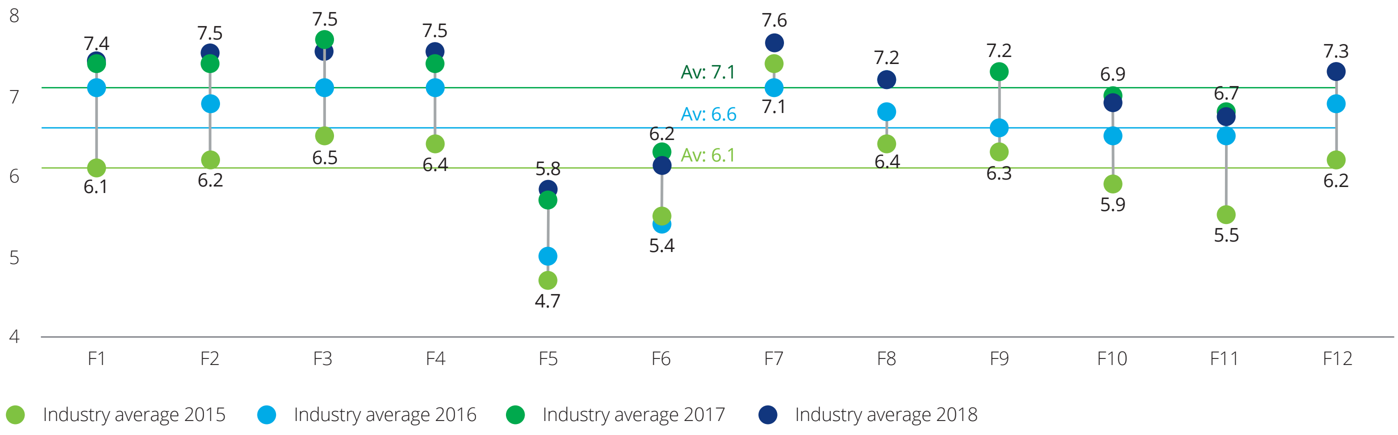
Operator and Supplier Index 2018 averages

Operators saw their average scores drop in 2018 to 7.0 from 7.2 in 2017. This was lower than the overall Supplier average, which rose from 7.0 to 7.2: see Figure 22.

This suggests that Suppliers are feeling less generous when it comes to their relationships with Operator partners, possibly because they don't feel their efforts are being reciprocated or because they are not seeing the upside from higher oil prices.

Two areas where Operators did better this year than last were in 'Willingness to collaborate' (F2) and 'Financial incentives' (F5). The increase in the rating for financial incentives is particularly noteworthy as this has consistently been the lowest scoring element in the Index. It suggests that Operators may be starting gradually to change their commercial models and contract terms.

Figure 21. Collaboration Index, industry averages 2015-2018



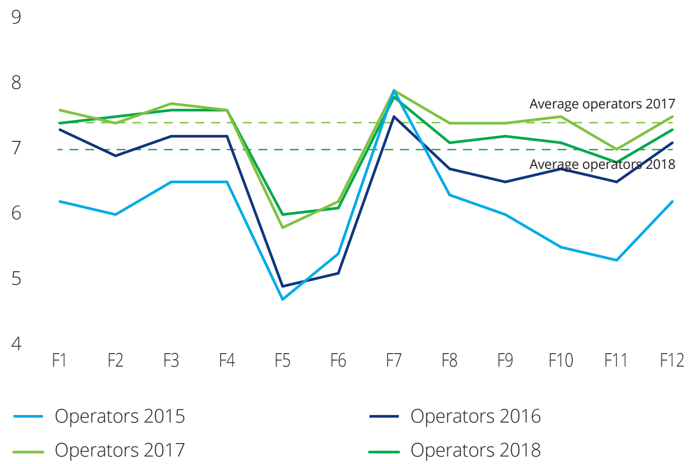
2015 n=418; 2016 n=464; 2017 n=584; 2018 n = 972 pieces of feedback

Source: Deloitte analysis

At the individual Operator level there were some big changes thanks to substantial collaboration programmes, which are reflected directly in the year-on-year improvements to their Collaboration Index scores. Some Operators have completely changed their supplier engagement model, particularly in Subsea & Marine, and Drilling & Wells projects. Measures included the development of multi-year contracts to avoid tendering and foster collaboration across the project lifecycle; highly transparent open-book contracts; and incentive schemes for the supply chain.

These provide strong evidence of the opportunities that exist for the industry as a whole. These projects have led to new ways of working between Operator and Supplier, driven by new commercial models and the empowerment of people at all levels of the organisation to make changes happen. The Survey results suggest that leadership attitudes can struggle to filter down to the front line, where the change actually happens, and this can be a significant barrier to more collaboration.

Figure 22. Operator averages 2016-2018



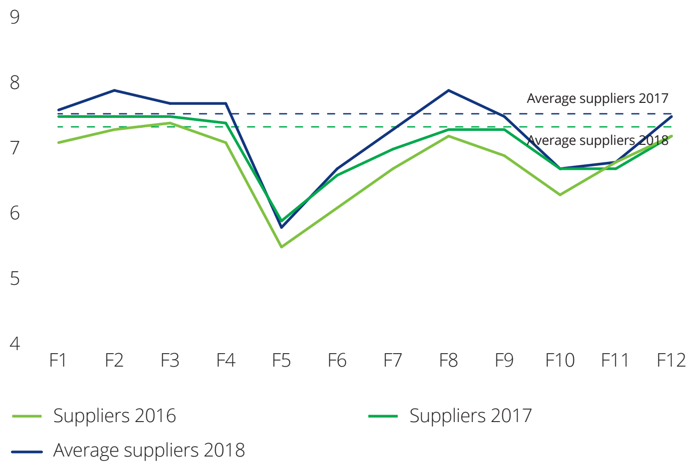
Operators 2015 n=392; 2016 n=281; 2017 n=395; 2018 n=648 pieces of feedback

Source: Deloitte analysis

Suppliers saw their average Index score rise in 2018, from 7.0 to 7.2. Their scores across 11 of the 12 statements were up. See Figure 22. The one exception is 'Financial incentives' (F5). Not only were Suppliers rated worse year-on-year on this point, but they also scored lower than Operators.

The biggest area of improvement was their ability to help partners improve their business overall (F8), highlighting the positive response of Operators to Supplier activities.

Figure 23. Supplier averages 2016-2018



Suppliers 2015 n=26; 2016 n=183; 2017 n=189; 2018 n=289 pieces of feedback

Source: Deloitte analysis

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In **conclusion**, there is some evidence in this year's survey responses that companies that have been squeezed financially while oil prices are low, and may be looking to redress the balance as oil prices and activity increase. While understandable perhaps, reversion to old ways of working would put at risk the progress made over the last three years. The industry should try to ensure that the transformation to collaboration it has embarked upon is encouraged and continued.

Endnotes

1. OGA, UKCS Production Efficiency 2018, https://www.ogauthority.co.uk/news-publications/publications/2018/ukcs-production-efficiency-in-2017/

2. Oil & Gas UK, as cited in Kim Fustier, "Global Oil Supply: Don't' forget decline rates," HSBC Global Research, August 2018.

3. See David Phillips et. al., "Global Oilfield Services: The Elephant in the Cloud," HSBC Global Research, 23 November 2017.

4. OGA, "UKCS Decommissioning: 2018 Cost Estimate Report," June. https://www.ogauthority.co.uk/media/4999/decommissioning-a5-2018-pdf-version.pdf

5. North Sea industry has 'picked up decommissioning challenge', OGA says', Energy Voice (June 2018), https://www.energyvoice.com/oilandgas/north-sea/175242/north-sea-industry-has-picked-up-decommissioning-challenge-oga-says/

Framework for action

Framework for action

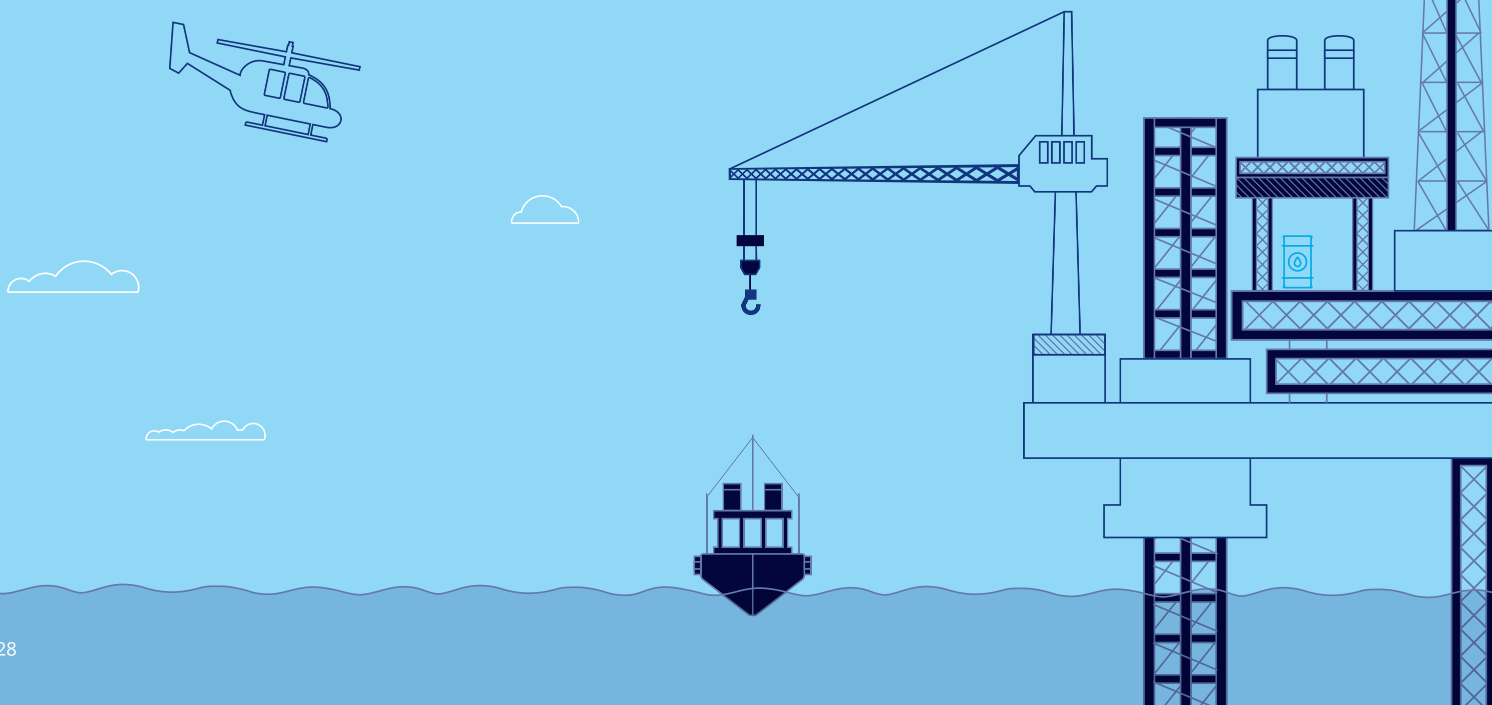
The Review and Index show that much progress has been made since we began the Survey in 2015. Awareness of the importance of supply chain collaboration is near-universal. Yet there is still a long way to go for collaboration to become the industry norm. Sentiment seems to have slipped this year compared to 2017.

We have updated our four-step transformation framework to help companies determine how to collaborate more effectively by focusing on how to make change happen and the use of new digital technologies.

Leadership:
Change must start at the top Take early responsibility and lead by example

Leadership is about:

- **setting the course** – establishing the overall direction and encouraging collaborative behaviours at all levels of the organisation
- **focusing on the long-term value, rather than short-term cost** – understanding the overall value and looking beyond the unit costs
- **challenging existing organisational structures, processes and bureaucracy** – constantly striving to remove the main obstacles to closer working relationships with supplier or operator partners
- **devolving/decentralising decision-making** – empowering people to make calculated choices and to support appropriate risk taking so they can be effective in their role and change what they do



Goals:
Pick a small but important project, do it and expand

Be clear on the goals and objectives. Collaboration needs to:

- **focus on the goals** – be clear on what success looks like, how you are going to measure it and communicate this consistently
- **test and trial** – solutions to prove the value. - don't be afraid to fail, but fail fast and move on to the next opportunity. Think about how new technology could help you be more productive
- **then expand the scope** – once you have gained some experience and demonstrated success, roll it out

Alignment:
Build systems and processes around the goal

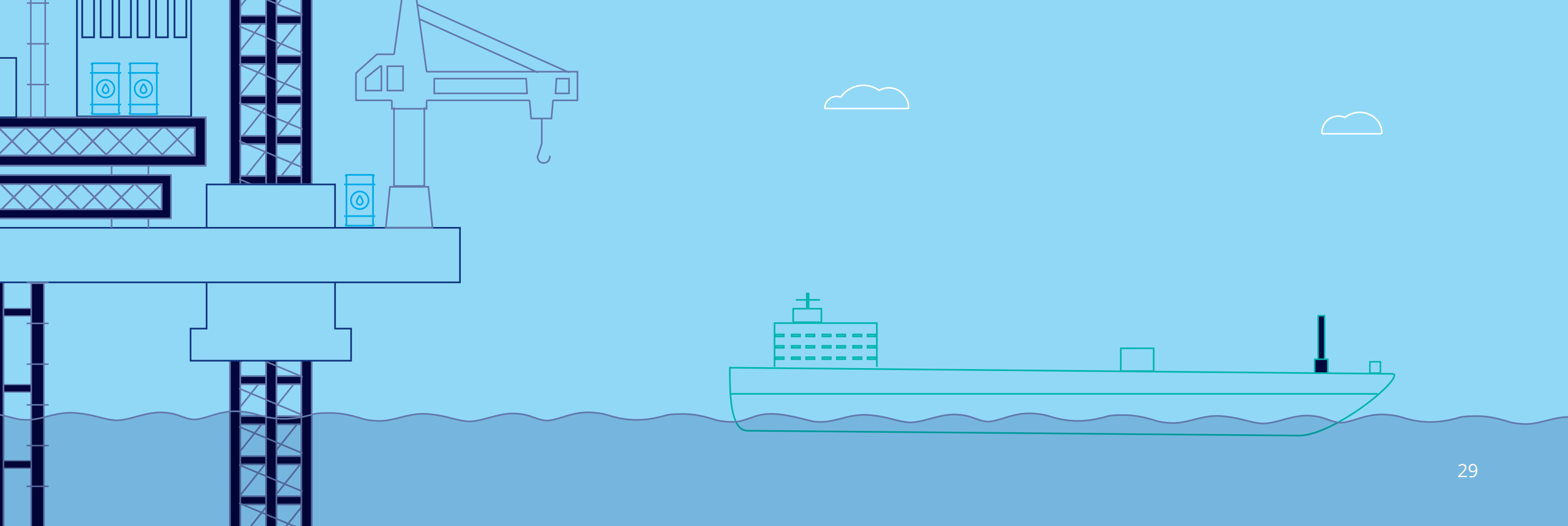
Identify how operations, processes and systems need to change to support new ways of working at scale. This should include:

- **determine the core changes** to key systems and processes you need to establish for the new ways of working
- **build a small, integrated team** comprised of both supplier and operator staff; every team member should be clear on their responsibilities and able to see the direct impact of their actions on the final deliverable; motivate team members to make timely decisions and be focused on commercial discipline
- **keep things simple** and closely aligned to your defined goals, eliminate duplication, e.g. in documentation and testing; use standard solutions, avoid bespoke systems and products where possible
- **establish simple, focused governance –** a short contract should focus on the intent of the project rather than the detail
- **eliminate unnecessary bureaucracy** – ensure documentation is necessary only for the completion of work, reduce documentation reviews and sign-offs

Results:
Measure, review, improve, repeat

Ensure you measure the right factors and support continuous improvement. Remember to:

- **collect data that helps to understand project progress** toward the ultimate goal, where the hidden costs are and how to enhance the value of the project
- **collect and share data with everyone,** including all partners, both operators and suppliers
- **develop and drive a culture of regular monitoring, feedback and continuous improvement** across the supply chain – data should be continually analysed and both the operator and supplier should be incentivised to make suggestions for improvement



Collaboration in practice

Collaboration in Practice

UKCS Supply Chain Collaboration Case Study: The Lomond Export Pipeline Bypass Project

Introduction

Chrysaor's Lomond to CATs riser export pipeline became blocked shortly after Chrysaor took ownership of a $3billion North Sea Asset in November 2017.

Having a clear intention to become a market leading North European E&P company that all stakeholders can be proud of, the Lomond pipeline replacement project immediately demonstrated that Chrysaor were going to do business aligned to their own values and business principles, adopting the collegiate and collaborative approach aligned to MER.

Nick Clark, Energy & Resources Director in Consulting at Deloitte, discussed with John McKenzie (Chrysaor's Wells and Subsea Manager) and Scott Cameron (Subsea 7's UK Business Unit Director) what made this project an outstanding example of close collaboration between an operator and a supplier.

An integrated project team was to resolve the blockage while also engaging early with Subsea 7 to work up a contingent bypass solution in case blockage remediation proved unsuccessful.

Several scenarios, intervention and bypass solutions with probability of success profiles were considered and modelled with input from Subsea 7 and Erskine Partners to develop the way forward.

Early engagement and collaboration within an empowered cross functional and intercompany team formed the basis of the bypass project execution model.

Chrysaor and Subsea 7 subsequently worked closely to install a new 26km pipeline, executing the project in 7 months from sanction without LTI, environmental issue and perhaps most indicative of the relationships developed, without contractual variation.

What do Chrysaor and Subsea 7 identify as the drivers and values for successful supply chain collaboration?

- Early engagement, disruptive thinking
- A mutual understanding of key drivers with access to proven engineering and installation competence
- Cultural and objective alignment
- Hard working, enabled, engaged and enthusiastic teams
- Open and honest dialogue
- Schedule flexibility and access to diverse fleet

Using a traditional approach to tendering, Chrysaor would have needed to conduct preliminary work to determine the scope of this solution before seeking a competitive tender. Instead, Chrysaor opted for a collaborative approach with Subsea 7, avoiding the need for competitive tendering based on price. Instead they worked directly with Subsea 7, giving Subsea 7 freedom to scope the project and trusting them to find the most effective and efficient solution. The result of this approach was to introduce the first condensate only 7 months from project sanction, reflecting almost a 50% acceleration in schedule.

Choosing the right partners and engaging in an open and honest manner throughout the organisation creates the environment for Innovation and Excellence as demonstrated in the PL781 bypass project.

This is an approach Subsea 7 has a rich and successful history of, with clients and the supply chain alike. Subsea 7 has similar processes, tools and suppliers as other service companies and Scott Cameron believes the real differentiators that enable collaborative ways of working are the leadership, culture, and behaviours which provide a strong foundation for everything that follows.

Chrysaor operates a model of partnership in the supply chain and empowers and relies upon the experts within. Chrysaor has a strong desire to become a great customer to do business with, to be known as a 'Co-operator as well as an Operator'. Selecting the best contractors for the job that possess the knowledge and capability to deliver superior performance is critical to success.

Subsea 7 has earned a reputation as a market leader through outstanding delivery of projects, flexibility in its approach in generating optimum solutions and enduring customer relationships. John recognises that Subsea 7 are flexible and agile to adapt their service delivery to match client's requirements very effectively.

Chrysaor is an operator that shares Subsea 7's vision for a successful delivery partnership. This is reflected in Chrysaor's focus on fit for purpose outcomes, and a lean delivery organisation that trusts, works openly with, and is willing to rely on the solutions and services provided by companies in the supply chain that align with their ethos.

Subsea 7 and Chrysaor were able to deliver effectively because the solution was worked together rather than the operator prescribing in detail the solution they want while closely managing strict compliance to onerous specifications.

It's possible to remove unnecessary complexity, levels of interface and assurance that negatively impact progress and pace by specifying what functionality is required first, and then engaging and focusing energy together in discussions on specifications to optimise or deviate from them - only if it will positively impact safety, cost, schedule and quality,

Neither Scott nor John were surprised that Subsea 7 works well with Chrysaor as there is such a strong cultural fit and clear set of shared values starting with Subsea 7's five core values (safety, integrity, innovation, performance and collaboration) and Chrysaor's four core values (integrity, safety, passion, innovation) set at the heart of everything they do and the way they behave.

The outputs of the Collaboration survey reflect this view with both organisations demonstrating excellent results.

How does all this impact the project?

Collaboration is about trusting competent people to deliver. The delivery performance achieved on this project exceeds others due to the application of suitable competence at pinch points working issues collaboratively.

This project and the relationship between Chrysaor and Subsea 7 are a great example of the right supply chain engagement and behaviours. Real leadership on both sides to take personal ownership of delivery and risk, and ultimately be responsible for their organisation's delivery, was key to success.

The project was delivered against a transparent 'Target Cost Contract' which brought alignment of goals and provided a fair and reasonable mechanism to administer change with associated cost and schedule delivery. A significant degree of trust, respect and integrity was quickly established between Chrysaor and Subsea 7 teams who worked hard to deliver the project but lived by the behaviours and values fundamental to success.

Apportionment or risk and risk management are some of the biggest barriers to successful collaborative relationships. Often operators, particularly during a downturn period in the market seek to push disproportionate risks to the supply chain. Be it a safety issue, late delivery of first oil or a cost overrun ultimately all risk is borne by the Operator. Both parties believe the risk and opportunities between operator and contractor should be shared. Risk should be assigned to the party that can best mitigate it, allowing both the operator and contractors to focus on the risks within their control, and jointly on opportunities.

A 'one team' approach taken from day 1 on the project significantly accelerated decision making, management of changes and execution by maximising schedule alignment and optimising the design basis, schedules and costs. Crucial interdependent design, procurement, construction and installation decisions were made by the single team, mitigating risk inherent with otherwise bespoke, client prescribed delivery. For example, project priorities were continually identified and discussed, ensuring the right decisions were made and actioned as early as practicable.

On Lomond the parties identified and appreciated uncertainty and opportunities together and worked closely to mitigate, manage or achieve them, leading to a far better transparency and more robust project risk allowance.

Both parties are certain that the project key success factors could not have been achieved had a more traditional approach to delivery been adopted. Opportunities like Lomond enable the best in experienced, likeminded people to work together to achieve a common goal in an environment that supports the right behaviours, attitudes and approach.

"Chrysaor have developed collaborative contractual relationships that align our respective values and common expectations with Subsea 7 and other key partners" – Chrysaor

"We trust empowered competent personnel to deliver, recycling their hard-earned operational experience" – Chrysaor

"Our long-proven approach to working closely with clients and key suppliers maximises added value and minimises risk. It is a key differentiator in a very competitive market place. More clients choosing to partner with us in this way validates the benefits available for all who choose to work this way." – Subsea 7

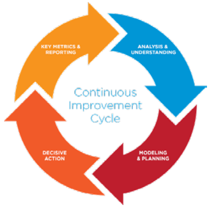
We would like to thank John McKenzie, Chrysaor Wells and Subsea Manager and Scott Cameron, Subsea 7's UK Business Unit Director for their help in developing this article.

Efficiency Task Force

Efficiency Task Force

ETF

OIL&GAS UK



About the Efficiency Task Force
The Efficiency Task Force (ETF), established in 2015 and delivered by industry for industry, aims to *'seek out and provide access to efficient practice across the oil and gas industry while maintaining safe operations'.* It does this by:

- Developing tools and guidelines to drive improvements in key focus areas (Business Processes, Standardisation and Simplification, and Cooperation, Culture and Behaviour)
- Promoting and capturing the impact of efficiency initiatives, as well as providing access to tools and lessons learned and networking opportunities
- Improving outputs by gathering and acting on feedback to maximise impact and improve industry operations

The success of the ETF relies on achieving successful collaboration across the supply chain. This is challenging given the competitive environment, the impact of contractual issues, and limited trust. The ETF utilises a number of key facilitators in an effort to address these challenges. These include:

- Engagement, commitment and visible support of key industry leaders across the supply chain
- Engagement and commitment of subject matter experts across the supply chain in the delivery of projects in industry-identified priority areas
- Development and launch of Efficiency Task Force Roadshows to increase awareness of and engagement in ETF activities, demonstrating industry collaboration in action through sharing case studies and lessons learned
- Continuous Improvement Network to bring together continuous improvement experts across the supply chain to share challenges, solutions and lessons learned

Collaboration achieved through these facilitators is evident from the significant industry engagement the ETF has been able to achieve.

The UKCS O&GUK/Deloitte Collaboration Index has been a key part of this. Not only are increasing number of companies participating in the survey, but more companies are now participating in detailed feedback sessions to understand their results and identify areas for improvement. This year sees the launch of a new support offering from the Efficiency Task Force, to support these feedback sessions and help companies use the data to drive their own internal improvement programmes.

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