NCS SHARING ECONOMY

Standardised Supply Chain Behaviour

Annual report – 2019
Baseline for improvement

Norsk olje&gass

Norsk Industri

Baseline report - purpose

The Joint Industry best practice guideline, launched April 2019, recommend four main areas for improvement

Increase use of industry STANDARD DELIVERY

Better and earlier use of SUPPLIER EXPERTISE

ALIGN DRIVERS across the supply chain

Change operator and contractor CULTURE

The purpose with this report:

- Establish a baseline for annual measurements for the industry's ability to change and the commercial effects of the guideline recommendations
- Be the basis for an improvement agenda on industry level, owned and managed by The Norwegian Oil and Gas Association and Norsk Industri on behalf of its members.

Input is provided from:

- Operators, Contractors and Supplier Companies
- From a representative variety of management in project, engineering, procurement and sales
- Commercial effect measurements is gathered from the FERM database.

We wish to thank all respondents and other involved parties

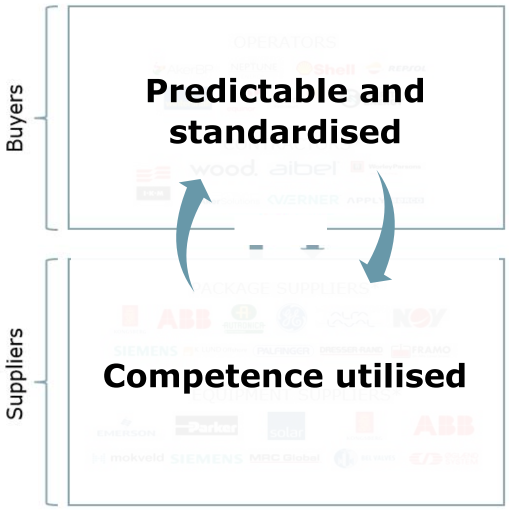
Industry potential

Is the industry moving in the right direction?

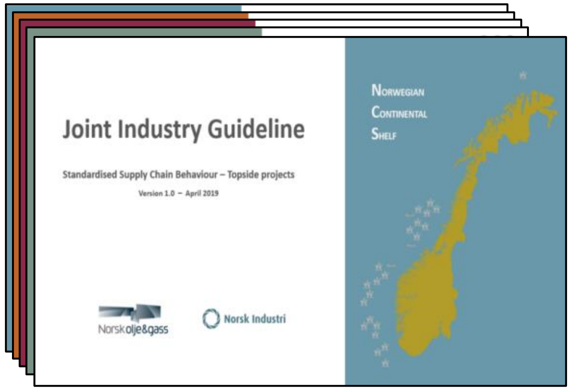
Ambitions for commercial effect

- Cost efficiency
- Prevention of cost creep
- Sustainable margins across value chain
- NCS competitiveness

Desired situation



… adapting to Guideline best practices



Joint Industry Improvement Arena

Norskolje&gass Norsk Industri

To stimulate improvement, feedback from supply chain actors is necessary regarding changes in ways of working together

Key feedback from respondent groups

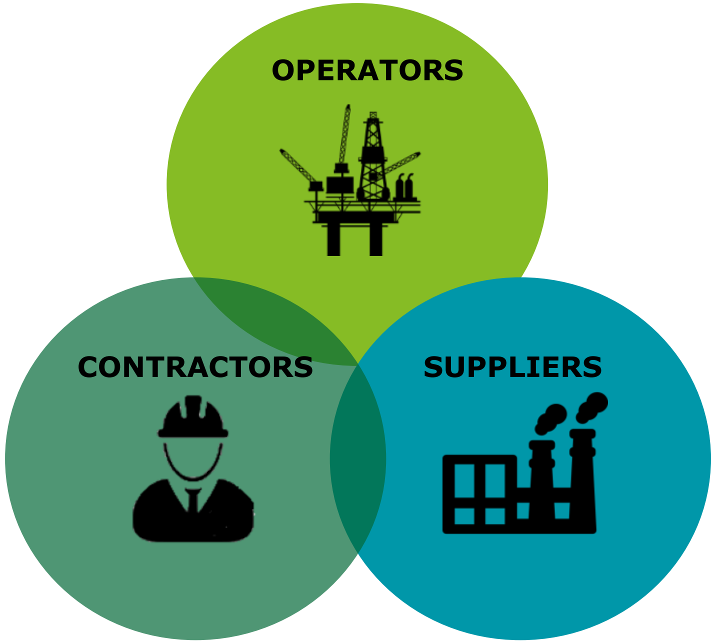
Operators have the most positive view on the current situation

Large spread between the operators in their feedback. *Other input also indicate varying alignment of current practice with guideline recommendations.*

Contractors have the most negative view on the current situation *in the industry.*

Significant improvement potential with regards to alignment of drivers *and the related support from contracts.*

Low spread *in the feedback - indication of coherent view on improvement potential*



Suppliers see a ***significantly larger improvement potential*** *than both operators and contractors related to* ***standardisation of documentation and pre-defined follow-up****.*

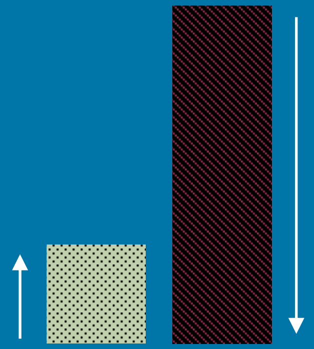
Utilisation of standard requirements receives the highest score from suppliers of all questions, and significantly higher than the other groups

Large spread *in the feedback, could be natural due to the differences in supplier characteristics and segments*

Significant improvement potential

The contractor and supplier companies sees the largest improvement potential

IMPROVEMENT AGENDA MAIN RECOMMENDATIONS		KEY FEEDBACK FROM INDUSTRY
Standard solutions should always be basis for optimisation and smart integration of scope	Increase use of industry **STANDARD DELIVERY**	*Significant potential to increase use of standard deliveries*
Key suppliers should be selected early, and involved in optimisation and smart integration of scope	Better and earlier use of **SUPPLIER EXPERTISE**	Improvement potential in better and earlier use of supplier expertise
Contract solutions in study/feed should stimulate to collaboration in optimisation and smart integration of scope	**ALIGN DRIVERS** across the supply chain	*Unleashed potential to review contract solutions and incentives*
Leadership and training programs should be conducted to ensure culture change within the target groups: Project management, Procurement and Engineering	Change operator and contractor **CULTURE**	*Clients in other relevant industries are in many cases more efficient and predictable than Oil & Gas clients*



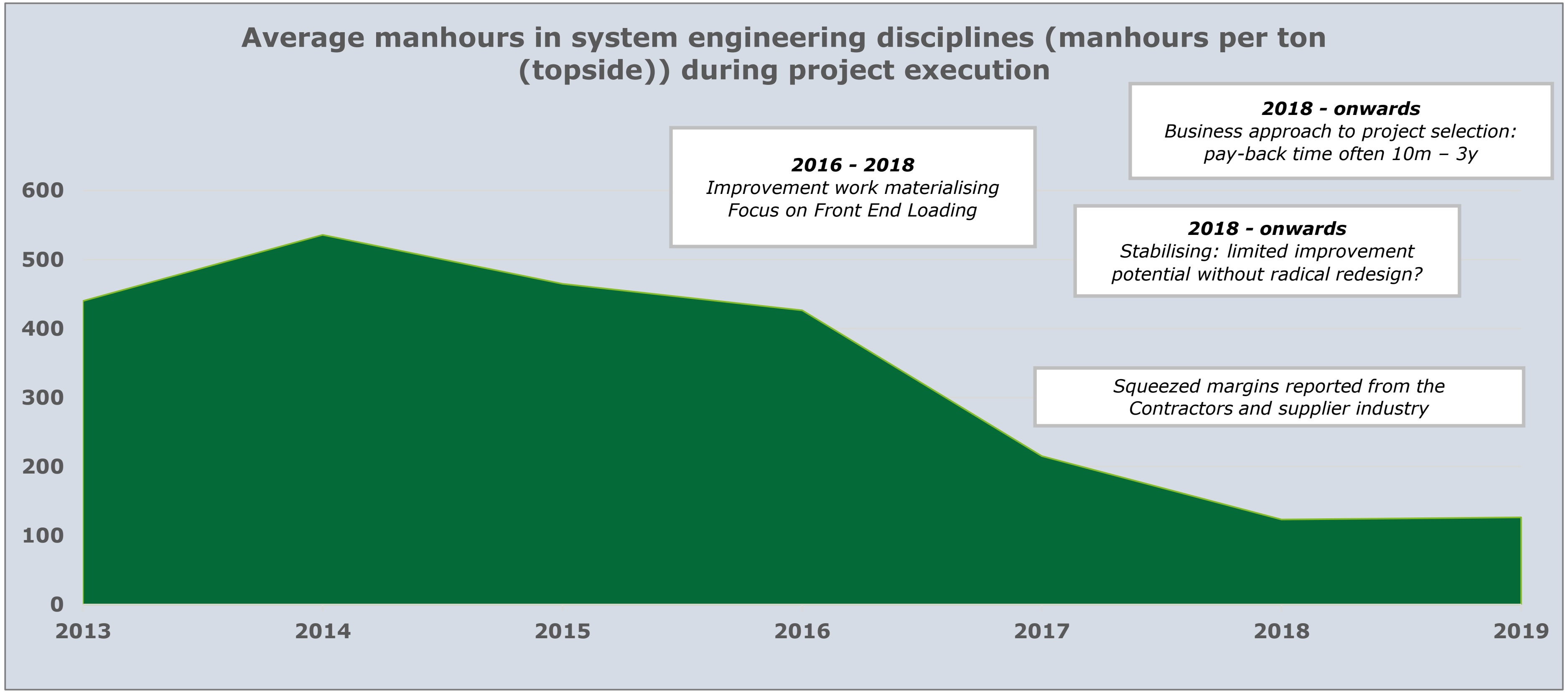
Goals:

- Cost efficiency
- Sustainable margins

COMMERCIAL EFFECT

Cost efficiency

How do we maintain efficiency and prevent cost creep?



FERM *(Forum For Exchange Of Experience And Results From Modification Projects)* is an operator owned database with experience data from execution of modification projects. The following operators participates and jointly owns the FERM database: Aker BP, ConocoPhillips, Equinor and Shell

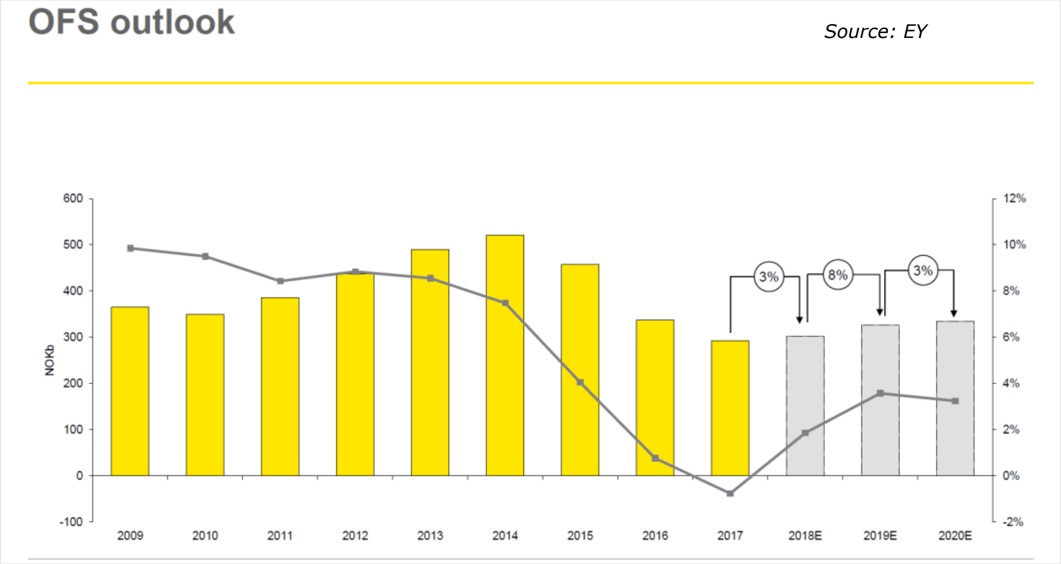
Going forward there should be focus on ***Smart Design* and efficient collaboration..***

..to maintain the current level and identify further improvement potential

*Cost efficient and robust configuration based on standard solutions

Sustainable margins

Norsk Industri observes and receives feedback on significantly lower margins in the service industry than before the downturn in 2014



Significantly lower margins than pre-downturn, but still varying between different segments in the value chain

- Competitiveness should be achieved through increased efficiency rather than price pressure
- A concern is IPR-regulations in disfavor of the suppliers, and there is a desire for more common goals, more incentive contracts and sound risk balance
- Sustainable salary levels is necessary to maintain stable workplaces as fluctuating activity level will be seen in the future

ABILITY TO CHANGE

Increase use of industry
STANDARD DELIVERY

Better and earlier use of
SUPPLIER EXPERTISE

ALIGN DRIVERS
across the supply chain

Change operator and
contractor **CULTURE**

Recommendation: *Standard solutions should always be basis for optimisation and smart integration of scope*

Increase use of industry
STANDARD DELIVERY

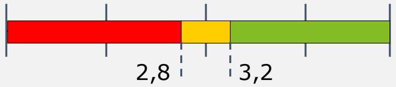
Operators has a significantly more positive view on use of industry standard delivery than contractors and suppliers

Buyers does on average over-specify, and contractors more than operators

Feedback indicated higher number of revisions for documents approved by contractors vs. operators

	Operator	Contractor	Supplier
• To what extent are industry standard equipment solutions normally utilised?			
• To what extent are industry standard requirements utilised?			
• To what extend are standard documentation, and pre-defined follow-up of documentation normally utilised?			
• To what extend do buyers over-specify their request?	NA	NA	
• What is normally the average number of revisions per document for approval?	NA	2,1	4,0

Limits*:



*Applicable for questions with rating 1-5

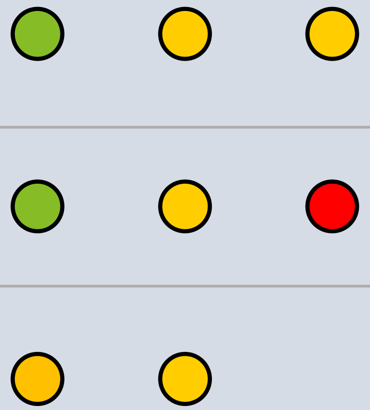
Recommendation: *Key suppliers should be selected early, and involved in optimisation and smart integration of scope*

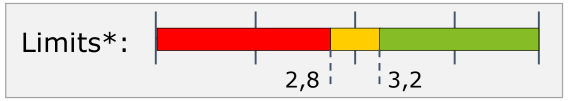
Better and earlier use of
SUPPLIER EXPERTISE

Suppliers clearly indicate a potential for operators and contractors to earlier and better utilise their expertise

The Contractors support need for change in practise to improve utilisation of supplier expertise to optimise smart solutions

	Operator	Contractor	Supplier
• Has key supplier(s) been identified, selected and informed (prior to optimisation and integration of scope)?			
• Has key supplier(s) expertise and technology been utilised pre-PO and contributed to optimisation and smart integration?			
• To what extend is the lead time in engineering efficient pre PO-issue?			





*Applicable for questions with rating 1-5

Recommendation: *Contract solutions in study/feed should stimulate to collaboration in optimisation and smart integration of scope*

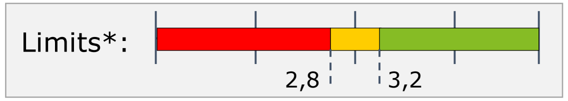
ALIGN DRIVERS
across the supply chain

Significant improvement potential identified by all respondent groups

Contractors sees the largest improvement potential

Clear feedback to the project that this is a challenging topic

	Operator	Contractor	Supplier
• To what extent does the contracts support common drivers across the supply chain to remove unnecessary work, stimulate collaboration and contribute to fit for purpose delivery?			
• To what extent are drivers aligned, communicated and understood by all parties?			



*Applicable for questions with rating 1-5

Recommendation: *Leadership and training programs should be conducted to ensure culture change within the target groups: Project management, Procurement and Engineering*

Change operator and contractor **CULTURE**

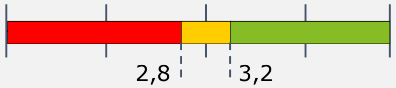
Improvement in Engineering and smart design has the highest value potential.
Total Cost of Ownership (TCO) perspective has a significant e potential for improvement

Suppliers report that project clients in other relevant industries are more efficient and predictable than the Oil & Gas clients

Contractors are reported to be less efficient and predictable than operators

	Operator	Contractor	Supplier
• Prior to project execution phase, where are normally the top three areas with the most significant value add (beyond meeting basic functional- and HSE-requirements)?	• **Engineering** • **Smart Design**		
• Based on previous questions: How efficient and predictable are the project clients (operator and/or contractor) compared to similar clients in other relevant industries (e.g maritime oil and gas clients)?**	NA	NA	

Limits*:



***A survey to further analyse the differences between relevant maritime industry and the oil & gas industry is planned for spring 2020. This will highlight areas of differences and for improvement that will form a basis for learning and change focus going forward*

*Applicable for questions with rating 1-5