

Joint Qualification System (JQS)



Experience transfer from JQS Verification audits

JQS Verification System

NORSOK S-006 – HSE evaluation of contractors

- Standardized basic HSE requirements to oil and gas suppliers

JQS Database

- JQS database is a tool for prequalification of suppliers, coordinated by EPIM, on behalf of Oil and Gas operators
- 3700 suppliers registered – annual update of suppliers self assessment and other required information

JQS Verification Service

- JQS Verification audits are performed to conduct an audit of supplier management systems in order to verify:
 - compliance with the requirements of NORSOK S-006
 - the correctness of the supplier self-assessment scores submitted to JQS
- Common and consistent evaluation of suppliers management system

Analysis and results

The intention of performing an analysis of the JQS Verification audit results is to:

- Facilitate experience transfer
- Utilize relevant data for continuous improvement purposes

Analysis

- A working group consisting of Edison Norge, Statoil, ConocoPhillips, Shell, Centrica and EPIM have collected, structured and analyzed the results of 644 HSE JQS Verification audits performed in the period 2011- 2016.

Result

- 5 main areas have been prioritized for improvements:
 - Compliance with rules, regulations, standards and requirements
 - Suppliers following up of sub-suppliers
 - Environmental management systems including chemical management
 - Investigations and reporting of major incidents
 - Security

Increase focus on compliance with rules, regulations, standards and requirements

NORSOK S-006 Item 3.7 - Rules, regulations, standards and requirements:

Is there a clear explanation of the formal requirements which the contractor shall meet? b) How does the contractor ensure that these requirements are observed and verified? c) Is there an overall structure for disseminating rules, regulations, standards and company requirements, and for improving internal governing documentation?

Minimum acceptable score: *The requirements are systematically identified, made available and adhered to.*

21 % of the audited suppliers scored below acceptable on this element

Main findings:

- Lack of regular review processes and compliance documentation
- Lack of regulatory competency (more frequently found in smaller companies)

Increase focus on suppliers following up of sub-suppliers

NORSOK S-006 Item 3.8 - Assessing the suitability of subcontractors

How does the contractor assess subcontractors for HSE policy, HSE expertise and HSE results? Where are the standards and requirements which the contractor requires to be met clearly set out? How does the contractor ensure that these standards and requirements are observed and verified?

Minimum acceptable score: Formal system for assessment of subcontractors implemented. Criteria for assessment defined and adhered to. Supervision carried out according to plan.

26 % of the audited suppliers scored below acceptable on this element

Main findings:

- Lack of systematic and frequent assessments of sub-suppliers.
 - HSE not included in assessments and insufficient documentation
 - A significant number of suppliers do not perform supplier audits (ref. element 7.1).

Increase focus on environmental management systems including chemical management

Environment: Is the Environmental management system is developed to a level comparable to a recognized international standard, e.g. ISO 14001:2004 or EMAS. Compliance is documented by self-assessment.

Minimum acceptable score: EMS documented comparable with recognized international standards. The contractor identify its environmental aspects, and use this information to minimise impact. Contractor identifies and document the best available environmental solutions. Environmental aspects are included in both technical and operational procedures.

Percentage of suppliers with unacceptable scores on the following elements:

- 38 % Environmental management system (4.10)
- 30 % Environmental impact assessment and monitoring (4.11)
- 28 % Selection of environmentally optimal solutions (4.12)
- 25 % The environment and management documentation (4.13)

Main findings:

Lack of EMS. Environmental aspects and use of best available solutions not identified or documented.

- Low scores related to the environmental elements tend to be connected to low score on element 3.7 Rules, regulations, standards and requirements.

Cont...

Chemicals: How does the contractor evaluate the HSE risks presented by the use, transport and disposal of chemicals and how is the quality of HSE data sheet ensured?

***Minimum acceptable score:** Systematic hazard and risk assessment performed and documented whenever chemicals are involved. Clear criteria for substitution. Minimal use of chemicals potentially harmful to the environment. Quality of the HSE data sheet and their availability to employees. The employees are capable of acting in accordance with the instructions provided*

Percentage of suppliers with unacceptable scores on the following elements:

- 35 % Use, transport and disposal of chemicals (4.7)
- 21 % HSE datasheet (4.8)
- 28 % Use of potentially environmentally harmful chemicals (4.16)

Main findings

- Low scores are linked to suppliers not executing risk assessment of chemicals and substitution.
- HSE datasheet often lacking.
- The lack of implementation of the duty to provide substitutional products (Produktkontrolloven § 3a) constitutes a large number of unacceptable scores .

Increase focus on investigations and reporting of major incidents

Implementation and monitoring (NORSOK S-006 element 6, item 6.2 and 6.10):

NORSOK S-006 Item 6.2 History of undesirable events/hazardous conditions: Has the contractor or any of the contractors' sub-contractors caused any notifiable events (safety, occupational health or environmental) over the past five years?

Minimum acceptable score: *Occurrences relate to minor event(s) only.*

NORSOK S-006 Item 6.10 Investigation and reporting of major incidents: a) Who heads investigations into undesirable events? b) How are findings from investigations or from undesirable events that occur elsewhere communicated to employees?

Minimum acceptable score: *Competence requirements to key positions in the investigation team clearly defined. Reports are made available to all employees. Findings are communicated to relevant employees.*

28 % of the audited suppliers have an unacceptable score on “Investigation and reporting of major incidents” (6.10)

Main findings:

Lack of defined requirements for investigations

Unclear documentation of who is responsible for executing investigations

Competence requirements for persons in the investigation team are not well defined

32 % of the audited suppliers have an unacceptable score on “History of undesirable events/hazardous conditions” (6.2)

- Lower score related to serious notifiable incidents the past five years

Increase focus on security

NORSOK S-006 Item 4.2 Security management

What systems does the contractor have in place to protect the company against security threats related to the work?

Minimum acceptable score: Admission control system in place and strictly adhered to. Emphasis on information technology and document security. Security interviews with all employees routinely performed and documented. Personnel with security tasks are trained and competent within the discipline.

17 % of the audited suppliers have an unacceptable score on this element

Main findings

- Lack of security awareness and mitigating actions Findings related to this item are most frequent in small companies.

Feedback from the JQS Verification auditors*

Experiences 2016:

In general: Suppliers with quality systems well anchored in top management have a visible and documented high HSE culture.

Most of the companies audited in 2016 have downsized. Downsizing seems to go fast in several cases and leads to visible impact on the systematic HSE work. Many examples found, where it is not clear who is responsible for follow up and ensuring the HSE work in the company. Planned activities are not performed or performed with low quality due to lack of competence and qualified resources. Number of internal audits and audits of suppliers decreased. In general - things are put on hold.

- Several of the suppliers have started LEAN projects and there are many good and anchored initiatives. However, some of the suppliers seems to not have a complete plan or a long term strategy for the work.

* International certified auditors

Summary - the way forward

Conclusions

The review of the JQS Verification audits data collection provides a useful tool for identifying strong and weak areas regarding suppliers HSE performance.

The way forward

1. Operators encouraged to present findings internal in own organisations
2. EPIM to coordinate information to main relevant external stakeholders* and establish a dialogue for the way forward

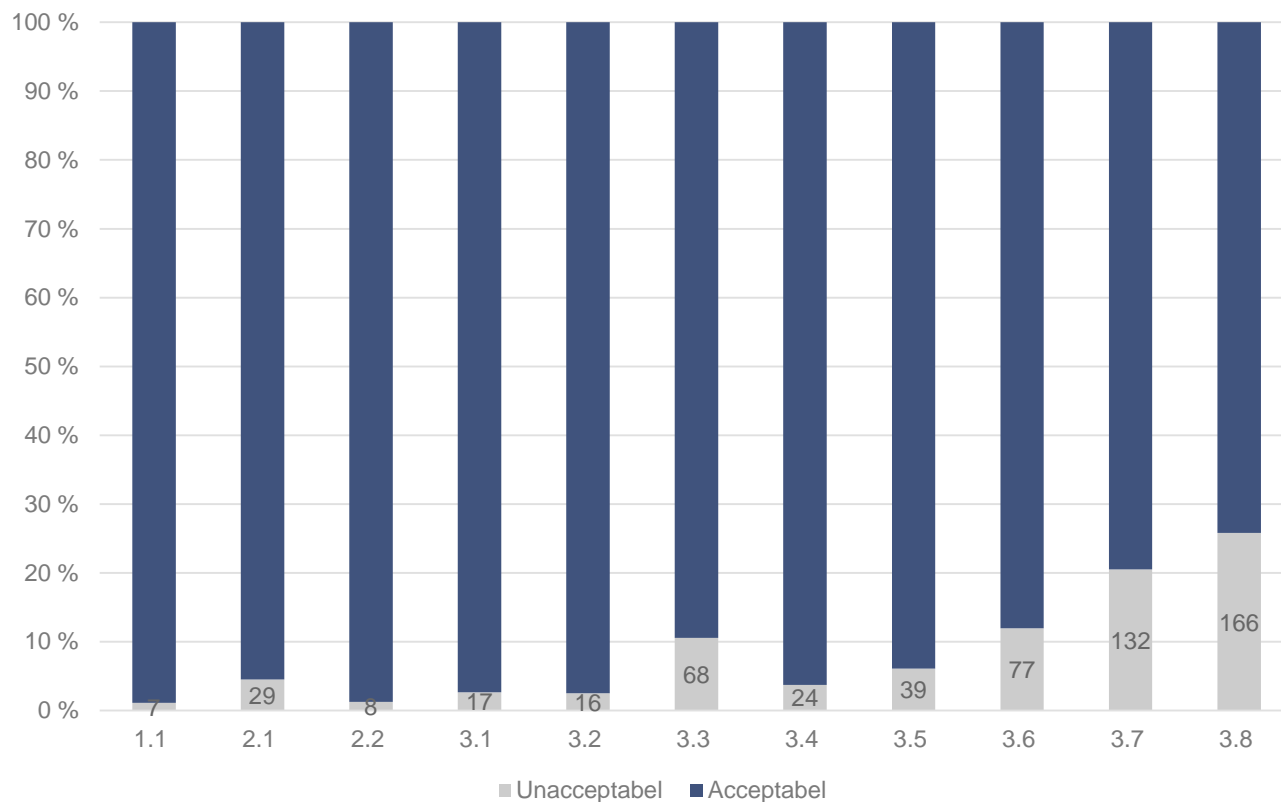
*Norsk Industri, Petroleum Safety Authority Norway, Norwegian Shipowner's Association, Norwegian Oil and Gas Association

BACK UP SLIDES

Results and trends (cat I and II):

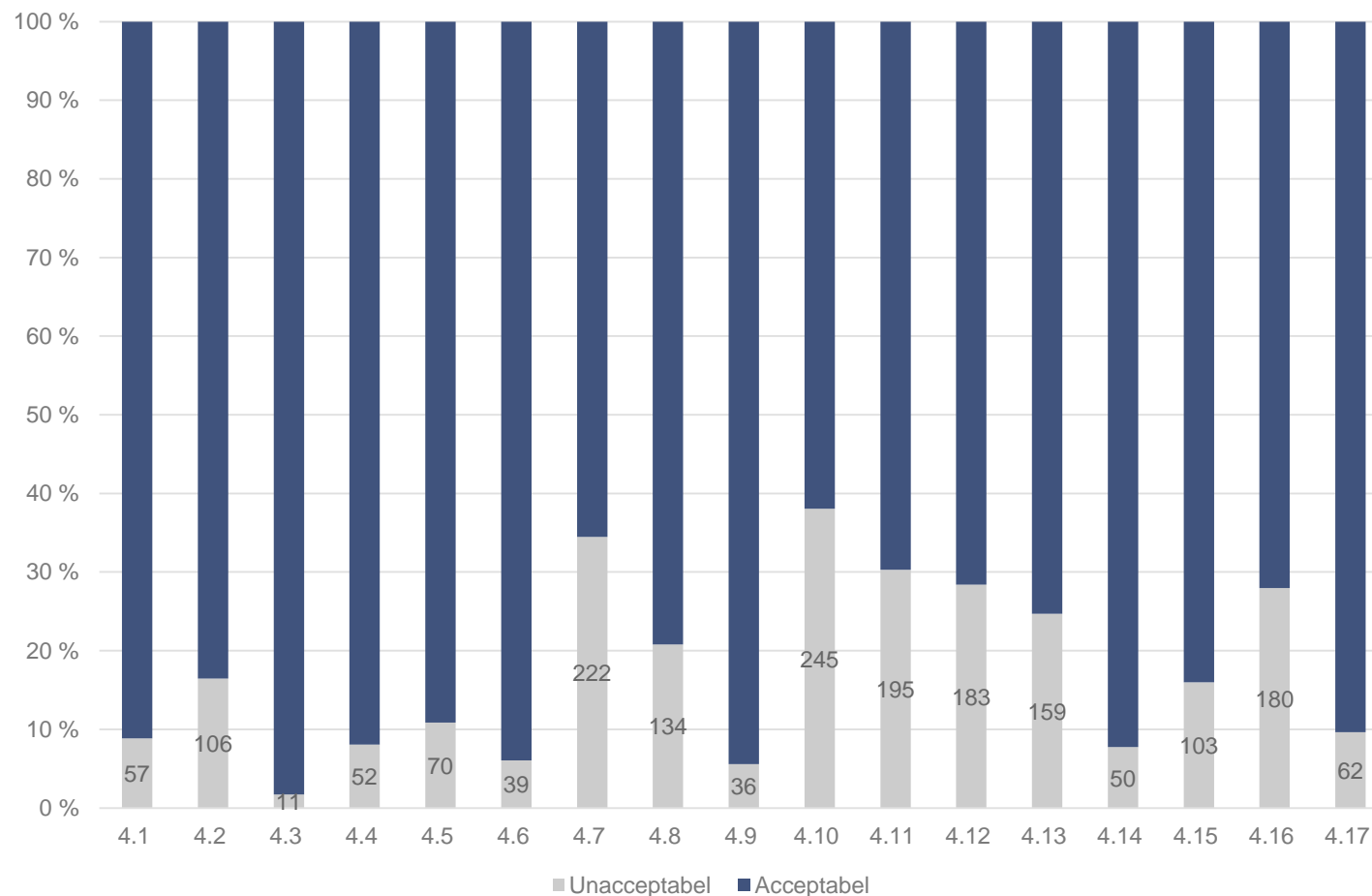
HMS-relaterte tema og oppdragskategorier		Kategori I	Kategori II	Kategori III	Kategori IV
Kategori I kvalifiserer også for kategori II, III og IV Kategori II kvalifiserer også for kategori III og IV		Stort omfang og / eller kompleks	Begrenset omfang og / eller enkel	Begrenset omfang og / eller enkel med enkel oppfølging	Innleie av personell
Element 1 — Lederskap og forpliktelse					
1.1	HMS-forpliktelse gjennom lederskap	◆	◆	◆	◆
Element 2 — Policy og strategiske målsetninger					
2.1	HMS-policy, tilgang og ansvar	◆	◆	◆	◆
2.2	Leverandørens policy mht. ulykker og tap	◆	◆	◆	◆
Element 3 — Organisasjon, ressurser og dokumentasjon					
3.1	Arbeidstakermedvirkning	◆	◆	◆	◆
3.2	Organisasjon og kommunikasjon	◆	◆	◆	◆
3.3	HMS-opplæring av ledere og arbeidsledere	◆	◆	◆	◆
3.4	HMS-program for nyansatte	◆	◆	◆	◆
3.5	HMS opplæringsprogram	◆	◆		
3.6	Spesialopplæring	◆	◆		
3.7	Regler, forskrifter, standarder og krav	◆	◆		
3.8	Vurdering av underleverandørers skikkethet	◆	◆	◆	
Element 4 — Evaluering og risikostyring					
4.1	Risikovurdering	◆	◆		
4.2	Sikringsledelse	◆	◆	◆	◆
4.3	Sykefravær	◆	◆		◆
4.4	Arbeidsbetinget sykdom	◆	◆	◆	◆
4.5	Arbeidsmiljøundersøkelser	◆	◆		
4.6	Bruk av overtid	◆	◆		◆
4.7	Kjemikalier	◆	◆		
4.8	HMS-datablad	◆	◆		
4.9	Personlig verneutstyr	◆	◆	◆	◆
4.10	Miljøstyringssystem	◆	◆		
4.11	Miljøkonsekvensvurdering og miljøovervåking	◆	◆		
4.12	Valg av optimale løsninger for det ytre miljø	◆	◆		
4.13	Det ytre miljø og styrende dokumentasjon	◆	◆		
4.14	Avfallshåndtering	◆	◆		
4.15	Miljøegenskaper ved kjemikalier som skal slippes ut	◆	◆		
4.16	Bruk av potensielt miljøskadelige kjemikalier	◆	◆		
4.17	Verneombud	◆	◆		
Element 5 — Planlegging og prosedyrer					
5.1	HMS arbeidspraksis	◆	◆		
5.2	HMS-program	◆	◆		
5.3	Kontroll og vedlikehold av utstyr	◆	◆		◆
5.4	Beredskap	◆	◆	◆	◆
Element 6 – Implementering og oppfølging					
6.1	Kontroll og oppfølging av arbeidsaktiviteter	◆	◆		◆
6.2	Tidligere uønskede hendelser/farlige forhold	◆	◆	◆	
6.3	Rapportering av hendelser med stort tapspotensial	◆	◆		
6.4	Rapportering av personskader	◆	◆	◆	
6.5	System for oppfølging av uønskede hendelser	◆	◆		
6.6	Helse og arbeidsmiljø	◆	◆		◆
6.7	HMS resultatindikatorer	◆	◆		
6.8	Avvikshåndtering	◆	◆		
6.9	Erfaringsoverføring	◆	◆		
6.10	Granskning og rapportering av alvorlige hendelser	◆	◆		
Tema 7 – Revisjon og gjennomgang					
7.1	Revisjon og gjennomgang	◆			

Element 1.1 – 3.8



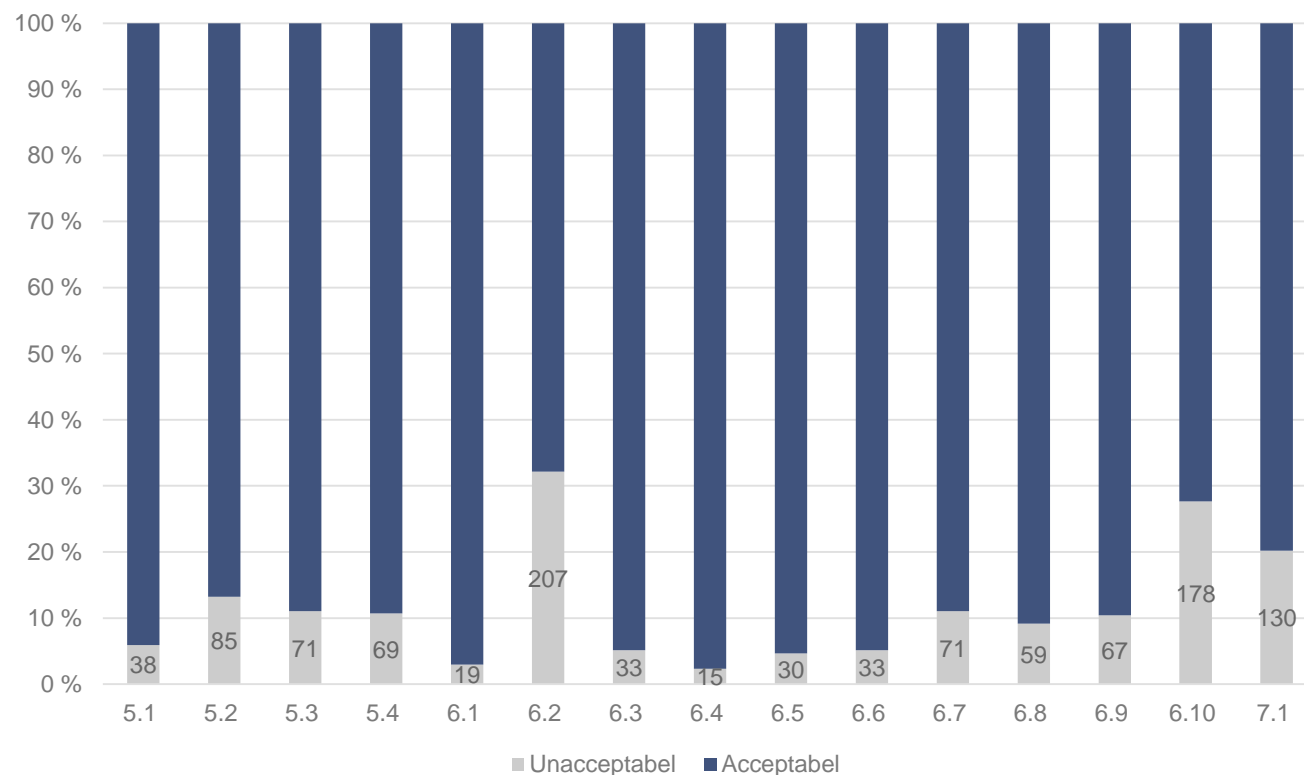
- 1.1 Commitment to HSE through leadership
- 2.1 HSE policy, access and responsibility
- 2.2 Contractor's policy on accidents and losses
- 3.1 Employee contribution
- 3.2 Organization and communication
- 3.3 HSE training of managers and supervisors
- 3.4 Personnel HSE induction programme
- 3.5 HSE training programme
- 3.6 Specialized training
- 3.7 Rules, regulations, standards and requirements**
- 3.8 Assessing the suitability of subcontractors**

Element 4.1 - 4.17



- 4.1 Risk assessment
- 4.2 Security management
- 4.3 Sickness absence
- 4.4 Work-related illness
- 4.5 Working environment surveys
- 4.6 Use of overtime
- 4.7 Chemicals
- 4.8 HSE data sheets
- 4.9 Personal protective equipment
- 4.10 Environmental management system
- 4.11 Environmental impact assessment and monitoring
- 4.12 Selection of environmentally optimal solutions
- 4.13 The environment and management documentation
- 4.14 Waste management
- 4.15 Environmental properties of chemicals due to be discharged*
- 4.16 Use of potentially environmentally harmful chemicals
- 4.17 Safety delegates

Element 5.1 – 7.1



- 5.1 HSE working practices
- 5.2 HSE programme
- 5.3 Equipment control and maintenance
- 5.4 Emergency preparedness
- 6.1 Supervision and monitoring of work activities
- 6.2 History of undesirable events/hazardous conditions**
- 6.3 Reporting events with a high loss potential
- 6.4 Reporting personnel injuries
- 6.5 Incident follow-up systems
- 6.6 Occupational health
- 6.7 HSE performance indicators
- 6.8 Handling nonconformities
- 6.9 Experience transfer
- 6.10 Investigation and reporting of major incidents**
- 7.1 Auditing and reviewing**