

HSE AND CULTURE

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1.

The party responsible will encourage and promote a sound health, safety and environment culture comprising all activity areas, and which contributes to achieving that everyone who takes part in petroleum activities takes on responsibility in relation to health, safety and the environment, including also systematic development and improvement of health, safety and the environment.

Section 11 of the Norwegian framework regulations on a sound health, safety and environment culture (HSE culture)

INTRODUCTION

Norway's petroleum regulations of 1 January 2002 specify that enterprises must have a sound health, safety and environmental (HSE) culture. Such a demand has never previously been expressed so directly in either Norwegian or international regulations.

The aim is to ensure a further improvement in HSE standards. However, the regulations do not specifically define what the concept of an HSE culture entails.

Approaches to understanding the concept are provided in this brochure, together with suggestions on how such a culture can be created.

Requirements for a sound HSE culture are that:

- efforts to improve health, safety and the environment are not viewed in isolation from each other
- a good balance is maintained between the independent responsibility of each person in HSE work and the responsibility of the enterprise to provide good working conditions.

This brochure does not provide any hard-and-fast rules, but is intended to assist the industry in improving its HSE culture. Important considerations include:

- taking an integrated view of different HSE measures
- maintaining a systematic and critical focus on one's own HSE activities
- paying greater attention to the "H" and "E" components
- working continuously to improve the level of HSE, and not relying simply on spasmodic efforts.



THE INTEGRATED HSE CONCEPT EMBRACES:

2.

- health (in accordance with health and working environment legislation)
- the natural environment (in accordance with the Pollution Act)
- the working environment (in accordance with the Working Environment Act)
- safety (in accordance with the Petroleum and Working Environment Acts)

Report no 7 (2001-2002) to the Storting on health, safety and the environment in the petroleum activity

A sound HSE culture can be observed in enterprises which facilitate continuous, critical and thorough efforts to improve health, safety and the environment.

HSE AND CULTURE

The regulations require health and the working environment to be viewed in relation to safety.

Requirements in the HSE regulations for the Norwegian continental shelf (NCS) are largely formulated in functional terms. If no recommendations are provided on how these requirements should be met, it is up to each enterprise to set their own standards for meeting them - specifying what constitutes a sound HSE culture, for instance.

A culture can be defined as the knowledge, values, norms, ideas and attitudes which characterise a group of people. We can gain an insight into this culture by listening to what people say and by looking at the way they behave. The relationship between words and deeds is precisely the point at which an understanding of the HSE culture in an enterprise can be gained. Words and deeds must correspond.

Culture is not only a matter of knowledge, values and attitudes. It is also about technology, economics, law and regulations, and other conditions which influence daily life.

5 - 6

We can regard culture as a glass through which we see the world, and which helps us to interpret what we see. We can find it difficult to view our own culture without glasses, because our vision will be blurred. It is often the case that we regard our own culture as "right" and defend what we think of as its good and fundamental values. The technical term for this is "ethnocentricity", or the tendency to assess, judge or analyse ways of behaviour in other cultures in relation to norms or concepts from the observer's own culture. It is only through our meeting with people from other cultures that we can detect what is distinctive about us and them.

Understanding how people's knowledge, values, norms, ideas, attitudes and frame conditions interact is important in building an HSE culture. All these aspects will influence the way we think and collaborate over HSE. CLARIFYING THE CULTURAL CONCEPT (from Gherardi & Nicolini 2000)

1. Culture is not something we own or have constructed once and for all. It finds expression through the things we do together, and is in constant development.

2. Culture is seldom a unified and collective quantity. It is usually fragmented, diversified and split into different sub-cultures.

3. Culture is not an individual quality. It develops through the interaction between people and specified frame conditions.

Key issues in efforts to enhance an HSE culture will be whether our HSE activities are appropriate, and whether they bring us closer to our objectives.



3.

A SOUND HSE CULTURE IS:

A reporting culture A just culture A flexible culture A learning culture

If you are convinced that your organisation has a sound safety culture, you are almost certainly mistaken (James Reason).

CHARACTERISTICS OF A SOUND HSE CULTURE

In pursuing an HSE culture, many people draw on the work of organisational psychologist James Reason (2001). He has developed a set of concepts which can be helpful in building an HSE culture. Reason argues that a significant feature of a sound safety culture is that it is informed. An informed organisational culture is characterised by several factors - it has good reporting systems, is perceived to promote fairness and is flexible and adaptable. In addition, both the organisation and its members learn from their experience.

Organisations with a sound HSE culture are characterised by the ability to learn, and constantly question their own practice and patterns of interaction. Informed organisations accommodate dialogue and critical reflection on their own practices. People respect each other's expertise and are willing to share and further develop their HSE knowledge.

If organisations become self-satisfied, they are on the wrong track. This kind of attitude undermines their ability to spot danger signals.



A conviction that they are robust and good can help to weaken their judgement. The result could be an increased risk of undesirable incidents, hazards and accidents.

Accidents are usually complex events which involve the failure of several barriers. That makes it important to use one's imagination and develop the ability to see unfamiliar relationships and new sequences of events. To predict and prevent incidents, organisations depend on their ability to combine knowledge available in different specialist groups, organisational entities and so forth.



THE ZERO PHILOSOPHY

3.

The introduction of the "zero philosophy" is a milestone in terms of attitudes. This mindset can be summed up in the statement that accidents do not happen, but are caused. All accidents are therefore preventable, so that the goal will be zero injuries and accidents. This requires that people are made responsible at every level and that constant emphasis is given to risk management, prevention and learning. Some commentators have maintained that the practical application of this approach contributes to underreporting of undesirable incidents. The injured employee is pressured into keeping the event concealed. This is contrary to the basic idea which underpins the zero philosophy, and the parties concerned are responsible for ensuring that it does not happen.

> Report no 7 (2001-2002) to the Storting on health, safety and the environment in the petroleum activity

A REPORTING CULTURE

Investigating critical incidents and near-misses is important in a reporting culture. Organisations with little trust can often find it difficult to get people to admit their own mistakes. They are afraid of the consequences. Some can also be doubtful about the value of reporting, partly because it involves extra work. People make mistakes, and incidents can be more or less serious. Many have an intuitive desire to forget an event and put it behind them.

Creating a climate of trust is important in combating this reluctance to report. Ensuring confidentiality could be a step in the right direction, but the objective should be to establish such a strong sense of security and trust in the organisation that this is unnecessary. Sanctions should not form part of a reporting system. The purpose of reporting must be to learn from experience in order to avoid unfortunate incidents.

Employees must quickly see the benefits of reporting, and it has to be perceived as meaningful.

Reporting and counting of undesirable incidents must not block more in-depth analysis of individual events. A thorough review could be more instructive for the workforce than statistical comparisons.



...

























FROM THE RISK LEVEL ON THE NCS (RNNS) SURVEY:

3.

Twenty-nine per cent of respondents said they agreed fully or partly with the following statement: "Accident reports are often dressed up".

A REPORTING CULTURE

Bonus schemes can sometimes act as an incentive to keep accident statistics low. These figures can then affect the award of contracts. A scheme may be basically regarded as a positive incentive (stimulation) to avoiding injuries, but can result in incidents being underreported or recorded as less serious than they are.

CHECKPOINTS:

- How does the organisation treat people who report danger signals? Are such whistleblowers taken seriously, valued, ignored or regarded as a nuisance?
- Does the organisation have different ways of assessing undesirable incidents? Is the degree of seriousness assessed differently?
- What does the system reward? Reporting occupational illness? Implementing preventive measures? Nice-looking accident figures?

11 - 12

Offshore work is pursued within complex organisations. It cuts across and beyond the companies' own organisation and a multitude of customers, contractors and sub-contractors. The fear of losing a working relationship or contract may find expression in a failure to report injuries or in allowing one's personal health to take second place. Bonus schemes can thereby have varying effects. They can stimulate and contribute to good HSE results, but they can also lead to underreporting and a hunt for scapegoats.



A JUST CULTURE

To err is human. Our efforts to avoid injuries, accidents or negative consequences for HSE depend on errors being corrected - sometimes through the intervention of another person. The ability and willingness to intervene is an important aspect of an HSE culture. Organisation and staffing also affect opportunities to intervene.

Our actions have consequences for ourselves and others. The way we behave in an organisation normally arouses positive and negative reactions, formal and informal. For a system of rewards and sanctions to work well in practice, it must be perceived as fair and constructive.

In other words, reactions must be proportionate

to the intentions behind and the consequences of an action. We must distinguish between intentional and unintentional behaviour. Organisations which apply sanctions in the right way will thereby support trust and creativity.

We are all responsible for our actions but, in certain circumstance, we are so far removed from these consequences that we find it hard to imagine what they might be. This makes it important to think HSE in every phase from planning to execution and completion, and to try to prevent undesirable consequences. Frame conditions mean a lot for our behaviour, but they do not absolve the individual from taking personal responsibility for HSE work.

13 - 14



A system that values stories and storytelling is potentially more reliable because people know more about their system, know more of the potential errors that might occur,

3.

and they are more confident that they can handle those errors that do occur because they know that other people have already handled similar errors

(Weick 1987:24, James Reason 1997:217).

Aircraft with two pilots generally suffer fewer accidents than if they only have one pilot. An important reason is that the two flyers check each other and consult all the time. If one makes a mistake, the chances are good that the other will correct the error before it causes an accident. Subject to good training in cooperation, and providing the pilots are not trained to commit the same error or influence each other to make this mistake, two pilots can fly more safely and reliably than one

(LaPorte and Consolini, 1991).

A FLEXIBLE CULTURE

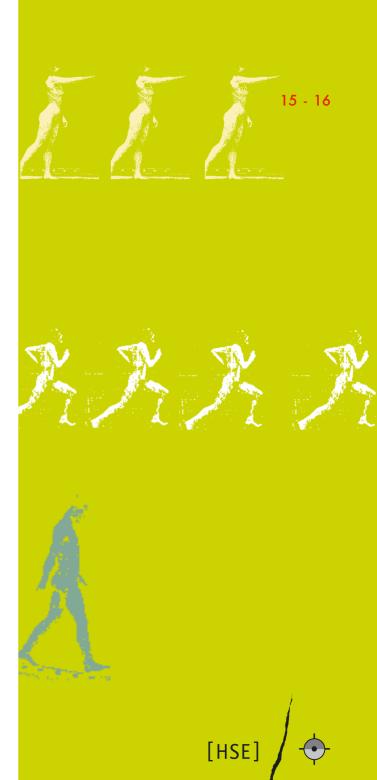
Assigning several people to do the same job increases reliability. In addition, we assume that people with different mindsets can provide the necessary correctives to current practice. A group of people with the same background and mindset could risk becoming short of ideas and less vigorous. Organisations which want creative contributions from their employees must have a degree of tolerance. It is important to value a verbal exchange of experience, creativity and imagination when this seeks to make work safer.

CHECKPOINTS:

- Is the organisation good at exploiting available meeting places (such as meetings before going offshore, coffee breaks, management meetings, HSE meetings, pre-job discussions or safe job analysis)?
- Are governing documents utilised in operational processes to reduce risk and improve quality?
- Do the procedures and job descriptions reflect best practice?
- Is the organisation able to set sensible priorities? Do the most serious issues get the greatest attention, or do they drown amid minor problems?

Organisations characteristic of the offshore industry are often termed "high reliability" in the professional literature. Such bodies are usually very complex, technology intensive and vulnerable to human error. Their work is demanding in terms of both professional knowledge and coordination. Operations are often governed by procedures, and the organisation invests heavily in training personnel in procedures and routines. We find this type of organisation in such areas as aviation and nuclear power. To compensate for being unable to use a trial-and-error approach, training is facilitated through simulators and the recruitment of personnel with different kinds of experience. The aim is to train people's ability to tackle unexpected occurrences and to improve work processes.

A flexible and pliable culture adapts efficiently to changing external demands, and is able to adjust quickly to different circumstances. It can tackle both normal and high workloads without compromising on safety and robustness.



Learning disabilities are tragic in children, but they are fatal in organisations. Because of them, few corporations live even half as long as the person - most die before they reach the age of 40 (Senge 1990, Reason1997:219).

3.

A LEARNING CULTURE

Learning is about the way our knowledge and our experience are systematised and managed on a day-to-day basis.

A learning HSE culture is characterised by the ability to detect and react rationally to danger signals, even when these are ambiguous and diffuse. In most major accidents, it transpires that somebody in the organisation was aware before the event of the problems which caused the incident, either as unambiguous or ambiguous signals.

CHECKPOINTS:

- Is it acceptable for a subordinate to correct a superior who makes an erroneous judgement? Does this happen in practice? Is it acceptable for a contractor employee to correct an operator employee?
- Do managers and rank-and-file consider it part of their job to help build bridges between different levels in the organisation?
- Are there groups who do not attend HSE meetings, or who do not participate in discussions on HSE?
- Are problems swept under the carpet because the information could cause difficulties for the organisation or for individuals ("if the authorities get to hear about this...")?

- Are individuals open to suggestions from new colleagues?
- When a problem comes up again and again, is it easy to adopt a familiar response even if experience shows that it does not have a lasting effect ("same procedure as before")?
- Do you find that safe job analysis helps to increase safety?

The ability to share knowledge across organisational boundaries is a key aspect of a sound HSE culture. Knowledge-sharing is particularly challenging in complex organisations like those we find in the petroleum industry. Players from different companies are often involved in different phases of the same project or in the operation of an installation. That makes coordination and transfer of experience a key requirement.

Knowledge can be shared both horizontally between employees in different companies, shifts or disciplines, between personnel from different cultural backgrounds, or between players offshore and on land - or vertically along the chain of customers and sub-contractors.

Boundaries are both visible and invisible, and cut across organisations. They are not impossible to surmount, but they present challenges in securing a good and sufficient flow of information and in ensuring that communication is clear and understandable. The dividing lines make their presence felt, for instance, in the extent of our communication with other players and how we communicate with them. As a rule, we communicate more frequently and more openly with those perceived to belong to "our" group, and it is important to oppose or acknowledge that a division exists between "us" and "them" in most workplaces. These boundaries can also mean that much knowledge remains unused because we ask "them" only when this is completely unavoidable.

The "us" constellation can take many forms and consist of various types of player. These can vary from "us in the company" to "us who work together on the same shift". Organisations which have many interfaces with others need to pursue active bridgebuilding to ensure that they function safely and efficiently.

Inadequate communication or misunderstandings at organisational interfaces contribute to many accidents and problems. A failure to communicate information between two shifts was a central cause of Britain's Piper Alpha disaster in the 1980s, for instance.



FROM THE RISK LEVEL ON THE NCS (RNNS) SURVEY:

"Forty per cent of respondents agreed fully or partly with the statement: "In practice, production considerations take priority over HSE considerations", and 19 per cent agreed fully or partly that. "I sometimes breach safety regulations to get the job done quickly".

The aviation industry has clear rules about when an aircraft is allowed to take off or land. In that way, for instance, stressed pilots or mechanics facing a clash between punctuality and safety can avoid relying on their own judgement to deal with conflicting objectives.



A LEARNING CULTURE

CONFLICTING OBJECTIVES

Conflicting objectives are part of life in all organisations and at every workplace. We want to do the job quickly and efficiently, without errors and without anyone being injured. In practice, we are often forced to weigh various considerations against each other. Time could run short, presenting management with a choice between forcing the pace or accepting a delay with its associated costs and loss of prestige. A work team could meet unforeseen problems and have to choose between speeding up or taking its time.

CHECKPOINTS:

- Are conflicting objectives discussed in a specific and constructive manner?
- Have clear, realistic and accepted criteria been established for the way operational personnel should deal with normal conflicts between objectives?
- Are procedures and job descriptions adjusted to ensure a balance between safety and efficient performance of the work?
- Who decides the procedures? Do operational personnel participate in maintaining procedures and job descriptions?
- Is HSE monitored on a par with production, quality and economics?

An important aspect of constructing a culture relates to the way we cooperate, communicate and build relationships with other people, and

skills and values.

If allowed to persist, conflicting objectives could help persuade work teams to start taking short cuts which undermine safety. If nobody objects to such practices, we risk them becoming the accepted way of doing things. It would be a serious matter if short cuts were accepted as long as everything went well but punished when an accident did occur.

All organisations must deal with conflicting objectives - wanting to start production from a new installation on schedule, for instance, rather than being well prepared when output does begin. A sound HSE culture means that the organisation can handle conflicting objectives without weakening HSE.

EMPLOYEE CONTRIBUTION AND THREE-PARTY COOPERATION

One of the aims of employee contribution is to utilise employees' overall knowledge and experience to ensure that issues are sufficiently illuminated before decisions are taken on health, environment and safety, and to give employees the opportunity to exert influence on their own work situation.

From the guidelines to section 6 of the framework regulations on arrangements for employee contribution

Acceptance and understanding of objectives and measures can only be achieved in a collaborative and learning culture. Involving operators, contractors, suppliers, employees, union officials and management at all levels in the companies is important. Collaboration between employers, unions and the authorities contributes to a top-level dialogue between these three parties.

how we develop and use shared knowledge,



4. | SOURCES FOR UNDERSTANDING ONE'S OWN HSE CULTURE

METHODOLOGICAL DIVERSITY



OBSERVATION, WORKING PRACTICES AND ACTUAL BEHAVIOR

Various sources can be used to obtain an understanding of the HSE culture in an organisation. The most important consideration is not which of these we use, but that we use them correctly. Systems, statistics, procedures and minutes are not useful in themselves. Information or knowledge derived from these sources must be adopted and integrated in the practical working day of employees.

A number of different methods could be relevant for identifying the HSE culture, including:

- questionnaire-based surveys
- participatory observation
- interviews (open or structured)
- workshops, seminars and conferences
- audits and accident inquiries
- written materials, such as reports, letters, objectives and the like.

Do not forget the importance of combining several different approaches. One will seldom be sufficient.

HOW TO USE DIFFERENT DATA SOURCES

Various quantitative registration tools are highly valued by the industry. Most companies have established systems for monitoring HSE-related trends in their organisation. The most popular are overviews of sickness absence, questionnairebased surveys and incident reporting, as well as production and financial data.

Other sources include knowledge of what happens in more formal arenas, such as safety delegate inspection rounds, HSE meetings, management reviews, management visibility or presence, HSE conferences and so forth. This list could be extended, and the arenas utilised vary from company to company.

Questionnaire-based surveys, injury statistics or other quantitative data can provide a good starting point for interviews or observations. They make it possible to identify areas where more detailed investigation will be important. Looking at regulations, HSE-related systems, relevant procedures, specifications for routines and so forth would also be appropriate.

One good way of obtaining insight into an HSE culture is to see whether formal management systems correspond with what people actually do. A principal goal must be to establish the quality of HSE work in the enterprise.

Offshore work is carried out within the framework of very complex organisations involving different players and companies. This makes it necessary to assess how people secure an accurate grasp of what is going on. In seeking to understand one's own HSE culture, it could be helpful to divide the job up into defined areas. These might include crane and lifting operations, the use of safe job analyses, falling objects, maintenance, well kicks and so forth.

KEY CLARIFICATIONS TO BE SOUGHT INCLUDE:

- which procedures and job descriptions are the most relevant?
- which people are the important ones to talk with?
- which meeting places are the most relevant
 coffee bar, safety meetings, workplaces
 or others?
- what is today's practice?

HOW TO LEARN ABOUT FOLLOW-UP OF PROCEDURES AND ROUTINES:

Participate in various work operations and talk with the personnel involved about their assessment of formal routines. Which procedures are relevant for their work? Do they regard procedures as useful for their work? Are procedures observed? Are they appropriate for their work routines? Do people have suggestions for changing the procedures? Have they proposed any changes? How were their suggestions received? Are the procedures easily accessible? Are the procedures known and understood?

It is also important to think through who should conduct such discussions, and how their purpose is presented. Everyone must be assured that information they provide will not be misused or lead to sanctions, but is intended to form the basis for improvements.

If such questioning makes it clear that people actually fail to observe procedures, something must be done. Involvement in and knowledge of the work processes involved are crucial in shaping procedures. Specialist expertise about risk, technical conditions, regulatory requirements and standards is also important in this context.



Proportion of respondents who agree fully or partly with the statements below:

WORK ROUTINES "Risky work operations are always carefully reviewed before starting them" (94 per cent)

"Different procedures and routines on different installations could be a threat to safety" (68 per cent)

INDIVIDUALS: "I stop work if I believe continuing it could be dangerous to me or others" (95 per cent)

GROUPS: "Communication between me and my colleagues often fails in a way which could allow hazards to arise" (five per cent)

ORGANISATION: "The company I work for takes HSE seriously" (90 per cent)

FRAME CONDITIONS: "The level of staffing is sufficient to ensure that good care is taken of HSE" (61 per cent)

MANAGEMENT: "My superior is involved in HSE work on the installation" (83 per cent)

SOURCES FOR UNDERSTANDING ONE'S OWN HSE CULTURE

4.

In its project about the risk level on the NCS (RNNS), the PSA is gathering information from many sources:

Players and resources Data collection: **Defined** hazards and accidents (DFUs) **Opinion polls** Barrier data (new) Analysis **Risk development** Work accidents Quality assurance status and trends Interviews Workshops Method

The project on the development of the risk level on the NCS (RNNS) being pursued by the Petroleum Safety Authority Norway uses a combination of different methods. These include interviews, questionnaire-based surveys and workshops. Some responses from the project's survey are provided to the left hand side. Data from the RNNS provide an overview of how offshore employees view conditions relating to their HSE culture.

DEVELOPMENTS IN THE RISK LEVEL - MODEL



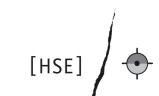
FACTORS WHICH CAN AFFECT AN HSE CULTURE

Culture changes continuously. Norway has strong cultural traditions relating to worker protection and participation. These were not taken for granted a century ago, and are not a matter of course in much of the world today.

When talking about culture, we often refer a little vaguely to what's "embedded" or "internalised". Culture deals with things we take for granted, and which influence the way we behave.

Many factors can cause cultural change in an enterprise, as in the wider community. Some of these factors are listed in the cultural model on the next page. They represent the frame conditions for petroleum activities and offshore work. At the same time, we influence these frame conditions through our knowledge, values and norms.

Our attitude towards people influences the regulations we adopt, for instance - the standards set, the areas covered and the way requirements are framed. Goal-oriented regulations build on the view that employers and employees in the industry are competent and willing to cooperate on finding good HSE solutions.



Economic factors - High or low oil prices - USD/NOK exchange rate

Political guidelines - Production licences - Prevailing regulations

ORGANISATION

GROUP

INDIVIDUAL

Natural resources - Extent of available oil and gas resources

Available technology and knowledge

- Expertise
- Inventions
- Technological tools

We often find that employees in the petroleum industry come from different countries. This can present challenges for HSE work.

Foreign personnel may differ from their Norwegian counterparts in terms of knowledge and values. Cultural variations also exist between different categories of worker on an installation, such as process operators, catering staff and drilling personnel.

The Norwegian offshore industry has been characterised by rapid technological progress. Knowledge about more efficient ways of working prompts modifications to routines and frame conditions for HSE work. Changes to technology and work organisation present new challenges in safeguarding employee health. Alterations in one or more frame conditions can gradually or dramatically amend our understanding and assessment of HSE.

THE ENTERPRISE

Various frame conditions can affect HSE work in an enterprise. The management generally asks itself the following questions: Will we be awarded more production licences? Is it possible to find gas? Is the oil field in the final phase? How will oil prices develop? What is the operator's financial position? Contractors generally want to know how much latitude the operator has allowed for HSE work in the contract, and how the regulations are enforced.

THE WORKPLACE

Similarly, employees have frame conditions for their work. The sort of question they could ask include: Do we have the time and expertise to do the job in a good and safe way? Are the right tools and equipment available? Are the procedures appropriate and safe to observe? Does HSE really take priority over production? Have enough resources been allocated for solving HSE problems?



FACTORS WHICH CAN AFFECT AN HSE CULTURE

Disagreements can arise at work over the best way to do things and what priorities should be set. When such arguments help to split people in the organisation into groups, we can talk of cultural conflicts. These may arise at different levels everything from national culture clashes to disagreements between different sub-cultures in an organisation. At the level of individuals, too, we find that people have different intentions, interests and views, and that these have conseguences for the way they cooperate.

Culture is also a question of power and who wins acceptance for their ideas and perceptions. Who will decide on the need for HSE measures the management on land or the workers offshore? And who will decide which measures should be implemented?

Cultural conflicts can remain unresolved, with

sub-cultures and counter-cultures developing in a company - often in opposition to the dominant culture. Actions initiated by management can run into resistance from employees. That can create counter-cultures which make it difficult to implement various measures. Establishing dialogue with people is important in ensuring that improvement measurements can be implemented without the use of sanctions. In some cases, heavy pressure from management for loyal observation of the enterprise's visions and values can be counterproductive and result in increased resistance.

The model on the right demonstrates two common strategies for problem-solving which can have undesirable effects. Diagnosis means the ordering we adopt in order to identify the underlying causes of a problem. If such diagnosis is too superficial, it becomes easy to opt for quick fixes.



[HSE]

FACTORS WHICH CAN AFFECT AN HSE CULTURE

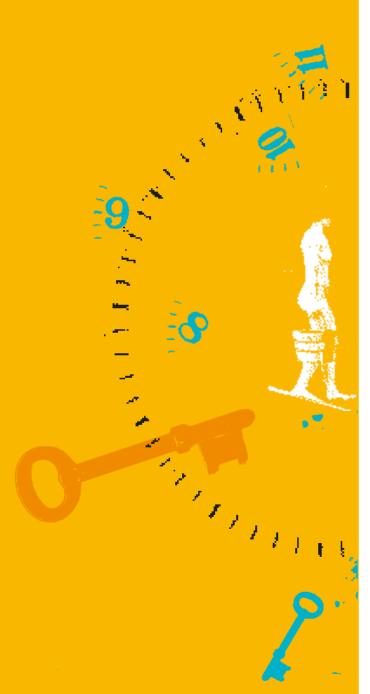
One of these two strategies focuses entirely on disciplining the workforce. A negative effect of such discipline can be reduced trust and a poorer flow of information. The other approach is more bureaucratic in nature, with the focus on changing procedures and systems. These procedures are meant to guide work practices, but can have the opposite effect if they become too complex or inappropriate to use. Working procedures can become over-slow, with the risk that the employees are alienated from them.

Companies with a sound HSE culture are able to avoid these undesirable effects. The probability of making the right diagnosis will be significantly increased by carrying out a thorough and in-depth analysis of the problem, by involving people with different professional backgrounds and from different parts of the organisation, and by allocating the time required. And the right diagnosis the correct understanding of the issue - creates the best basis for describing and implementing appropriate and effective measures, and thereby for solving the problem. Some change processes are unconscious, whilst others are strategic, consciously conceived and desired modifications - such as the development of regulations, prioritisation and follow-up by the regulatory authorities, campaigns to influence attitudes and enhance knowledge, training programmes, team building, changed working routines and so forth.

Some changes take place unobserved and over a long time. Others will be experienced as more brutal, violent or revolutionary - such as industry crises, stock market crashes, oil price slumps, major restructuring processes, mergers, technological innovations, downsizing, liquidations and the like.

A culture can be influenced or changed in many ways. Some of these are very noticeable, others are undetectable. Both conscious and unconscious cultural change can have positive or negative consequences, and measuring these effects will be easy or difficult.

Culture-building projects are being pursued by a number of the companies operating on the



NCS. Good results in the HSE area have developed into an important element in brand-building by these companies, and represent important goals for their market credibility and success.

No simple recipe or easy route exists for building a positive HSE culture. Good frame conditions, a well-entrenched HSE policy, well-considered and appropriate basic attitudes among employees, a dedicated commitment by managers, and considered and systematic work on HSE are all aspects which interact to create a sound culture.



MANAGEMENT AND CULTURE

APPRECIATED MANAGERS ARE CHARACTERISED AS BEING:

open	honest	decisive
trusting	present	professionally able

UNAPPRECIATED MANAGERS ARE CHARACTERISED AS BEING:

unfair

closed

stressful

absent

- unpredictable critical

- controlling

Section 11 of the framework regulations requires the responsible manager to promote a sound HSE culture in the enterprise. Report no 7 (2001-2002) to the Storting relates an HSE culture closely to management, and specifies that: "knowledge about the development of an organisational culture builds on the recognition that whatever is given systematic attention and priority by management becomes culture. So management responsibility and behaviour are central elements in the

An operator struggled with high injury figures in its activities, despite the constant introduction of new requirements, procedures and guidelines aimed at making work on its installations safer. The message was clear - although HSE efforts had been pursued with the best intentions, genuine employee involvement was lacking. The company's head of operations became involved by visiting all the contractors at their own premises. This person asked where the problems were, listened to the answers and discussed the issues. Genuine cooperation and mutual respect laid the basis for positive development.

6.

31 - 32

[HSE]

work of building an HSE culture". In other words, HSE is to be integrated in an organisation's shared values, established attitudes, expertise and behaviour.

The management plays a key role as the provider of the company's values and visions in the HSE area. It is important that the management conveys these in a well-considered manner, and that they are observed in day-to-day work. The ability of managers to develop close relations with and convey values to their own subordinates is crucial for the outcome. Trust and respect do not grow on trees. They must be earned.

Managerial behaviour, and the attitudes on HSE issues signalled by such actions, are given great weight by most people. Managers who are committed, who apply with their own expertise and that of their subordinates, and who devote energy to these issues usually achieve good results.

MANAGERSAS CULTURE-BEARERS

Managers often say "we will always have the time to work safely". The next minute, they signal the exact opposite - by constantly asking whether work will be finished soon. During well testing on the drill floor of a mobile rig, one person has been sent up to release a stuck valve. The working position is difficult, and the tool is not appropriate for the job. The operator's representative, the drilling superintendent, the driller and the well-test supervisor are all standing on the drill floor. They are already several hours behind schedule. How does the person up in the derrick experience this, particularly in terms of pressure to work faster? Scaffolding should really have been put up so that safer and more appropriate equipment can be used - but that would take time...

MANAGEMENT AND CULTURE

CONFLICTING MESSAGES?

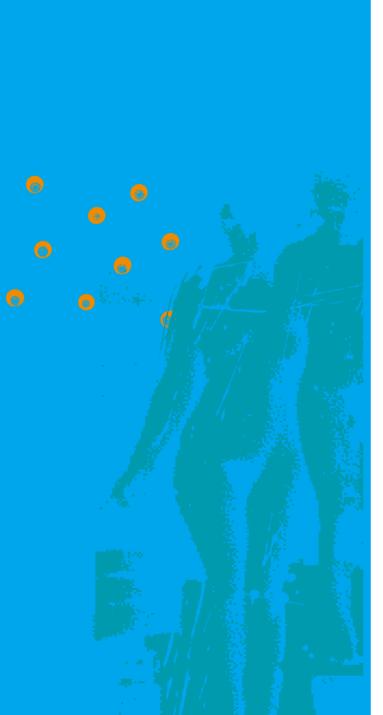
6.

What are drilling personnel to think if they are told publicly by visiting managers from the operator that "time out" is important and desirable, only to be asked privately about the number of metres drilled over the past day?

• In the risk level on the NCS (RNNS) survey, 40 per cent of respondents agreed fully or partly with the statement: "In practice, production considerations take priority over HSE considerations".

CHECKPOINTS FOR MANAGERS:

- Do word and deed correspond at all levels in the organisation?
- Is HSE prioritised by managers at all levels as clearly in everyday work as it is in the company's official values?
- Do managers have the time to deal with a difficult HSE issue until a good solution has been identified and adopted?
- What targets are managers judged byproduction or HSE?
- Does the organisation have HSE targets which contribute to improvement?
- How far do managers accept short cuts being taken in the organisation? Are short cuts accepted and rewarded on some occasions?
- Are managers at all levels familiar with the key HSE challenges in their area of responsibility?. Conflicting messages?



Other conditions may also influence managers in everyday life, such as the company's financial position, contracts, available technology, the physical working environment, technical solutions, the availability of personnel with the right expertise and so forth.

Campaigns aimed at changing attitudes which are not backed with lasting organisational or technical measures risk ending up as superficial efforts to create a positive culture. In the RNNS survey, key union officials expressed a desire to see a more continuous perspective applied to HSE work rather than short-term campaigns.

Most employees appreciate visits and attention from their managers, but superficial inspections and safety rounds can be counter-productive - particularly if they are perceived as control. If a manager first goes out to the field, taking the time to talk with people and listen to them is important. The coffee bar could be a good place to start. What stories people tell when they meet on a daily basis can be more interesting than proceedings in formal arenas such as HSE meetings.



6.

MANAGEMENT AND CULTURE

A manager who actively investigates whether routines are perceived as appropriate and who picks up on possible proposals for improvement will simultaneously motivate their subordinates and secure valuable help in their own work.

The significance of the way managers speak and behave is often underestimated. Managers who are committed, who draw on available professional expertise and who give of their time and energy will often achieve results in the form of trust and respect from their subordinates. A manager who only gets involved after the event - such as an accident will not enjoy the same credibility as one who has paid attention throughout.

Managers who can take the pulse of their own organisation and who pick up small but important nuances in the working climate have everything it takes to be a good culture-builder.

Their coffee is awful, but their stories are great!

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