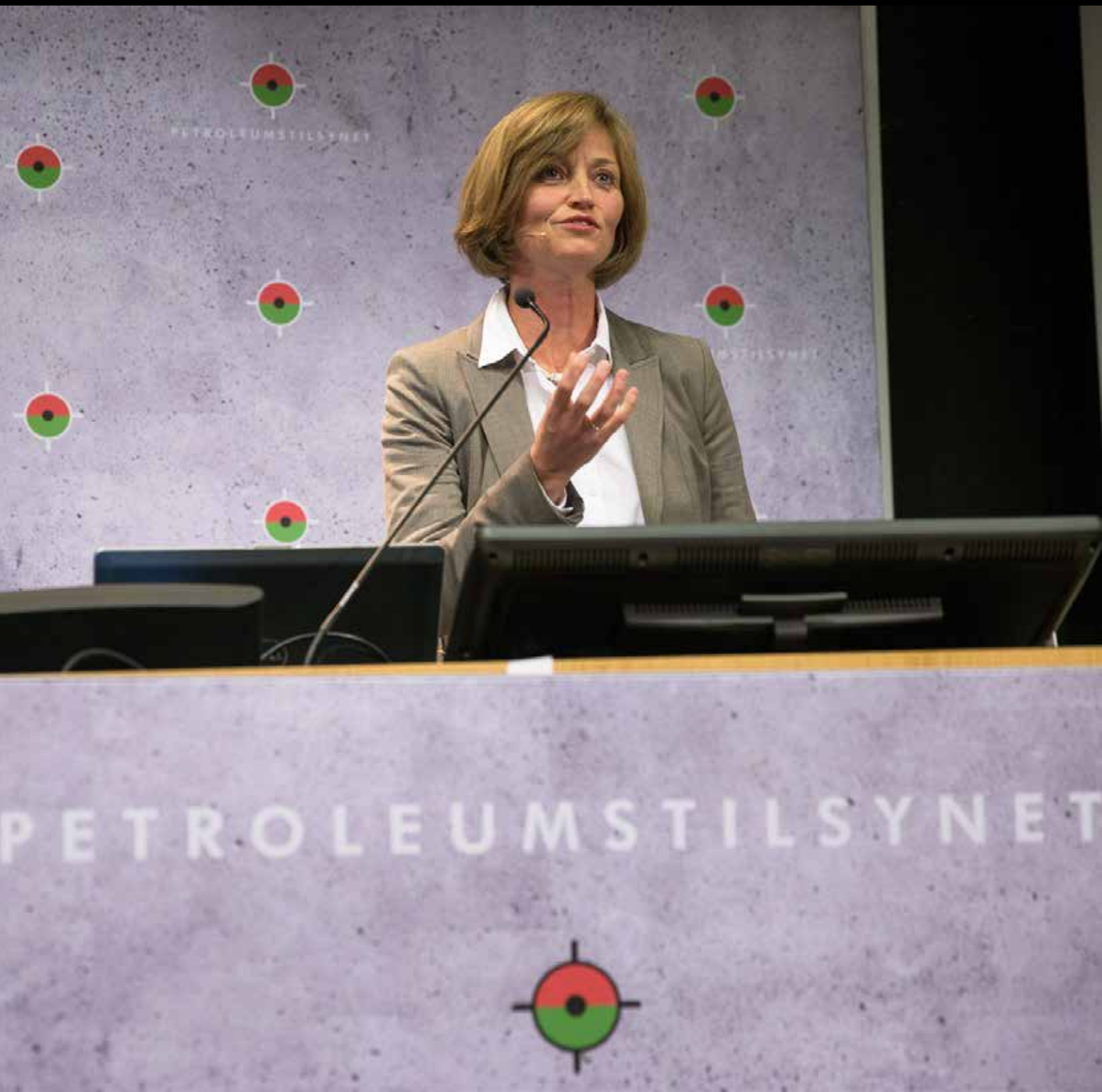




ANNUAL REPORT

2013



FOREWORD

This publication is the facts section of the annual report from the Petroleum Safety Authority Norway (PSA) for 2013. It should be read in conjunction with our publication entitled Safety – status and signals 2013-2014, which summarises issues of particular concern to us last year and looks ahead to the biggest challenges we foresee in the future.

The following pages provide information on results from and factual conditions which affected our operations in 2013. That includes the priorities we have set for our supervisory activities and other work.

Our annual report on Trends in risk level in the petroleum activity (RNNP), which is published both in a complete form and in a summary version, contains an extensive overview of incidents, accidents and injuries in 2013. It provides a comprehensive review of the risk picture in this sector and its development. The summary version is available in English.

We hope that these publications will collectively provide a good overall picture of the safety challenges faced by the petroleum industry in Norway, the responsibilities of the participants in this activity, and how we as the regulatory authority supervise industry observance of these responsibilities.

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1. SUPERVISION OF SAFETY IN THE PETROLEUM ACTIVITY

The concept of “supervision” embraces all the activities we pursue in order to

- form a picture of the safety status at one or more of the players in the petroleum business
- see to it that all the players conduct their activities in accordance with regulatory and/or in-house requirements
- consider applications for consents and acknowledgements of compliance (AoCs), and plans for development and operation/installation and operation (PDO/PIO) from the companies
- assess whether compensatory measures adopted are adequate for operating acceptably
- investigate conditions relating to a serious undesirable incident
- influence the players with a view to reducing the risk of major accidents, undesirable incidents, personal injuries and occupational ill-health
- conduct supervision pursuant to the Act on Pay Agreement Application.

Our annual activity plans are based on a number of factors which reflect the reality in which we exercise our regulatory role, and the requirements and expectations set for us through the Ministry of Labour and Social Affairs.

To achieve the best possible application of our resources in meeting the established targets, we set several main priorities every year which form the basis for our supervisory activities. Our main priorities for 2013 related to:

- barriers
- management and major accident risk
- the natural environmental
- groups particularly exposed to risk.

These are areas we prioritise ahead of others. This means that the plans laid for supervision in these areas have by and large been fulfilled. The four main priorities are of equal importance, so the order in which they are listed is not intended to reflect any relative significance.

Work on our main priorities is supplemented by a number of other activities which are significant for safety. These may be restricted to a specific company, a particular type of activity or the like. They embrace both audits and other work such as processing applications, dealing with incidents

and status meetings with the companies.

A summary is provided below of the challenges we have faced, the activities we have pursued and what we have achieved within our various main supervisory priorities.

1.1 Overall assessment of results in 2013

We by and large implemented our plans for 2013, which were based in part on our main priorities and commissions from the Ministry of Labour (now the Ministry of Labour and Social Affairs).

Making the players more conscious of their responsibilities is the guiding principle for all our efforts to help ensure that the industry develops and maintains a high level of safety. In our supervisory activities, we ask questions about – and thereby contribute to improvements in – that part of the management system at the companies which aims to ensure they are capable of ensuring on their own account that their operations are acceptable and comply with the regulations at all times.

The level of safety in the Norwegian petroleum industry is basically high. But it is not the case that this level, once achieved, will be self-sustaining. A continuous commitment is required to prevent it from deteriorating over time. Accordingly, the fact that the risk level in certain areas, as measured through our work on the annual RNNP report, showed no improvement in 2013 from the previous year does not conflict with the way we assess our performance in reaching our goals.

No known quantitative methods are available for determining the impact of our overall exercise of regulatory authority. Nevertheless, a number of indicators suggest that this supervision has a positive effect. Internationally, incidents such as the Macondo accident in the Gulf of Mexico during 2010 have prompted a number of official investigation teams to point to the North Sea nations and Norway as pioneers in terms both of the level of safety and of models for government regulation of the industry. Recommendations from these investigations underline the relevance and appropriateness of our main supervisory priorities for 2013, which are largely being maintained in 2014.

We also see that the international collaboration in which we participate contributes to good safety results, particularly in a long-term perspective. The mechanism here is that the various national regulators, by exchanging experience and discussing regulatory requirements and methods for exercising their official duties, present clear similarities to an industry which is international by nature. Such similarity in exercising the regulatory role also provides the industry with greater predictability in satisfying official requirements. Important

arenas for international collaboration in 2013 remained the International Regulators' Forum (IRF) and the North Sea Offshore Authorities Forum (NSOAF). International collaboration is described in greater detail in section 2.2.

We again devoted resources in 2013 to developing and operating our website in an active and up-to-date manner. We consider that openness in the form of publishing audit reports, decisions and so forth, and the volume of information which is thereby made available, contribute to the understanding of risk conditions and challenges in the industry.

1.2 Developments for accidents and injuries

No fatal accidents occurred during 2013 within our area of responsibility, either offshore and on land. Three people have died in occupational accidents over the past 10 years, most recently in 2009. Preventing fatal accidents in the petroleum industry is a mandatory goal.

A brief summary of the most important developments for accidents and injuries in 2013 is provided below. See the annual RNNP report published simultaneously with this document for a more detailed presentation of the risk picture.

1.2.1 Risk picture for offshore facilities

Figures from the RNNP which reflect management by the companies of contributors to the risk for loss of life associated with major accidents (the overall indicator) were at their lowest level in 2013. The trend for this indicator, calculated as a three-year rolling average, has flattened out over the past four-five years at a level below the previous period. That applies to both production installations and mobile units.

Hydrocarbon leaks were slightly more numerous in 2013 than the year before. However, only one of the nine leaks fell into the 1-10 kilograms per second (kg/s) category in 2013. This meant that the contribution to risk from hydrocarbon leaks in 2013 was the lowest recorded since these assessments began in 1996.

None of the leaks in 2013 ignited. No cases of hydrocarbon leaks from process facilities igniting have occurred since 1992, apart from some minor escapes which are not considered to have had the potential to cause a major accident.

The number of serious personal injuries in Norway's offshore industry remained fairly stable in 2013 at 24, compared with 23 the year before. Because working hours increased, the serious personal injury frequency nevertheless fell from 0.51 per million working hours to 0.48. That represents a statistically significant reduction compared with the previous 10-year period, and therefore means that the positive trend of recent years was maintained.

The personal injury frequency for contractor personnel on production installations, which has traditionally been higher than for operator employees, declined in 2013 and thereby maintained the positive trend seen in recent years. At 0.32 per million working hours, it fell for the first time below the frequency for operator employees.

After decreasing in 2012, the serious personal injury frequency increased slightly on mobile units during 2013. It was approximately equal in 2013 to the average for the past five years.

A total of 13 well control incidents were recorded in 2013, a reduction from 16 the year before. Well control incidents related to drilling production wells showed a particular decline, while the level of such incidents with exploration wells remained high in a 10-year perspective. Although the number of well control incidents was higher a number of years ago, it is nevertheless desirable that they continue to decline. We are accordingly following up these incidents closely, particularly with a view to identifying underlying causes related to management and control, experience transfer, learning from similar events and safety culture.

The number of ships on a collision course declined further in 2013. This positive trend can primarily be attributed to the effect of controlling sea areas around installations from the traffic management centres.

Three collisions occurred between installations and supply ships in 2013, all with limited consequences. The number of such incidents has been reasonably stable over the past decade at two-three per year.

Incidents related to structures and maritime systems fell from 12 in 2012 to 10 in 2013. Such events were relatively frequent over the past three years, which gives grounds for concern. This frequency runs clearly counter to the good progress made from 2004 to 2010. However, none of the incidents in 2013 were categorised as serious.

We conducted a qualitative study in 2013 to gain insights into causes of and possible measures to reduce the risk of structural and maritime incidents on the NCS. Four challenges were identified on the basis of technical literature, investigation reports, and interviews with and a questionnaire-based survey of specialists in the companies. These related to a need by the industry to enhance the quality and quantity of investigations into this type of incident, and to improve the exchange of information between players and between different phases in a facility's life cycle. Knowledge and practice related to maritime systems also need to be strengthened, while more systematic safety work and efforts to prevent major accidents are required in relation to both structural and maritime incidents.

An extensive questionnaire-based survey was conducted for the seventh time in 2013 among personnel working on the NCS. Generally speaking, the results show an improvement in many areas related to the HSE climate. At the same time, however, we see that the areas which remain challenging are the same one identified by previous surveys. These concern such aspects as the number of procedures and routines, inadequate maintenance and challenges related to language diversity.

The physical, chemical and ergonomic working environment does not appear to have changed to any significant extent from the previous survey in 2011. Where significant changes exist, however, they are to the better.

A positive trend for the noise indicator during recent years did not continue in 2013. Only two of 11 job categories showed an improvement. We expect that the industry project for noise reduction in the petroleum sector, launched in 2011, will lead with time to an improvement in the noise indicator.

Figures from the RNNP furthermore reveal that the industry faces challenges related to managing safety-critical barriers. The failure rate for certain key barriers related to hydrocarbon-bearing systems lies above the expected value for the industry as a whole. Results for barrier management at installation level show that certain facilities remain substantially above the expected failure rate. This could mean that some facilities operate with an availability for certain safety-critical barriers which is below the expected level.

Where working environment risk is concerned, see section 1.4.4 of this report on results for our main priority concerning groups particularly exposed to risk.

1.2.2 Risk picture at land-based plants

Factors influencing risk at the land-based plants have clear similarities with corresponding factors offshore, but may also differ. Efforts have been made in the RNNP process to adapt indicators so that they reflect the risk picture at the land-based plants as closely as possible.

One factor special to the land-based plants is the possibility that third parties – in other words, people who live or are present in the vicinity – could be exposed to accidents.

No fatal accidents occurred at the land-based plants in 2013. The most recent was suffered in 2005.

Thirteen incidents which fulfilled the criteria for serious personal injuries were reported in 2013, compared with seven the year before and three in 2011. Since hours worked were more or less unchanged, the personal injury frequency rose from 0.63 to 1.21 per million working hours. It was accordingly more than twice as high as in offshore petroleum operations, which gives grounds for concern.

Twelve hydrocarbon leaks occurred in 2013, compared with five the year before. If the number of

leaks is normalised with working hours, the 2013 level shows a statistically significant increase from the 2006-12 average. One of the leaks in 2013 ignited.

In addition to the ignited leak, one other fire occurred. This was considered to fall into the “small” category. Other incidents include one case of toxic emissions and 25 involving dropped objects, plus three vehicle accidents causing personal injury. These figures show relatively small changes from the previous years.

A questionnaire-based survey was conducted for the fourth time in 2013 among personnel working at the land-based plants subject to our jurisdiction. The results provide an overview of how the workforce assesses safety and the working environment at their own workplace.

Employees generally find the HSE climate at the land-based plants to be relatively good. At the same time, we see that significant changes for the worse have occurred in several areas since the previous survey in 2011. That applies to issues related to various procedures and routines, governing documentation and language challenges.

The physical, chemical and ergonomic working environment is regarded as relatively good, and has remained stable since the previous survey.

The indicator for exposure to noise is calculated on the basis of noise levels and time spent in the noisiest areas as well as contributions from noisy work operations. It shows that a number of worker categories involved in process and maintenance activities experience exposures which exceed the limit value of 85 dBA.

Seven cases of new or worsened hearing reductions were reported in 2013, compared with 12 the year before. These figures are substantially lower than on the offshore facilities. This difference is probably attributable to lower noise exposure because opportunities to disperse and insulate noisy equipment are greater on land than offshore. Other factors which could contribute are different reporting routines, and the fact that a number of reports from contractor personnel go to the Norwegian Labour Inspection Authority rather than to us, without this being picked up.

1.3 Independent assessment of supervisory strategy and regulations

The Ministry of Labour appointed a committee of experts in the autumn of 2012 to undertake a review of the supervisory strategy and HSE regulations for the Norwegian petroleum industry. Chaired by Professor Ole Andreas Engen, the committee reported to the ministry in August 2013.

The committee's mandate embraced the following issues.

- Do development trends in the petroleum sector (greater internationalisation, more and smaller players on the NCS, pressure on profitability and

possible pressure on collaboration between employers, unions and government) mean that challenges in the industry have changed in such a way that adjustments to government follow-up are also required?

- Is today's supervisory strategy adequate and appropriate for identifying factors/risk aspects of significance for HSE work and conditions?

- Are regulatory instruments appropriate and adequate, and are they used in a way which confers authority and yields results in the form of better HSE work in the industry?

- Is the supervisory role in the petroleum industry sufficiently clear in relation, for example, to a role as technical agenda-setter?

- If the industry becomes more prepared to challenge the instructions of the regulators concerning how compliance with the performance-related regulations is to be achieved, would it be useful, or even correct, to think in terms of clearer/more detailed regulation in some or more areas? In the event, how and in which areas might it be appropriate to change the orientation of the regulations, and what consequences might such changes have?

- What role and status do industry standards have in today's regulatory regime? Is the significance of these standards appropriate?

In its report, the committee of experts observed that it would be reasonable to claim that the Norwegian regulatory regime functions well, but that grounds also exist for making recommendations about how this regime could be further developed and improved. The overall recommendations from the committee are as follows.

- The Norwegian regime has proved robust over a long time and in the face of substantial technological and structural changes. It functions by and large well, and should be maintained. Assessing the overall structure, context and interdependencies in the regime will accordingly be important should changes be desired. Tripartite collaboration between companies, unions and government is an important cornerstone and must be maintained.

- Clearer prioritisation and use of instruments is required. A risk- and system-based strategy for supervision should be continued, with regulations which are primarily performance-oriented and related to industry standards. Consideration should be given to introducing a practice which explicitly compares costs to anticipated benefits when adopting new regulations and taking individual decisions.

- The government should improve the management of major accident risk by adjusting the regulations so that the industry's implementation of risk acceptance criteria, analyses and reduction processes is given substantially greater emphasis.

In our consultative comments to the ministry, we have

stated that we have taken note of the report as it stands and have also initiated work to assess matters raised by the report in the light of how the safety regime in the petroleum industry can be improved, and how the reports conclusions and recommendations can help us to follow up the industry in a better way.

1.4 Main priorities in 2013 – experience and results

1.4.1 Barriers

Audits, investigations and surveys of the level of risk in the petroleum industry in 2013 exposed relatively substantial differences between the players with regard to their understanding of the regulatory requirements for barrier management – and thereby for compliance with these requirements. We see that most companies still have challenges related to barriers. However, we have registered that our work related to barrier management has contributed to positive processes and initiatives in the industry.

Offshore operations

Audit activities, investigation of incidents and identification of the level of risk in connection with the RNNP process have exposed relatively substantial differences between the players with regard to their understanding of – and thereby compliance with – the regulatory requirements for barrier management. As a consequence, we identified a number of nonconformities with significance for safety and followed these up through audits in 2013. This follow-up identified a need to make the regulatory requirements related to barrier management more easily accessible and to inform the industry about the relationship between regulatory requirements, guidelines and relevant standards.

However, we have also registered that our activities related to barrier management have resulted in positive processes and initiatives generally in the industry. Statoil, as the biggest player on the NCS, comes across as an example of a company which has implemented good improvement processes in this area. It has come a long way in developing facility-specific safety strategies and performance requirements. Statoil's work is likely to be significant for the whole industry.

We have observed that operator companies with long operational experience have better documentation of their barrier management. Companies with less than five years of operational responsibility generally have less well-documented barrier management than the more experienced operators. Audits also reveal that all operators have an improvement potential for barrier management when new facilities are transferred from project to operations.

Land-based plants

Barrier management and the performance of the pressure blowdown system were key follow-up points for the

land-based plants in 2013 after the audits we conducted in 2012, particularly for Statoil's Hammerfest LNG plant. Audits in 2013 revealed improvements in several areas. The company is now paying greater attention and making a stronger commitment to overcoming the challenges for barrier management at the plant, but seems to be facing certain challenges over the progress of several of the measures. Viewed overall, experience from activity during the year shows that the 2012 audit had a good effect.

Most of the land-based plants have developed documents which describe local performance requirements for barriers, and these help to increase knowledge about the role and function of the barriers.

Mobile units

We have also registered that the mobile unit industry has come a long way with regard to influencing owners over the process of developing barrier performance requirements and strategies. Where mobile units are concerned, we continued to devote attention to this main priority when processing applications for AoCs during 2013.

Our observation is that most rig owners still have challenges in this area, but we also register that our activities related to barrier management have resulted in positive processes in the industry. In our view, the work being done on this issue among the rig owners is at least as good as in other parts of the industry.

We have also noted as a positive development that the Norwegian Shipowners Association has initiated activities to establish common approaches to the subject.

Role of contractors

The contractors are key players in the petroleum industry. They have a considerable influence on the quality of barriers and are therefore important contributors to risk reduction. These companies participate in all phases of petroleum activities, and represent a steadily growing part of the overall player picture. They perform a number of safety-critical tasks with barriers, and account for an ever increasing share of overall work in the industry, both offshore and on land.

A study of hydrocarbon leaks conducted as part of the RNNP process identifies key risks where the contractors have an important responsibility. Well control incidents have also been the subject of a similar study.

These challenges have been discussed in meetings with the industry, and calls made for collective arenas to share knowledge and experience and to collaborate on further risk reduction.

As a consequence of these meetings, we raised this issue with the parties in the Safety Forum. The industry has got to grips with the challenge and established two technical fora for the contractor sector – covering well incidents and hydrocarbon leaks respectively. The Safety Forum is being kept updated about developments in these areas and about various initia-

tives being pursued under the industry's auspices, and will follow up the measures implemented by the two new fora in 2014.

Establishing these technical fora is an important move for improving cooperation between the players, while emphasising the responsibility and role of the contractors in dealing with major accident risk on the NCS.

Barrier document

Barrier management covers a wider scope than the choice of technical and operational solutions in a planning or design phase. It is equally important to ensure that barriers fulfil their intended functions over time, and that companies always operate their facilities in accordance with the assumptions and terms of use.

On that basis, we have been the prime mover through a number of activities in securing the development of more integrated barrier management in the petroleum sector. That is the context for the preparation of our document on Principles for barrier management in the petroleum industry (the barrier document).

This document relates the requirements in the regulations and the guidelines to the content of relevant standards. The knowledge and experience incorporated in the document forms an important basis for our supervision and for the industry's own follow-up of barrier management.

The barrier document was further developed in 2013, in part through two studies which describe the function and role of emergency preparedness and maintenance in barrier management, and which have been incorporated in a new version of the document. It has now also been translated into English, partly because of interest from government agencies in other countries.

Work was also done in 2013 on defining operational and organisational barrier elements. The results of these efforts will be incorporated in the barrier document during 2014.

1.4.2 Management and major accident risk

Our attention related to management and major accident risk was primarily directed in 2013 at the drilling contractors – how these companies adapt their activities to shortages of critical resources, and how they follow-up and maintain an overview of their own operations. Our impression is that the companies give greater emphasis than before to the way managers influences risk down the organisation. This aspect of management cannot be over-emphasised. We otherwise note that the industry is making a bigger commitment to improved planning and efficiency as a result of reduced profitability and high costs.

Management plays a key role with regard to major accident risk. Initiatives and decisions pursued by managers define and influence conditions which are significant in this respect. We have devoted long-term

attention to management's responsibility for maintaining control over major accident risk.

Activity in the petroleum industry has been rising during recent years. This has prompted claims from various quarters that shortages of resources and expertise could reduce safety levels.

Such allegations were one reason why we paid special attention to drilling contractors in 2013, looking at how the companies adapt their activities to scarcities of critical resources, and how they follow up and maintain an overview of their own operations.

When following up management and control of expertise, we have seen that challenges vary in this area. The companies themselves say they have the supply of expertise under control, even though some disciplines – in subsea installations, for example – are more affected by shortages than others. A review of results from the RNNP process dealing with the competence of the individual employee shows a mildly positive trend with regard to self-assessment by personnel of their own expertise.

The attention we devote to risk and barrier management and to the work of the licensees reflects areas where companies develop transparency in processes and structures as part of efforts to reduce major accident risk. This yields better insight both internally and externally, which leads in turn to further improvement measures.

In our follow-up of mobile drilling units, we have noted that company managements themselves say that they understand their full and complete responsibility for maintaining the preconditions which underpin the AoC scheme.

Specific effects from this type of audit are that we help to identify areas and topics with an improvement potential on the individual installations which the companies themselves have failed to pick up on to the same extent. Feedback indicates that companies and employees regard this as a valuable supplement to their own audit activities offshore, and that it contributes both to enhancing knowledge and to increasing the attention given to the topics addressed in the audit.

1.4.3 Preventing acute discharges

An important part of our work during 2013 in the field of preventing acute discharges related to enhancing knowledge and prevention. This included paying greater attention to such aspects as developing risk assessment methods, learning from incidents, increasing knowledge of subsea installations, and well safety and robust wells. A series of industry seminars on the natural environment was organised during the year, and a number of player-specific audits were conducted. This main priority is not being continued in 2014, but has been incorporated in the other main priorities.

Our role in the work of protecting nature and the envi-

ronment from harm is directed primarily at the preventive side – in other words, supervising that the industry is working purposefully on preventing accidents which could cause acute discharges.

We have followed up the industry's commitment, in part by influencing the players to pursue proactive and systematic learning from major accidents and from other incidents which have actually given rise to acute pollution or could have done so.

A key consideration has been to influence the industry to acquire the necessary overview and control over the most important contributors to the risk of acute discharges in its activities, and to see to it that each company implements preventive measures which are proportionate to the possible consequences of acute pollution.

We have also given great emphasis to enhancing knowledge on the issue of subsea installations. Furthermore, our work has directed attention towards well safety and robust wells.

As in recent years, we conducted a number of player-specific audits during 2013 related to the environmental main priority. We have also organised a series of industry seminars, where communicating results and transferring experience occupied centre stage.

We feel good results have been achieved from our work over many years on the natural environment as a main priority. This topic will cease to be a special main priority from 2014, but will be pursued as an integrated part of the other priorities. We will therefore continue to have preventing damage to the natural environment high on our agenda.

1.4.4 Groups particularly exposed to risk

A large part of our work in 2013 with groups particularly exposed to risk related to categories in the drilling and well segment, with the main emphasis on mobile units. These activities exposed a number of weaknesses, including the familiarity of certain companies with working environment risk and how operators should relate to contractors. Noise received the greatest attention where working environment factors were concerned, and was followed up most closely in connection with audits and the processing of applications for consents and AoCs. Our audit activities helped to enhance the visibility of contract personnel as a group, and have directed greater attention to challenges in following them up.

Much of our work in 2013 with groups particularly exposed to risk related to categories in the drilling and well segment, with the main emphasis on mobile units.

We conducted a "breadth" activity in 2013, which means we put together and audited a number of groups comprising operator, drilling contractor and well service company. These sets were commissioned to map the working environment, assess risk with consequent risk-reducing measures, and evaluate how different

operating parameters could have been significant for risk and risk management.

A total of eight operators, 11 drilling contractors and 11 well service companies took part in this activity.

The results can be summarised as follows.

- The companies have limited familiarity with the actual working environment risk, and the ability to secure a qualified basis for risk-reduction measures is inadequate. The biggest improvement potential is to be found in the drilling and well service companies.
- The division of responsibilities between the three parties is not always understood well and consistently, and their ability to cooperate is not sufficient to ensure coordinated mapping, risk assessment and prioritisation of improvement measures. Information on risk is not communicated actively between the parties concerned.
- Operator companies are little involved in follow-up of groups particularly exposed to risk by contractors, and have limited knowledge of working environment risk on mobile units.
- The emphasis given by operator companies to productivity targets in following up contractors can put pressure on time, with negative consequences for the working environment and safety.

We also met a large proportion of the players in the drilling and well segment, both individually and collectively, and conveyed the results of our audits. We will be continuing to do this in strategic arenas during 2014. Through their own assessments and our feedback, the companies have recognised the weaknesses and taken the initiative on improvements.

ISS trades

Scaffolders and other trades involved in removal of facilities have been covered by supervisory activities aimed at groups particularly exposed to risk. Through various audits, we have looked at how contract workers – particularly in the insulation, scaffolding and surface treatment (ISS) trades – are followed up as part of systematic HSE work.

Contract workers

Audits have contributed to making contract workers visible as a category, and focused attention on the challenges faced in following up these groups. In particular, clarifying roles and responsibilities between operators, companies hiring workers and companies providing them has occupied a central place in our follow-up.

Together with the Norwegian Labour Inspection Authority, we initiated an R&D project at the Fafo and Sintef institutes to help learn more about safety and the working environment for contract workers in the petroleum sector and related industries under the Labour Inspection Authority's jurisdiction.

Noise

Noise has received the greatest attention where working environment factors are concerned, and was followed up mostly in audits, consents and monitoring of units with AoCs. We have participated as an observer in the industry's noise project, which terminated in early 2014. At the initiative of the Labour Inspection Authority and ourselves, the National Institute for Occupational Health (Stami) conducted a knowledge-acquisition process on the relationship between noise in working life and the development of hearing damage.

Chemical working environment

We conducted a questionnaire-based survey in 2013 to learn about the effects of the project pursued by the industry between 2007 and 2012 to improve the chemical working environment. While this survey was directed at company managements, questions were also put to chief safety delegates and working environment committees on offshore installations and at land-based plants.

The unanimous response is that commitment in this field has increased, and that the industry has strengthened its expertise base. However, conditions posing a potential risk appear to exist which have not been followed up with qualified mapping, risk assessment and measures. The companies report a backlog. We have also noted that the extent to which working environment committees have been involved, and their knowledge of the industry project and its follow-up on installations and at plants has been limited.

New technology

We have contributed through various approaches and instruments to the adoption of new technology for treating drilling mud. This technology appears to provide significant improvements in terms of noise and vibration, chemical exposure and physical workloads. This represents a long-desired step forward for a large group of workers.

1.5 Other results from supervision

1.5.1 Investigation of incidents

We have found investigation to be a good tool for learning about the causes of serious incidents and for focusing attention on causal mechanisms – technological, human and organisational. The primary purpose of an investigation is to help ensure that similar incidents do not recur and to contribute to disseminating experience through the industry which can support learning processes in the companies.

An investigation calls for substantial supervisory resources. Our criteria for deciding to investigate an incident relate to its seriousness with regard to the extent of injury/damage caused or the potential for harm, as well as opportunities to learn from it.

We initiated the investigation of four incidents in 2013:

- work accident at Kårstø (May)
- gas leak on Oseberg A (June)
- incident on diving support vessel Skandi Arctic (June)
- lifting incident on Statfjord C (September).

The investigation reports are available on our website.

1.5.2 Player picture

The picture is characterised by Statoil as a big national player, a few large international players and some new and smaller participants. This diversity can represent opportunities for improving the level of safety, but could also present a challenge. Many of the new operators and licensees are relatively small companies with limited capacity and expertise, and little or no experience of operations on the NCS. Most of these companies have so far pursued activities in the exploration phase, but some are now initiating work related to development and operation.

The number of companies with operatorships on the NCS has increased considerably in recent years, rising from 14 in 2001 to 43 by 31 December 2013. In addition come 25 companies which only play the role of licensees.

Although the operator in a production licence has an overall role in ensuring compliance with the regulations, the other licensees also have legal responsibilities and duties. Partly in order to emphasise this responsibility, we conducted an audit in 2013 with Hess as the largest licence for the Valhall field, where BP is the operator, and with the partners in Gassled, operated by Gassco.

The principal conclusion from these audits is that, in many cases, the licensee has little or no awareness of its responsibilities and duties. We plan further audits of licensees in 2014.

We again paid special attention during 2013 to new operators, particularly with regard to their first application for exploration drilling consent and in connection with the submission of a PDO.

1.5.3 Acknowledgement of compliance (AoCs)

Two AoCs were issued in 2013. Fifty-two mobile units had received such acknowledgements at 31 December.

In our view, the AoC system helps to create greater predictability for the industry, improves knowledge and understanding of the regulations, and enhances the sense of responsibility of mobile unit contractors. In certain cases, however, we have devoted unnecessarily large resources to considering applications because of deficiencies in the underlying documentation. This has resulted in lengthy communication with the applicant and thereby increased use of our time. Another consequence is that the contractors also incur costs.

However, we have seen a clear improvement – particularly since 2011 – in documentation from applicants who have been through this process on one or more occasions. Our reminders to the industry on the importance of good applications means first-time

applicants are also submitting better-quality applications now than was the case in the early years of the AoC scheme.

An AoC is mandatory for the following units which are registered in a national register of shipping and are intended to conduct petroleum-related operations on the NCS:

- drilling rigs
- accommodation units (flotels)
- floating production, storage and offloading (FPSO) units
- well intervention vessels

An AoC has been a requirement since 2004 for mobile drilling facilities to conduct petroleum operations on the NCS. The extension to other types of mobile unit came into force on 1 January 2007. However, it was decided that an AoC would not be given for FPSOs when these are operated by an operator company.

Acknowledgement of compliance (AoC)

An AoC is a statement from us which expressed the confidence of the authorities that petroleum operations can be conducted in compliance with the regulations.

More information about this arrangement can be found on our website.

1.6 Regulatory development

Proposals for amending the HSE regulations were developed and circulated for consultation in 2013. They have been developed in cooperation with the Norwegian Environment Agency and the health authorities.

We have received extensive comments from certain consultative bodies on some of the proposals, including the requirements for relief wells and certain changes at the interface between maritime and petroleum regulation. The proposed changes which did not attract significant comments came into force on 1 January 2014. Consideration will be given to the more extensive comments during the spring of 2014.

We completed work during the autumn of 2013 on regulations for lifeboats and evacuation equipment. A draft has been submitted to the Ministry of Labour and Social Affairs to be prepared for external consultation.

A final decision concerning certain more general comments received in the consultation processes related to the revised HSE regulations was not taken before the latter came into force in 2010. Work on assessing these subjects was subsequently initiated in dialogue with the companies and the unions. The results are incorporated in a report which provides a broader review of the need for future development of the regulations.

The report on future regulation was submitted to the ministry in the first quarter of 2013 with a view to securing the necessary clarifications for the individual proposals outlined in more detail. Other relevant topics have been subject to discussion in the Regulatory Forum. We have proposed that these issues are further considered by the forum in 2014, and have secured acceptance for this.

The Regulatory Forum

The Regulatory Forum is an important arena for information about and debate concerning work on developing and maintaining regulations and framework documents in the industry. It discusses plans for regulatory development, experience from applying the regulations and specific collaboration on regulatory work and organising consultative processes. The forum met five times in 2013. We take the view that the tripartite collaboration works well in this arena, and in line with intentions.

Standardisation work

The guidelines to the various regulatory requirements provide recommended solutions in part by referring to industrial standards (recognised norms) as a way of complying with the regulations. If such a solution is chosen, the regulatory requirement is normally regarded as fulfilled. A company which chooses an alternative approach must document that this meets the regulation's requirements.

We conducted a new review in 2013 of the key standards referenced in the petroleum regulations. Its results were incorporated in amendments which took the form of updated references in the regulations and which came into effect at 1 January 2014.

In order to obtain the best possible basis for determining which standards should be referenced in the guidelines, we participate as an observer in national, European and international standardisation efforts.

We again gave priority in 2013 to following up national and international standardisation work affecting the level of risk in the petroleum industry. That also included following up parts of the work being done in technical committee (TC) 67, sub-committee (SC) 08 on Arctic operations of the International Organisation for Standards (ISO). We have concentrated in this project on following up the working parties for emergency preparedness and for the working environment.

The expert committee on petroleum standardisation serves as a "mirror" committee for work in the European Committee for Standardisation (CEN) TC 12 and the ISO TC 67, but also conducts independent standardisation work through relevant Norsok projects. We participate in expert groups in all the disciplines relevant for our regulatory work, and are also represented on the sector board for petroleum standardisation at Standards Norway.

Our follow up of international standardisation was somewhat reduced from earlier years. That reflected collaboration problems between the ISO and the American Petroleum Institute (API) over the ownership of the

standards, and not least the failure to resolve the US and EU trade boycott of Iran. These conditions have contributed to a partial halt to ISO standardisation work over several years, but the position improved somewhat during 2013 following a collaboration agreement between the ISO TC 67 and the International Association of Oil & Gas Producers (OGP).

We refer to about 135 recognised norms in the regulations, and about 25 of our specialist personnel participated in following up standardisation work in 2013 – either as observers or as commentators in assessing whether a particular standard is suitable as a recognised norm in the regulations.

2. NATIONAL AND INTERNATIONAL COOPERATION

2.1 Safety Forum

Established in 2001, the Safety Forum is the key tripartite collaboration arena between companies, unions and government for embedding strategic projects and processes related to safety in the petroleum activity. Its strategic agenda at all times will reflect the industry's main safety challenges.

The forum is an arena for embedding processes and projects in the safety area, such as the RNNP process, the noise and chemical working environment projects and activities following up the Deepwater Horizon (DwH) disaster in 2010. It also serves as a consultative body in processes leading up to government White Papers affecting HSE in the industry.

We are responsible for administering the forum, which is chaired by our director general. Emphasis is given to ensuring that its activities are transparent and well documented, in part through our website. The forum draws on our own discipline teams and on industry specialists for presenting issues as well as trends and development aspects. This contributes to mutual expertise enhancement and a common understanding of risk conditions in the industry.

The Safety Forum held five all-day meetings in 2013, one special session to present the status revealed by the RNNP process, and the annual open conference staged in June. A visit was also paid to the Slagentangen refinery, where the Safety Forum held meetings with operator Esso. Members were given a presentation of the HSE management system for the facility and a workplace tour which included a demonstration of the new fire-fighting system.

In addition, a working seminar was held on the Safety Forum's modes of working and processes. Agreement was reached at this session on certain changes to working modes and decision processes in the forum. As the forum's chair, our new director general will further entrench it in our senior management.

A new technical secretary was also appointed for the Safety Forum in the summer of 2013.

Safety Forum priorities

The debate on what should be the Safety Forum's priori-

ties has been conducted with great engagement since it began in 2012. Underlying this discussion has been such issues as provisions in the Safety Forum's mandate, the working life White Paper and the petroleum White Paper.

These discussions concluded that the five most important areas of the Safety Forum's strategic agenda will be:

- major accident risk
- working environment risk
- collaboration between the various sides in the industry and worker participation
- capacity, expertise and the significance of operating parameters for safety and the working environment
- mutual sharing of knowledge and information.

All these points have been amplified and are available on the Safety Forum's website at www.psa.no.

Follow-up of the DwH disaster

We have used the meetings of the Safety Forum to provide a response to companies and unions in the consultation processes on the key documents Principles for barrier management in the petroleum industry (the barrier document) and Action in the industry - follow-up of DwH (the action document). Our identical letter to the employer organisations was also reviewed and entrenched with the participants in the arena.

The Norwegian Oil and Gas Association has also presented and reviewed its own report on experience from and action taken after the DwH accident. New equipment for capping and containment developed since the disaster has been presented to the Safety Forum's members.

Annual conference

The Safety Forum's open annual conference for 2013 brought together just over 200 key players to debate major accident and working environment risk in the industry. The conference again attracted a full house, and this big interest confirms its significance as a key arena for the various sides of the industry to discuss issues related to major accident and working environment risk in this business. The theme of the meeting was Time for a change of pace, which embraced such topics as learning from history, reflections on the report from the 22 July Commission, tripartite collaboration and increased activity in the far north.

Noise and vibration

Noise remains one of the major working environment challenges facing the industry, and has been a key issue at Safety Forum meetings. The forum has been continuously updated about developments in this important area, both from the noise project and through our own supervisory activities. Getting vessel owners involved in the project in a binding manner has been a challenge. For our part, it has been important to challenge the industry to initiate and highlight positive measures

through the noise project.

Chemical working environment project

The Safety Forum has long been an important supporter of and agenda-setter for efforts to improve the chemical working environment in the petroleum industry. A substantial number of activities and measures have been initiated by the forum in this area.

Stami has now summed up the projects conducted within the framework of the chemical working environment project. Its main conclusion is that much good and useful work has been done in these studies, but that a number of challenges remain – particularly where action is concerned.

To investigate whether actual improvements have been made in the chemical area, we conducted a questionnaire-based survey directed at operators of offshore installations and land-based plants. Managements, coordinating safety delegates and a total of 31 working environment committees took part. Both the survey and experience from our audit activities in the area show that the companies still have much work to do in carrying out qualified mapping and risk assessment of the chemical working environment. It appears that the companies were active for a time in establishing what should be done in this area, but have later failed to be vigorous in taking the necessary action.

Cancer Registry

The Cancer Registry of Norway's offshore project was initiated in the 1990s by a forerunner of the Safety Forum. It is based on a set of 28 000 offshore employees who responded to a questionnaire-based survey in 1996-98. This group has been followed up for cancers diagnosed from 1999. The risk for all forms of cancer has proved to be the same as for the rest of the population for men, and rather higher for women. However, some differences emerged between offshore workers and Norwegians in general where specific cancers are concerned. An increased frequency of mesothelioma, bladder cancer and oesophageal cancer was observed in men, while women were more prone to leukaemia and malignant melanoma.

Working time project

The petroleum survey on shift work, sleep and health (Pussh) being conducted by Stami has faced substantial challenges since its launch in 2009. It was based on our working time project and two international knowledge reviews, which contributed to a proposal by the oil industry to include shift work and health as a priority area where greater knowledge was required in the Petromax programme run by the Research Council of Norway.

The subject was again on the Safety Forum's agenda in 2013 with a view to strengthening dialogue with the project. Stami says that the project team now aims to complete its work in line with the original ambitions. The results are due to be presented to the Safety Forum in 2014.

Learning across industries and national frontiers

Experience transfer and learning across industries and national frontiers have been important considerations for the Safety Forum. Accidents and disasters on other national continental shelves have accordingly been presented at the forum's meetings to provide opportunities for learning lessons.

Hydrocarbon leaks and well integrity

A number of debates were conducted in various fora between the government and Norwegian Oil and Gas, the industry's interest organisation, concerning the negative trend for hydrocarbon leaks identified by the RNNP process.

Under pressure from the Safety Forum, the industry got to grips with this trend and established two specialist fora for the contractor sector, dealing with well incidents and hydrocarbon leaks respectively. The Safety Forum has been kept continuously updated at natural milestones on progress in this area and about the various initiatives being pursued by the industry, and will follow up which measures are implemented by the new fora during 2014.

2.2 International

Cooperation with industrial countries consists first and foremost of the global collaboration in the IRF and the NSOAF. Both function well, and we regard this cooperation as a valuable contribution to the overall attainment of our goals. They are supplemented by bilateral collaboration at the specialist level with certain countries, particularly the UK, Russia, the Netherlands and Denmark.

2.2.1 International Regulators' Forum (IRF)

This body was established in 1994 to be a competent driving force for developing safety in the international petroleum activity through regulatory collaboration on joint projects and the exchange of knowledge and information. Current members of the IRF are Australia, Brazil, Canada, Denmark, Mexico, the Netherlands, New Zealand, Norway, the UK and the USA.

In addition to its annual member meetings, the IRF stages the International Regulators' Offshore Safety Conference every two or three years. The most recent took place in Perth, Australia, in the autumn of 2013 with major accident risk as its theme. Through presentations and round-table discussions, these conferences make important contributions to the IRF collaboration.

The IRF resolved at its annual meeting in 2010 to initiate measures in five main strategic areas where the member countries agreed to use their resources to promote safety in the international petroleum sector. With the various members accepting particular responsibility for individual areas, we undertook to be responsible for performance indicators. In this context, we head a working group which will continue to develop selected indicators from the RNNP process with a view to establishing an international platform for systematising information on hydrocarbon leaks, well incidents,

collisions, fires, fatal accidents and serious personal injuries. We have also accepted responsibility for evaluating opportunities to help speed up further development of blowout preventers (BOPs), well control systems and instrumentation.

Accidents in the petroleum industry appear to be attracting far greater international attention today than was the case earlier, and both we and the industry players in Norway must therefore be conscious of their responsibility to contribute. The accidents involving West Atlas (Montara) and DwH (Macondo) have given international collaboration on strengthening safety in the petroleum industry far greater significance. It will accordingly be important for us to contribute actively to this work. We again committed resources in 2013 to keeping abreast of follow-up activities in the wake of these two accidents, both for our own learning and to contribute to the exchange of experience between regulators.

2.2.2 International Committee on Regulatory Research and Development (ICRARD)

ICRARD was established by the IRF in 1994 as a global arena for sharing information and experience from HSE research in the petroleum sector. To help ensure that research activities are known and made available across continental shelf boundaries, we established the www.icrard.org website in 2004 on behalf of the forum. This site is regularly used by member countries to publish R&D-related news stories. It also has a unique search engine which looks only for information on selected websites in the member countries.

The site received almost 2 100 hits from 93 countries in 2013. IRF members are agreed on the need to pay particular attention to R&D activities related to aging and producing-life extensions, carbon capture, transport and storage, and deepwater drilling.

2.2.3 North Sea Offshore Authorities Forum (NSOAF)

Safety regulators in Denmark, the Faroes, Germany, Ireland, the Netherlands, Norway, Sweden and the UK participate in the NSOAF.

Over the years, working groups appointed by the forum have conducted many projects aimed at identifying common challenges and adopting joint measures which can contribute to improving the level of HSE. Many challenges are of such a nature that they demand common action to achieve improvements. The industry is international, and many companies operate across continental shelf boundaries, which requires the regulatory authorities to act in the most coordinated possible manner. The regulators have limited resources, and exchanging experience, sharing information and collaborating permit more optimum use of these.

From time to time, the Norwegian regulations are alleged to set safety standards which drive up costs compared with offshore requirements in other countries. It is important in this context to have a good understanding of the way each offshore regulator

enforces regulatory requirements. The NSOAF collaboration contributes to this.

A substantial proportion of the NSOAF's work is conducted through the working groups appointed by its annual meeting. The latter receives reports from the various working groups and decides on the work programme for the coming period, including the possible winding up or creation of new working groups. Four such groups were in operation during 2013, covering HSE management in general, safety training, drilling and wells, and the exchange of information concerning the relationship of member countries to the EU. The NSOAF has also been extensively consulted by the European Commission on safety issues.

As part of the work programme in the wake of the accident in the Gulf of Mexico in 2010, the member countries in the NSOAF established a multinational audit series on organisational and human factors related to well control in 2012. Participating in this work also gave us access to useful experience and knowledge from the other participant nations. A joint report on the audit series was completed in 2013, and identified improvement and learning points for the industry. Each member country has published the report on its website, and the industry is being urged to discuss its findings and applying them to their work on continuous improvement in the area. The report can be downloaded from our website.

The NSOAF's members cooperate with the EDTC and the OMHEC.

2.2.4 Regulatory collaboration on the Arctic

Six nations have continental shelves which extend into waters defined as Arctic. Shared interests concerning safe operation in these vulnerable regions mean that governments have good reason to collaborate. We accordingly took the initiative in 2013 on a meeting between Arctic safety regulators. The countries invited were Canada, Greenland, Iceland, Russia and the USA in addition to Norway.

This meeting was held on 31 October at our premises. The emphasis at this initial session was on creating mutual understanding of each other's duties and challenges. A number of topics related to the far north were identified as common points of interest for the governments in all the countries, and it was agreed to assess how such a collaboration can best be carried forward.

2.2.5 European Diving Technology Committee (EDTC)

Some 20 European countries belong to the EDTC, and each member state can appoint one civil service, union, industry and medical representative. Norway has appointed a representative from each of these four categories, with the authorities represented by us. The EDTC's principal activity is work on joint documents which are posted to its website. Although its scope is confined to Europe, documents produced by the com-

mittee are also used as references in other parts of the world. One example is the document on diver expertise, which has been produced and issued together with the International Marine Contractors' Association (Imca).

During 2013, we raised issues related in particular to the education of bell divers and the use of intensive three-week courses to provide divers with expertise in line with the EDTC's competence standards. We are concerned that such courses fail to confer the necessary expertise and experience for engaging in diving operations in the North Sea. As a result, we have urged the members of the EDTC to establish a group to assess experience with such courses and possible requirements for amending the training

2.2.6 Offshore Mechanical Handling Equipment Committee (OMHEC)

The OMHEC brings together specialists on crane and lifting operations, and holds two meetings a year. Personnel from Denmark, the Netherlands, the UK and Norway participate in the committee's work, and each nation can appoint up to four representatives. Its principal activity is work on joint documents, such as common recommendations on issues related to cranes and lifting. These include recommendations on expertise requirements for personnel and competent persons, and on educational standards. The OMHEC also has an advisory role for the NSOAF on matters related to mechanical handling operations offshore.

A new chair for the committee is due to be elected for a three-year term in 2014. We have made a candidate available for this role.

2.2.7 Bilateral collaboration with Russia

Our collaboration with the Russian authorities represents an extension of the former Boris project, which began in 1995, and is supported in part by the Ministry of Foreign Affairs. With the clarification of the boundary line in the Barents Sea and growing activity in these waters, maintaining contact with the Russian government on petroleum industry safety continues to be important for us.

Our Russian partner is Rostekhnadzor, the regulator responsible for technical safety in the petroleum sector. Official responsibility for HSE in Russia is otherwise spread over various government agencies we are not in contact with. However, we are in touch with the Norwegian embassy and players familiar with Russia's petroleum sector.

We held a bilateral meeting in 2013 with Rostekhnadzor, which also participated in our international meeting on safety in the Arctic (see section 2.2.4 above) together with regulators from Canada, Greenland and Iceland.

The agenda for the bilateral meeting covered the status of work on developing regulations for the Norwegian and Russian petroleum industries, responsibility for mobile units, follow-up of the Barents2020 project, the RNNP process, and research and technology

development related to petroleum activities in the far north/Barents Sea.

We also participate in the marine environment group under the Norwegian-Russian environmental commission. We took part during 2013 in a comprehensive seminar in Moscow attended by government agencies, research institutions, and Norwegian and Russian companies. This meeting dealt with resource and safety management from various angles. We contributed papers on methods for risk assessment in order to manage risk and thereby help to prevent accidents and discharges.

2.2.8 Development cooperation

The Norwegian government established its Oil for Development (OfU) programme in 2005. This supports partner countries in administering their petroleum resources in an economically, socially and environmentally acceptable manner, based on Norwegian experience and petroleum administration.

Norway has gradually developed an administrative regime which creates the basis for apportionment and sustainable economic growth. This experience is in great demand from developing countries. The OfU is therefore the most popular programme in Norway's development cooperation efforts. The potential revenues which national governments can obtain through good administration of their resources far outstrip the actual support. This was confirmed through an evaluation of the OfU programme initiated by the Norwegian government and submitted in January 2013.

Within the programme, we help developing countries to establish an administration which can handle safety risks in the oil and gas sector. Operational responsibility rests with the Norwegian Agency for Development Cooperation (Norad), which seeks technical support in this work from a number of specialist agencies. Safety forms part of most OfU projects. We contribute to a number of these, primarily together with the Norwegian Petroleum Directorate (NPD), the Norwegian Environment Agency and the Petrad foundation.

We had activities in the following countries during 2013:

- Bolivia
- Ghana
- Iraq
- Libanon
- Myanmar
- Nicaragua
- São Tomé og Príncipe
- Sudan
- South Sudan
- Tanzania
- Uganda

We also give a number of speeches to delegations from nations worldwide under the OfU programme in order to inform them about the Norwegian management model and safety regime for the petroleum sector.

3. PUBLIC AFFAIRS AND COMMUNICATION

3.1 Our information policy

Information supplied to the industry, the media and the public at large will be characterised by openness, accessibility and accuracy. Given the special position occupied by the oil and gas industry in Norwegian society, we will provide information about its activities and answer questions to the extent that this is possible and acceptable given our role as a regulatory authority and our overall objectives.

3.2 Media management

All media enquiries are handled in accordance with the principles of our public affairs policy as specified above. In addition to direct contact with the media, we use our website to provide information about our follow-up of such matters as undesirable incidents. As a general principle, we publish specially-written articles only about our own activities – the launch of our own investigations, the submission of investigation reports and so forth.

3.3 The internet

The www.psa.no website is one of our most important channels for spreading information about who we are and what we do. Press releases, technical articles and interpretations of regulations are posted regularly to the site, which also hosts a dedicated section for the Safety Forum (www.psa.no/safetyforum).

In addition, information on all our supervisory activities is presented on the site in the form of articles. We do this both to make our work and priorities visible, and to make it easier for the companies to use the information for learning and experience transfer. The bulk of the material is published in both Norwegian and English.

Publication of supervisory activities on the web in English includes:

- investigation reports
- summaries of our audit reports
- notices of orders and orders
- consents
- acknowledgements of compliance (AoCs)
- identical letters to the industry (related to audits).

Our site has become one the most-used sources of safety-related information for the NCS, with roughly 40 000 hits and more than 20 000 unique visitors every month. We also offer a subscription service for news, supervisory information and interpretation of regulations, and had some 7 000 subscribers at 31 December 2013.

We make active use of our website to highlight our role, priorities, activities, audit results and so forth. In our view, the openness signalled through such publi-

cation, and the volume of information which is thereby made available to the world at large, represent a substantial contribution to understanding risk conditions and challenges in the business.

We relaunched our website in September 2013 with an updated graphic design. It was simultaneously adapted for all mobiles and tablets with the aid of responsive design. This means that the pages automatically adjust to the size of the user's screen, and the user experience becomes the same on mobile phone, tablet or computer.

Public interest in our activities is reflected in part through the number of requests for access to documents, which rose sharply over a number of years but now seems to have flattened out or declined somewhat. We responded to 3 239 such requests in 2013.

Dealing with requests for access makes heavy demands on our resources. Through the greatest possible openness, including on our website, we seek to reduce the public's need to apply for access to individual cases.

WEB WORDS:

Hits

Hits on our website represent the number of times somebody has searched our web pages and found what they were looking for.

Unique visitors

This expresses the number of people who have visited our website from individual PCs (IP addresses). However, many individuals or PCs may be behind each such address, depending on the IT solution chosen for the user location.

3.4 Electronic communication

L2S is a shared solution for processes related to the administration of production licences and official correspondence between the petroleum industry and the government on the NCS.

This solution is managed by the Exploration & Production Information Management Association (Epim). We follow up selected licences and serve as an observer on the committees.

JV Authorities is an integrated secure two-way web-based communication channel for exchanging formal electronic correspondence between the operators/licensees and the government within L2S. It has been provided with a high level of security, so that only sender and recipient can read the content. This solution offers full traceability of all documents exchanged.

No less than 59 companies currently use JV Authorities, compared with nine in 2012. We are very satisfied that so many companies have chosen to adopt this tool for electronic communication. That develop-

ment contributes to reaching our goal of full electronic interaction with the licensees in the petroleum industry.

3.5 Knowledge transfer

To contribute to knowledge transfer in the HSE area and to provide information on our regulatory role, activities and priorities, we consider it important to participate with papers and presentations in key strategic arenas such as conferences, courses and so forth.

We also stage our own courses and seminars to focus attention on areas which represent safety challenges.

Ten open specialist meetings and conferences were organised by us in 2013.

- Risk reduction and coherent HSE in the petroleum industry – on principles for risk reduction in the safety regulations for offshore petroleum activities. In cooperation with the Norwegian Environment Agency.
- Opportunity space for adaptation in the petroleum industry – on operating parameters for HSE and inclusive workplace (IA) work in the petroleum sector. In cooperation with the Inclusive Workplace Support Centre of the Labour and Welfare Administration (NAV).
- Management and major accident risk – on the way company managements keep informed about and act to contribute to risk reduction. Held in English.
- Technical seminar on ICT – to communicate experience from audits conducted on the management of ICT security related to process safety and to share knowledge generally in the area.
- Structures seminar – exchanging experience and lessons from the investigation of structure-related incidents, and on material choices in Arctic waters.
- Robust fire safety for offshore installations – on reliability and uncertainties in methods applied for fire prevention. In cooperation with the Norwegian Fire Research Laboratory at Sintef.
- Contractor conference – with particular emphasis on the role of contractor companies in well control incidents and barrier management.
- How to handle risk in integrated operations – presentation of results from a research project on risk management in integrated operations.
- Flexible risers seminar – with the focus on integrity, learning, sharing of experience, continuous improvement and prevention of major accidents on the basis of incidents related to flexible risers in recent years. Held in English.
- A learning industry – presentation of the main results from our two-year project to increase knowledge about learning in organisations.

We also organised a high-level conference on Arctic Safety in November, with an invited audience of senior

executives in the industry. The aim was to identify whether the industry feels it is well prepared to pursue acceptable operations in the far north in view of existing knowledge about the special safety challenges in the region. The conference attracted about 120 external participants.

Many of our managers, technical experts and other key personnel are also in constant demand to speak at courses and conferences, and to chair and participate in a number of committees for such programmes nationally and internationally.

4. ORGANISATION

4.1 Staffing

We had 166 employees in service at 31 December 2013. Women make up 45 per cent of the staff, and men 55 per cent. The proportion of women in senior posts is 40 per cent, and we are constantly working to achieve an even balance between the genders in all job categories.

The average age of the workforce is 52 years for men and 47 for women.

Sickness absence in 2013 was 2.8 per cent, compared with 3.6 per cent the year before.

Fourteen employees left in 2013, 12 from permanent and two from temporary posts. Twenty-six new employees joined, including one office trainee and two temporary staff.

4.2 Senior management

Anne Næss Myhrvold took over as our new director general on 2 May 2013 following the retirement of Magne Ognedal in April.

In addition to the director general, the senior management team comprises five area directors. Our Head of information is affiliated with this team. The communication and public affairs function reports directly to senior management.

4.3 Supervision

Six supervision teams monitor sectors or groups of players in the industry. Contact persons have been designated in each team to provide a fixed point of contact for the various players. Each team is headed by a supervision coordinator with product responsibility and formal decision-making authority.

The responsible managers in 2013 were Ingvill Hagesæther Foss and Finn Carlsen, as the directors of supervisory activities.

4.4 Professional competence

Our professional competence is divided into six discipline areas, each with its own leader responsible for human resources and for expertise development in their area. These areas were:

- drilling and well technology
- process integrity
- structural integrity
- logistics and emergency preparedness
- occupational health and safety
- HSE management.

The discipline areas allocate human resources to supervisory activities and multidisciplinary projects.

Øyvind Tuntland, the director for professional competence, was the responsible manager in 2013.

4.5 Legal and regulatory affairs

The regulatory development activity embraces:

- development of regulations and standardisation
- cooperation with government authorities in other countries and the responsible Norwegian ministry over regulatory development
- internal coordination and preparation of reviews, studies and reports for the ministry
- incorporating and interpreting European regulations under the European Economic Area agreement
- development of collaboration and coordination agreements
- managing public consultation processes relating to regulatory development.

The responsible manager in 2013 was Anne Vatten, director of legal and regulatory affairs.

4.6 Operational support and development

is responsible for our in-house operation. It also provides support for developing our own organisation and follows up our sub-contractors.

The activity embraces:

- human resources
- organisational development
- company occupational health service
- finance and contract management
- internal security and reception
- building coordination
- intranet and web information system
- library
- document centre
- system development/electronic processing
- operation of shared services for the NPD and Petrad.

The responsible manager in 2013 was Gerd Randi Kaland, director for operational support.

5. KEY FINANCIAL FIGURES

The Storting determines both expense and income appropriations for the PSA as part of the central government budget. As a government agency, the PSA submits its accounts to the Ministry of Finance in accordance with the cash accounting principle.

Expenses

Operation of the PSA cost NOK 233.9 million in 2013. The table show how this breaks down between the main items. Corresponding figures for 2012 are shown for comparative purposes (all figures in NOK).

	2013	2012	Endring i kroner	Endring
Pay and benefits	145 407 149	133 451 964	11 955 185	9.0%
Goods and services	63 112 631	64 612 746	(1 500 115)	(2.3%)
Total operating expenses	208 519 780	198 064 710	10 455 070	5.3%
Contract-related pay and benefits	1 524 733	2 090 477	(565 744)	(27.1%)
Supervising the petroleum activity	21 597 154	14 786 311	6 810 843	46.1%
Contract and collaboration activity	668 743	-	668 743	
Total special operating expenses	23 790 630	16 876 788	6 913 842	41.0%
Major equipment purchases	1 575 120	787 785	787 335	99.9%
TOTAL EXPENSES	233 885 530	215 729 283	18 156 247	8.4%

Income

The PSA had an income of NOK 116.1 million in 2013, which breaks down as follows:

	2013	2012	Endring i kroner	Endring
Contract and collaboration income	2 636 962	2 624 570	12 392	0.5%
Refunded supervisory expenses	65 238 908	74 824 384	(9 585 476)	(12.8%)
Miscellaneous income	23 820	467 177	(443 357)	(94.9%)
Conference/seminars	21 300	38 207	(16 907)	(44.3%)
Refunded labour market measures	-	-	-	-
Refunded maternity/adoption pay	1 036 212	325 684	710 528	218.2%
Refunded trainees	78 110	34 533	43 577	126.2%
Refunded sick pay	669 749	1 252 989	(583 240)	(46.5%)
Sector fee	46 379 863	-	46 379 863	
TOTAL INCOME	116 084 924	79 567 544	36 517 380	45.9%