

PETROLEUM SAFETY AUTHORITY NORWAY 2009

# ANNUAL REPORT



PETROLEUM SAFETY AUTHORITY  
NORWAY

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## FOREWORD

This publication is the facts section of the annual report from the Petroleum Safety Authority Norway (PSA) for 2009. It should be read in conjunction with our publication entitled Safety – status and signals 2009-2010, 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 factual information on conditions which affected our operations in 2009. That includes the priorities we set for our supervisory activities and other work. This publication previously also contained facts about selected incidents, accidents and injuries and our assessments related to these. That overview will now be incorporated in a new annual publication which will be issued in August.

Our annual report on Trends in risk level in the petroleum activity (RNNP) contains an extensive overview of incidents, accidents and injuries in 2009. 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.

## ABOUT THE SAFETY CONCEPT

Safety means protection against the loss of assets. The assets we at the PSA are assigned to protect include human life and health, the natural environment, and the material value represented by installations and equipment. The last of these reflects society's interest in avoiding financial loss as a result of accidents, and in meeting delivery commitments through high operating regularity.

The health, safety and environmental (HSE) concept has gained broad application in society. Although it includes safety, this concept has acquired a general sense

related to the working environment – including protection against personal injury and occupational illness. These values come high on our agenda. The HSE concept, as generally applied today, nevertheless fails to cover the full breadth of the assets we safeguard.

Where in this report and other contexts the safety term is used, it is in the sense we have described here. We nevertheless apply the HSE concept where appropriate – when, for instance, we refer to external documents or contexts in which this concept has been employed.

## **1. SUPERVISION OF HEALTH, SAFETY AND THE ENVIRONMENT**

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

- form a picture of the safety status of one or more of the players in the petroleum business
- influence the players with a view to improving safety conditions
- ensure that all the players conduct their activities in accordance with regulatory and/or in-house requirements
- consider applications for consents, acknowledgements of compliance (AoCs) and plans for development and operation/installation and operation (PDO/PIO)
- assess whether compensatory measures adopted are adequate for operating acceptably
- investigate conditions relating to serious undesirable incidents
- conduct supervision pursuant to the Act on Pay Agreement Application (non-refundable activity).

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.

To achieve the best possible application of our resources in meeting the targets which have been set, we frame a number of main priorities every year which form the basis for our supervisory activities. The following main priorities were set for 2009:

1. extending the producing life of installations
2. management and major accident risk
3. technical and operational safety
4. groups particularly exposed to risk
5. prevention of harm to the natural environment.

The order in which these priorities are listed is not intended to be a ranking by importance.

Work on our main priorities is supplemented by certain other activities of

significance for safety. These will be confined, for instance, to a specific company, a particular type of activity or the like. We seek to coordinate such tasks with other supervision which falls within the priority areas in order to make the best use of our resources.

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

### **1.1 EXTENDING THE PRODUCING LIFE OF INSTALLATIONS**

The purpose of this main priority is to supervise that the companies maintain an acceptable level of safety on installations and at plants being or due to be used beyond their original producing life. Within a few years, more than half the installations on the Norwegian continental shelf (NCS) will have passed their original design life. The challenges this presents affect safety for people, the environment and material assets.

We set the following goals for our work in this area:

- determine criteria and frameworks for producing life extension
- contribute to the development of good standards and guidelines by the industry for producing life extension
- collaborate with regulators in other countries to exchange information and contribute to similar treatment of
- producing life extensions across national boundaries
- contribute to a high level of expertise on aging effects and producing life extension in the industry and in our own ranks
- ensure resource-efficient consideration of consent applications.

Following our request in 2006 that the Norwegian Oil Industry Association (OLF) develop standards or guidelines for extending producing life, this project was completed in 2009. The OLF’s work has resulted in new standards and guidelines for installations, subsea systems, pipelines and process systems. We have evaluated all the

documents and conveyed our comments to the OLF. Providing our observations are taken into account in an acceptable manner, we take the view that the industry now has a good basis for making safety assessments associated with producing life extensions in the above-mentioned areas.

We have initiated work to assess possible requirements for updating the regulations with regard to aging. Our experts also collaborate with their counterparts at the British and Dutch regulators to exchange information and to harmonise their approach to regulation as far as possible, since these countries to some extent face similar challenges in this area.

A multi-year development project with Sintef to strengthen our expertise in this area was completed in 2009. This work has involved gathering and systematising information about aging and producing life extension as the basis for implementing processes for such extensions on offshore installations. In this context, an earlier project report has been updated and expanded to include a broader human-technology-organisation (HTO) perspective on aging and producing life extension.

We have also contributed to strengthening the industry's expertise in this area. An important arena in this context is provided by meetings with operators who are in the process of preparing consent applications for producing life extensions.

In addition, our supervisory activity has helped to identify the consequences of aging and extended producing life. As part of our audits, we assess how the maintenance philosophy and strategy adopted by the companies for aging installations reflect the way such work should be managed, given that a certain proportion of producing life has been used up. We have given priority to auditing those companies which face the biggest aging challenges.

We issued four consents for producing life extensions in 2009, and made a substantial commitment into considering these applications. The processes undergone by

the companies have contributed to greater understanding of such aspects as the status of the installations' technical condition and compliance with regulatory requirements.

## 1.2 MANAGEMENT AND MAJOR ACCIDENT RISK

Our audits in 2009 have followed up how managements

- maintain an overview of realities and risk in their own business
- assure that responsibility for risk management is clearly defined
- assure that requirements for collaboration on managing risk is clearly defined, both internally and between the parties involved
- ensure adequate capacity and expertise in the organisation
- encourage learning and improvement.

One of the audit activities focused on enterprise management and major accident risk was conducted across 11 companies, including five as a follow-up to audits carried out in 2008. Each company has performed a self-assessment of the performance of its own senior management with regard to reducing major accident risk. Some companies have volunteered the information that this job has initiated useful processes internally. Companies presenting their assessment of progress and conditions in this area at follow-up meetings have pointed to important improvements. A number of companies have made similar comments after being asked for their observations. They include operators, licensees and contractors.

By auditing the integration process in Statoil (formerly StatoilHydro), we have encouraged the company to pay greater attention to the importance of a focus on the decision-making basis at process milestones, and to the way this addresses the complexity and assessments of risk during complex changes where acceptable operation must also be maintained. Verification of working conditions for offshore supervisors in change processes has exposed aspects which we will be following up in our future audits.

We have also conducted audits of

the companies' ability to learn from incidents, and identified areas where improvements are needed. In an associated audit activity concerning organisation factors in accident investigation, we analysed 22 incidents/accidents to acquire an understanding which we will feed back to the industry and internally.

Furthermore, measures to enhance our expertise have given us additional insight into and understanding of financial, contractual and insurance aspects of significance for safe operation. Changes in market conditions are included here.

We are sure that the prominence we have given to the need for attention in this area has contributed in itself to creating management awareness of the issues involved.

### 1.3 TECHNICAL AND OPERATIONAL SAFETY

The technical equipment on installations and at plants is extensive and complex. It must handle large amounts of energy in the form of oil and gas, partly under high pressures. Incidents which allow control of these energy volumes to be lost present a big accident potential.

Our supervision in this area again focuses on the ability of the players to manage risk.

Within this priority area, we paid particular attention during 2009 to techni-

cal and operational barriers and to the way the companies conduct, follow up and use risk analyses in the operations phase and for modifications.

Where technical and operational barriers are concerned, our ordinary supervisory activities in 2009 were supplemented by establishing a project which aims to conduct a comprehensive review of the requirements to be set for the various barriers on the basis of the performance-oriented requirements set for this area in the regulations. The project has identified ignition source control and emergency power supply as the two first subjects for study. This work will continue in 2010 and is expected to acquire a better foundation for efficient supervision in this area while providing the industry with a clarification of what the regulatory requirements on barriers involve in practice.

We have found that the barrier concept is less familiar and applied less widely at land-based plants than offshore. Our audits check that organisations at the land-based plants learn from serious incidents which have occurred internationally in recent years, where the failure of critical barriers has been the direct cause or has contributed to the scale of the damage. In our experience, knowledge of such incidents varies among senior plant managers. A few measures have been implemented to learn from

## BARRIERS

In this context, barriers mean systems of functions which can prevent or reduce harm in the event of an undesirable incident.

They can be divided into physical and non-physical. The latter embrace operational or organisation barriers. A barrier will often involve at least one physical element, such as a valve. Associated elements could, for instance, include a valve activator and its operational systems and components.

Barriers are built into designs and procedures in accordance with regulations and standards, with the aim of reducing the risk for people, the environment and material assets.

the incidents, but their effects are difficult to trace. The incidents are little known among other relevant personnel.

With regard to the management of risk related to technical and operational safety, we conducted a survey in 2009 among relevant employees in various companies to secure an overview of the use of risk analyses/assessments.

This survey confirmed the impression that safe job analyses (SJAs) are a well-established tool which is extensively used. Quantitative risk analyses might appear to be underused. It could seem that the SJA is also the preferred method in cases where quantitative risk analyses would have been a more appropriate tool.

We also perceive a potential for improvement in applying experience from investigations and earlier incidents to support risk analyses. Furthermore, we see examples where the assumptions applied in and guidance provided by risk analyses are not conveyed sufficiently well for optimum use to be made of these assessments in planning modifications and maintenance. Other areas for improvement include better knowledge about the use of formal risk analyses and a broader involvement of relevant personnel in initial assessments.

Little difference exists between offshore installations and land-based plants in attitudes towards the use of quantitative risk analyses.

#### 1.4 GROUPS PARTICULARLY EXPOSED TO RISK

In this priority area, we have conducted audits of the systems used by the players to identify and monitor groups particularly exposed to risk. We have checked that the companies can demonstrate the establishment of a functioning management system, which ensures that the risk faced by categories of workers is identified, clarified and followed up in such a way that working environment and personnel safety conditions are fully acceptable in all parts of the contractual chain. We have given weight to the way operators, main contractors and sub-contractors assess the significance of frame

conditions in determining the risk faced by groups of contractor personnel. Examples of such conditions include contractual terms and the division of responsibility between operator, contractor and sub-contractor.

We believe that our supervision has contributed to a stronger emphasis on issues related to identifying and following up groups exposed to risk in the industry. Attention has also been focused on differences between operator and contractor employees where groups particularly exposed to risk are concerned.

Our follow-up has also enhanced knowledge both in the industry and within our own ranks about the significance of frame conditions for risk. We have also secured a clearer understanding of the concept of frame conditions in this context.

We have witnessed specific improvement measures at the players we have audited. Several companies, for instance, have developed survey tools which can integrate information about working environment conditions and personal injuries in relation to worker categories. A number have also reported back that our supervisory activities have led to a better climate of collaboration between operator and contractor.

#### 1.5 PREVENTION OF HARM TO THE NATURAL ENVIRONMENT

Our supervision related to the natural environment is intended to influence the players to prevent acute emissions/discharges, make integrated assessments with regard to people, the environment and material assets, and choose solutions which support national and regional environmental goals.

No incidents occurred in 2009 with serious environmental consequences. However, certain acute discharges take place which are individually small or insignificant but which indicate a need for improvement – especially with regard to activity in areas which are particularly sensitive in environmental terms.

Where minor acute discharges are concerned, such as those from slip joints, it can be difficult for the players to see the immediate benefit of making improvements.

Work on attitudes may also be needed here in addition to technical enhancements.

On the basis of our role in accident prevention, we make a direct contribution to minimising the risk of acute emissions/discharges through our overall commitment to maintaining a high level of safety in petroleum operations. This commitment covers the whole range of our activity, from continued development of the regulations, through supervising compliance with these, to monitoring risk trends over time and collaborating with the parties on important improvement processes.

We also follow up how new environmental requirements affect safety and the working environment as a consequence of introducing innovative technology, novel working methods and new modes of organisation. We check that the companies, through good management and control, ensure that these changes do not have a negative impact – and preferably have a positive effect – on safety and the working environment. That in turn lays an important foundation for safe operation which minimises the threat of acute emissions/discharges.

In part through work related to development solutions and award criteria, we have made specific contributions to establish the principle that accident prevention must become more ambitious in areas where the consequences of an accident for the natural environment are more serious than usual. In other words, preventive measures must relate to the possible consequences for the natural environment.

By developing well-adapted regulations, we help to lay the basis for an important measure related to the climate issue. Our role with regard to carbon capture, transport and storage (CCS) is to ensure that this solution is pursued in an acceptable manner with regard to safety and the working environment. We have initiated a review of relevant regulations to ensure that these are further developed so that they will also be appropriate for activities related to CCS. We have helped to narrow the knowledge gap and have positioned ourselves in rela-

tion to these issues in the context of both research and development and regulatory development.

We are also making contributions to the technical aspects of work on management plans for sea areas. Through this participation, our aim is to ensure that accident-prevention measures receive the necessary attention in the planning process.

Viewed overall, we believe that we have helped to enhance the attention paid to the safety and working environment consequences of climate- and environment-related measures. We also take the view that more people than before have acquired a clearer perception that we play an important role in achieving national environmental and climate goals through our work on safety and the working environment in the petroleum activity.

## 1.6 OTHER RESULTS FROM SUPERVISION AND GUIDANCE

### 1.6.1 Investigation of incidents

We have found investigation to be a good aid in learning about the causes of serious incidents and for focusing attention on causal mechanisms – human, technological 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.

We completed the following investigations in 2009:

- lifeboat incidents on Veslefrikk and Kristin (January)
- incident with a serious personal injury on Deepsea Bergen (March)
- fatal accident in connection with scaffolding work on Oseberg B (May)
- incident with a serious personal injury on Troll C (May)
- condensate leak at Kollsnes (May)
- serious lifting incident with personal injury on Stena Don (June)
- collision between vessel and



- installation on Ekofisk (June)
  - serious lifting incident on Deepsea Atlantic (August)
- The investigation reports are available on our website.

### 1.6.2 Player picture

The number of smaller players has increased substantially in recent years. We devote the largest part of our resources to following up operator companies with fields in the production phase and with forthcoming exploration drilling and development projects. The number of players in this category has been relatively stable in recent years. However, we have witnessed a substantial expansion in small companies with low levels of activity in the respective production licences. Through acquisitions and mergers, we see that new medium-sized companies are being formed with the expertise and strength to undertake more extensive activities on the NCS. We are giving priority to closer follow-up of these.

We have initiated a broad strategy review to analyse the steps which we as the regulator should be taking in light of industry trends, and to be prepared for future challenges. One area which forms part of these assessments is clarification of the responsible-party hierarchy – in other words, where responsibility rests among the various players and companies in the industry. This in turn will form the basis for our expectations of expertise and capacity at small companies.

Through our audit work and feedback from the companies, we have formed the clear impression that our activities have contributed to enhanced understanding of the regulations among new/"young" organisations with limited petroleum experience.

### 1.6.3 Acknowledgement of compliance (AoCs)

Nine AoCs were issued in 2009, and 41 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 owners.

## ACKNOWLEDGEMENT OF COMPLIANCE (AoC)

An AoC is a statement from us that a mobile installation's technical condition as well as the applicant's organisation and management system are considered to comply with relevant requirements in Norway's offshore regulations.

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

In certain cases, however, the resources we have devoted to considering applications are unnecessarily large because of the poor quality of the underlying documentation. This has resulted in time-consuming communication with the applicant and a longer process. Another consequence is that the owners incur costs. The issue of poor-quality applications has been raised with the industry in general. The individual applicant has also been reminded of the requirements for submitting an AoC when they notify us of their intention to apply.

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 units
- well intervention vessels.

An AoC has been a requirement since 1 January 2004 for mobile drilling units to conduct petroleum operations on the NCS. The extension came into force on 1 January 2007.

A number of new players have emerged in recent years with limited knowledge of the regulations and experience of the routines associated with the AoC system.

This has meant that the resources we devote to considering applications for AoCs are more substantial than expected.

#### 1.6.4 Social dumping

During 2009, we followed up observance of the regulations on pay agreement application and the duty to verify compliance pursuant to the regulations on information and compliance responsibility and the right of inspection. This was done as part of audits at the land-based plants, but no specific audit activity focused directly on these issues. We have not seen any need to conduct specific audits directed at social dumping since the number of foreign employees at the land-based plants is now relatively small.

Given our experience from an audit at Mongstad, where an appeal by a player against our order was upheld by the ministry, we have submitted a proposal for amending the regulations to make the main contractor the responsible party in our area of responsibility as well. This will accord with the responsibility held by the main contractor in other land-based activities.

As part of audit work in 2009 aimed at identifying and following up groups particularly exposed to risk, we checked compliance with the HSE regulations for foreign contract labour at the land-based plants. In one case, it was found that Norwegian and foreign contract workers involved in insulation, surface treatment and scaffolding who fall ill or need work customisation were not being followed up. It also emerged that risk had not been adequately clarified for these groups. An unclear division of responsibility between the main contractor and various sub-contractors/labour hire companies concerning clarification and follow-up of risk was identified as one of the reasons for this. Following this audit, the operator and main contractor were asked to review their systems

for maintaining the safety of and working environment for sub-contractors and contract workers.

#### 1.7 REGULATORY DEVELOPMENT

A draft version of new integrated HSE regulations for petroleum operations offshore and specified plants on land has been completed and was submitted to the ministry in 2009 with a request that they be adopted. The new framework regulations on health, safety and the environment for petroleum operations offshore and specified plants on land were adopted by the Council of State on 12 February 2010, and come into effect on 1 January 2011. We are now in the process of completing work on establishing the other HSE regulations.

Following up national and international standardisation efforts of significance for safety in the petroleum activity remained a priority in 2009.

Furthermore, we worked systematically during the year on identifying regulatory requirements related to carbon management. Today's regulations contain requirements for a systematic approach to all types of risk in the activity. We will nevertheless review relevant sections of the regulations with associated guidelines to identify any need to supplement or amend their content.

An internal project team has also been established with the mandate to propose the incorporation of changes identified as necessary in the regulations governing HSE in the petroleum activity. The goal is to be able to approve the regulations during the summer of 2010.

## 2. NATIONAL AND INTERNATIONAL COOPERATION

### 2.1 Safety Forum

One of the principal intentions with the Safety Forum, which brings together companies, unions and government in a tripartite collaboration, is to provide a consultative arena for strategic projects and processes related to safety in the petroleum activity. Processes related to a new White Paper on HSE in Norwegian working life occupied a key place in 2009. After members had contributed their own proposals on this issue, these were summarised and reviewed by the forum and conveyed to the Ministry of Labour. A selection of issues on the forum's agenda in 2009 are provided below.

#### Lifeboat projects

The Safety Forum continued to follow up the lifeboat project in 2009. This was established by the OLF after weaknesses and limitations were exposed in one type of freefall lifeboat on the Veslefrikk field in the summer of 2005. Since then, the project has reviewed all the different freefall types on the NCS, and discovered a number of shortcomings. These have been corrected or have led to restrictions on the use of the craft.

This work has included the strength of the superstructure, the forces acting on passengers during a launch, blows against the hull and, not least a new standard for future craft. The first phase cost more than NOK 200 million. A total of 20 000 model trials with 14 different designs and some 250 full-scale tests were carried out with freefall lifeboats. The second phase was launched in the autumn of 2007 and continued in 2008 and 2009.

A parallel project pursued by the Norwegian Shipowners Association (NR) has included such elements as design and improvement of existing equipment, training and expertise, and maintenance and optimisation of rescue equipment. This project has also reported continuously to the members of Safety Forum.

#### Chemical working environment

Partly on the basis of discussions in the Safety Forum dating back as far 2002, a number of activities concerning the chemical working environment were instituted by government, industry and specialist/research teams. This commitment to uncovering the health risk of chemicals has been a constant topic at forum meetings, with the OLF taking a leading role through the project on the chemical working environment in the oil and gas industry.

This work was intended to provide a unified picture of the exposure picture, both past and present, describe and close knowledge gaps and help the industry to become better at handling working environment risk associated with the use of chemicals in the oil and gas sector. A number of activities and measures were initiated in 2009, and experience and knowledge have been shared through the OLF's website as well as dedicated meetings, courses and conferences. Status reports on the project have been given continuously at Safety Forum meetings. Norway's National Institute for Occupational Health has also attended forum meetings to provide status reports on its involvement in this area.

#### Integrated emergency preparedness offshore

The Safety Forum has been involved in this work since it was initiated in 2008. During 2009, we summarised our efforts to establish the status of emergency preparedness offshore. Carried out by external consultants under our leadership, this work builds in part on analyses of our audit reports and investigations, results from the RNNP studies, data and statistics from the companies, incident data and interviews. The main conclusion of the report is that emergency preparedness offshore is good. The members of the Safety Forum supported the work, which was regarded as important for the overall picture of offshore emergency preparedness. The report is available – in Norwegian only – on our website.

### Worker participation

The Safety Forum followed up work carried out in 2004 on worker participation. The report from that work was prepared by the parties under our leadership. As a follow-up, a voluntary trial scheme for worker participation in two major production licences was established in 2006 for a two-year period. At the end of 2008, we found that none of the companies had established routines for implementing the scheme. The OLF thereby acknowledged in 2009 that the initiative had not been followed up by the industry after its launch. The OLF and the companies involved nevertheless did not want to re-establish these pilot projects, but wished instead to build on existing collaboration arenas in the companies.

A number of processes and projects for collaboration, experience transfer and worker participation were initiated in 2009. Through dedicated sub-committees and working parties, the Safety Forum has been informed about and involved with two collaborations. One is the joint project between the PSA, the Employment and Welfare Administration (NAV) and the Norwegian Labour Inspection Authority on achieving and further developing an inclusive workplace (IA) agreement which also applies to offshore employees. The other involved the creation of a new advisory committee for RNNP work. The Safety Forum was also invited to share its experience with the employees involvement committee .

### Safety Forum annual conference

The annual conference of the Safety Forum was again well attended in 2009. A number of speakers from the industry, government and centres of expertise covered current issues in answering three questions. These were: what has been learnt from earlier major accidents and near misses, what does the financial crisis mean for safety in the petroleum industry, and how should crises be managed when they first occur. A number of good and personal contributions moved, involved and challenged many.

## 2.2 INTERNATIONAL

### 2.2.1 North Sea Offshore Authorities Forum (NSOAF)

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

The forum's annual meeting 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. There are currently four of these, covering training, wells, EU/EEC and HSE.

The NSOAF's members cooperate with the European Diving Technology Committee (EDTC) and the Offshore Mechanical Handling Equipment Committee (OMHEC).

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 PSA representing the authorities. 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 committee 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).

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.

### 2.2.2 International Regulators' Forum (IRF)

Members of the IRF are the USA, Canada, Brazil, the UK, Australia, New Zealand, the Netherlands and Norway. The forum was established in 1994 to be a driving force for developing safety in the petroleum activity through regulatory collaboration on joint projects and the exchange of knowledge and information. In addition to the annual member meetings, the IRF stages the International Regulators' Offshore Safety Conference every three years. The next is due to take place in Vancouver, Canada, during October 2010.

We hosted the IRF's 16th annual meeting in September 2009. Apart from regular items, such as the latest news on priority activities in the member countries and joint projects, the opportunity was taken to discuss the helicopter accidents during the past year on the Canadian and UK continental shelves and the follow-up of these, as well as a briefing on the Montara/West Atlas accident off Australia.

### 2.2.3 Bilateral collaboration with Russia

Our collaboration with the Russian authorities represents an extension of the former Boris project, and is supported by the Ministry of Foreign Affairs. As part of the collaboration in the marine environment group under the Russo-Norwegian environmental commission, we headed a joint audit in

2009 with participation from both Norwegian and Russian regulators. We and the Norwegian Pollution Control Authority (now the Norwegian Climate and Pollution Agency – Klif) took part from Norway, with Russia represented by its corresponding Rostekhnadzor and Rosprirodnadzor agencies. This audit focused the technological and expertise aspects of preventing emissions/discharges. The work was done on an installation off Norway and provided an insight into differences and similarities in the regulatory approaches of the respective governments.

We have also participated in the Barents 2020 project led by Det Norske Veritas. This initiative by the Norwegian government is partly funded by the Ministry of Foreign Affairs. It has conducted a review of existing national and international standards to identify where changes are needed in order for these to be able to set acceptable norms for HSE and the working environment in far northern waters. Participants from the Russian side have largely hailed from the companies and the scientific community, while one goal of our further follow-up will also be to continue working with the Russian authorities on the question of how international norms should be reflected in national standards.

We have also kept abreast of the development of offshore petroleum activities in Russian waters – in part through meetings with Rostekhnadzor and Statoil's Moscow office.

### 2.2.4 Norad

The Norwegian government established its Oil for Development (OfU) project in 2005 as an assistance programme for developing countries in the petroleum sector. Operational responsibility rests with the Norwegian Agency for Development Cooperation (Norad), which seeks technical support in this work for a number of specialist agencies. Safety forms part of most OfU programmes. We contribute to a number of these, primarily together with the Norwegian Petroleum Directorate (NPD) and Klif. Together with the latter, we are responsible for executing a project in Vietnam.

### 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 in conformity with our role as a regulatory authority and our overall objectives.

#### 3.2 Media management

All media enquiries are handled in accordance with the public affairs policy 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 inquiry reports and so forth.

#### 3.3 The internet

The [www.psa.no](http://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 site for the Safety Forum ([www.psa.no/safetyforum](http://www.psa.no/safetyforum)).

In addition, all our supervisory activities are presented on the site in separate articles. We do this both to make our work and priorities visible, and to make it easier for the companies and the industry to use the information for education 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

### 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 can be behind each such address, depending on the IT solution chosen by the user.

- acknowledgements of compliance (AoCs)
- circulars to the industry (related to audits).

Apart from complete audit reports, all material is posted in both Norwegian and English.

The website at [www.psa.no/regulations](http://www.psa.no/regulations) presents all relevant statutes and HSE regulations for the petroleum sector, with associated guidelines and interpretations.

Our site ranks as one the most-used sources of HSE-related information for the NCS, with roughly 35 000 hits and up to 18 000 unique visitors every month. We also offer a subscription service for news, supervisory information and interpretation of regulations, and had some 4 100 subscribers at 31 December 2009.

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 publication, 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.

Public interest in our activities is reflected in part through the number of requests for access to documents, which is continuing to rise. We responded to 2 604 such requests in 2009, almost double the figure for 2008 and four times the level of two years ago. Of these, 78 or about three per cent were denied or approved with restricted access.

### 3.4 AuthorityWeb

We continued our collaboration over the AuthorityWeb (AW) during 2009. This provides a two-way web-based communication channel for correspondence between the government and the petroleum industry, and can also be used for inter-agency correspondence. The Exploration & Production Information Management Association (EPIM) administers this solution.

### 3.5 Courses and speeches

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.

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

## 4 ORGANISATION

### 4.1 Our organisation

We had 165 employees at 31 December 2009. Women make up 46 per cent of the staff, and men 54 per cent. The proportion of women in senior posts is 40 per cent, and we are working to achieve an equal gender balance in all categories of job.

The average age of the workforce is 52 years for men and 45 for women.

Sickness absence in 2009 was 5.4 per cent, compared with 5.3 per cent the year before.

Eleven permanent employees resigned in 2009 and nine new appointments were made to permanent positions. The average age of new recruits was 38 years.

### 4.2 Senior management

comprises our director-general, Magne Ognedal, and five area directors. Our press spokesperson is affiliated with the senior management team.

### 4.3 Supervision

Teams responsible for supervision are organised in six groups covering various types of players in the activity. Contact persons in the relevant supervision teams have been designated 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 are Anne Vatten and Finn Carlsen, as the directors of supervisory activities.

### 4.4 Professional competence

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

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

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

Øyvind Tuntland, the director for professional competence, is the responsible manager.

### 4.5 Regulatory development

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

- 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 is Olaf Thuestad, director of regulatory development.

#### 4.5 Operational support and development

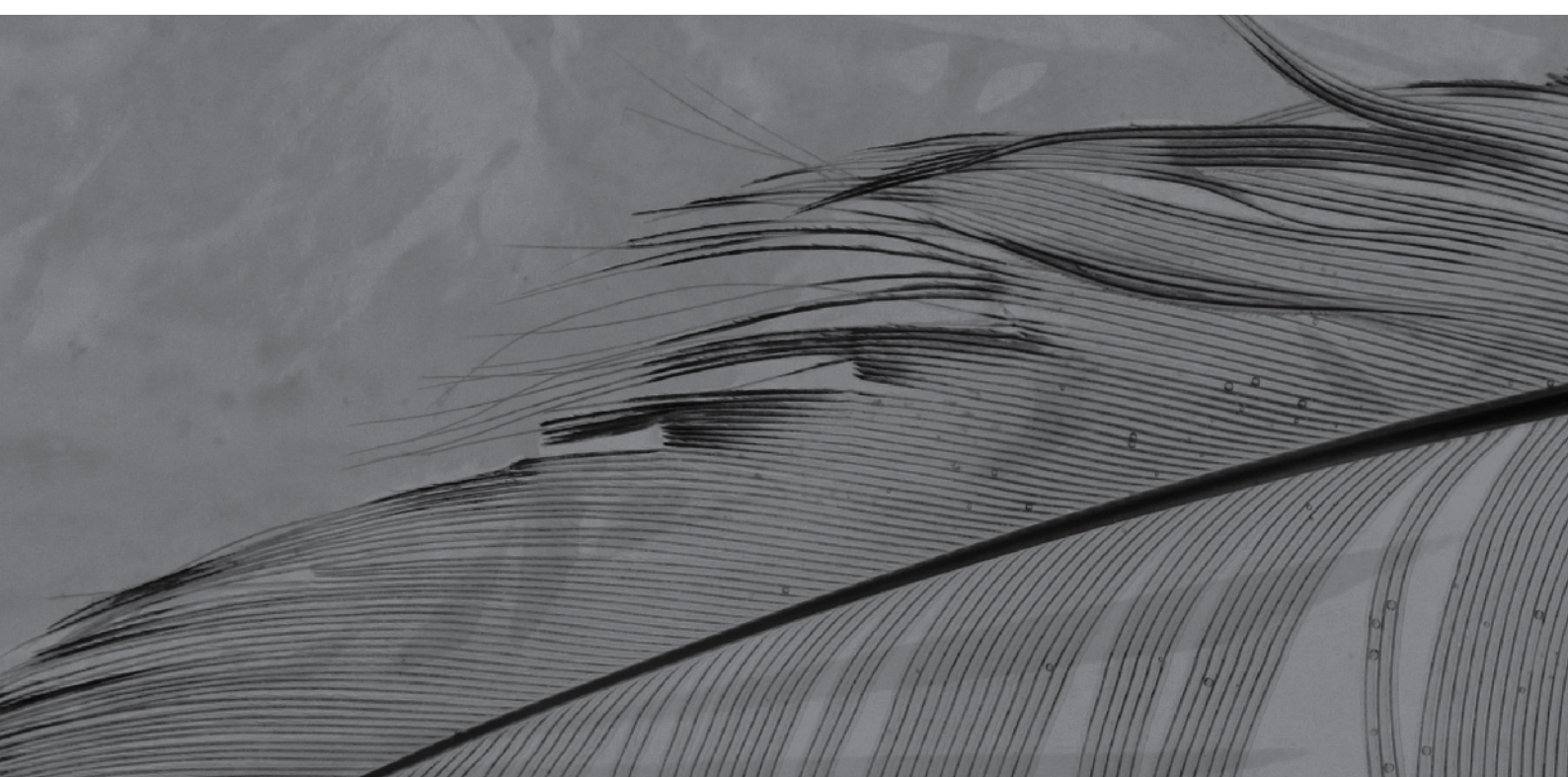
is responsible for our operational activities relating to both external and in-house clients and recipients.

The responsible manager is Gerd Randi Kaland, director for

operational support.

The activity embraces:

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





## 5 KEY FINANCIAL FIGURES

Operation of the PSA cost NOK 193.56 million in 2009.  
This breaks down as follows (all figures in NOK):

Pay and benefits	120 545 552	
Goods and services	50 962 124	
Total operating expenses		171 507 676
Contract-related pay and benefits	852 707	
Supervising the petroleum activity	19 706 163	
Contract and collaboration activity	0	
Total special operating expenses		20 558 870
Major equipment purchases		1 489 131
<b>TOTAL EXPENSES</b>		<b>193 555 677</b>

The PSA had an income of NOK 69.02 million in 2009, which breaks down as follows:

Contract and collaboration income	755 937	
Refunded supervisory expenses	62 237 945	
Miscellaneous income	3 901 311	
Conferences/seminars	36 700	
Refunded labour market measures	59 503	
Refunded maternity/adoption pay	235 699	
Refunding trainees	30 264	
Refunded sick pay	1 763 734	
<b>TOTAL INCOME</b>		<b>69 021 093</b>