The Characteristics of Robust Regulation

- What is robust?
- Can regulations and regulation making be robust?
- What kind of regulations do we need?
- How could we define robust elements within a regulatory context?
- Examples of robust elements within safety, health and environment regulations in Norway.

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Robust can describe one or more of several qualities when used to describe systems:

- a system, organization, etc. able to withstand or overcome adverse conditions
  - It does not break down easily
  - It recovers quickly from or holds up well under exceptional circumstances
  - It is not wholly affected by bugs in one aspect of it

When used in a regulatory context:

A robust regulatory system should come with a wide range of capabilities concerning:
- Purpose and principles
- Balance between politics and regulation
- Models of governance
- Regulatory approach and development
  - Design of regulation making processes
  - Enforcement of regulation

Robust regulation can be defined as a regulating regime whose basic design principles stay the same over time, or are restored after a challenge, but whose detailed operationalization adapts to changing demands and situations. (A Hale 2013)
Many of the chapters, in tracing the history of the regimes, show that each country’s is such a complex product of its technology, history, political institutions, legal system, industry structure, culture and management that unquestioning adoption of one regime’s elements in another country could be an expensive disaster. (A Hale-2013)
Principles of regulation

**OECD- definition:**

- **Economic regulation** intervenes directly in enterprise and market decisions such as pricing, competition, market entry or exit.

- **Social regulation** protects values such as health, safety, the environment and social cohesion
Trends in the development for social regulations
Increased focus on:

- How regulative decision-making takes place
- Regulation making processes
- Risk and risk management
  - The fact that risk can’t be eliminated, but has to be managed
  - Risk being more than a technical objective risk
    - Perceived risk
    - Human factors
    - ....
- The importance of active involvement from stakeholders – stakeholder management
Principles of Good Regulation

Transparency

• Policy objectives, including the need for regulation, are clearly defined and effectively communicated to all those concerned;
• Regulations should be simple and clear;
• Those being regulated must be made aware of their obligations and be helped to comply by enforcing authorities;
• Proposals must be published
• Ample time for consultation must be given before decisions are taken;
• Regulatory failures must be handled openly by government.

Transparency and involvement of stakeholders are the most important factors for fighting corruption!
Principles of Good Regulation

Accountability

- Regulators must be accountable to government, citizens and Parliament; There must be well-publicised, accessible, fair and efficient appeals procedures. (Regulators exercise of discretionary power)

- Within the regulatory context, we may distinguish four, overlapping and not mutually exclusive, aspects of accountability (and legitimacy)
  - **Legal**
    - the perceived fairness and appropriateness of the rules and standards, including the rules and standards of rulemaking itself
  - **Bureaucratic**
    - the implementation and enforcement processes, stressing the need for regulators to be reasonable and fair in interpretations and assessments of rules and facts when enacting their authority
  - **Professional**
    - bureaucrats and front line law enforcers, as well as those being regulated, must also meet standards of professional peers, and ultimately of the scientific basis of these
  - **Political**
    - the responsiveness of elected officials to regulatory shortfalls, and the various oversight mechanisms available for detecting these
Principles of Good Regulation

Targeting

• The approach taken is aimed at the problem and not "scatter-gun" or universal;
• Where possible, flexible targets should be preferred to rigidity. Both regulators and those being regulated must be given scope to decide how best to achieve those targets. Flexibility also enables regulations to be adjusted as circumstances dictate;
• Regulations should be reviewed from time to time to test whether they are still necessary and effective. If not, they should be modified or eliminated.
Principles of Good Regulation

Consistency

- New regulations must be consistent with existing regulations;
- Regulations must be compatible with EU and international trade and competition policy;
- There must be consistent enforcement by the relevant authorities across the country.

Proportionality

- Alternatives to regulation must be fully considered before deciding on state intervention;
- The impact on all those affected by the regulation should be clearly establishing the right balance between risk and cost; without unnecessary demands on those being regulated;
- Enforcement action must be in proportion to the seriousness of the offence
For effectively to enforce regulations you need:

(Suggested from EU to uniform governance)

- A stable and strong law(s) as legal basis
- An independent agency with a clear mandate (clearly assigned powers and tasks)
- Safeguards against political pressure, regulatory capture and centralisation
- A sufficiently resourced regulator (with professional and highly trained staff)
- A committed (credible) regulator giving incentives to comply (publication of a regulatory strategy)
- Speedy and efficient decision-making procedures (i.e. good governance through a set of internal rules)
- Judicial review (on the merits of the case)
Politics and regulation – interface and passage of power
Roles and responsibilities in the regulated area

Parliament and Parliament decisions

Ministries

- National control
- Legal frameworks

The business

- Business development
- Contracts
- Production
- Sale

Regulatory agencies

Development of operational regulations
- Enforcement
- Advice
Protector of law and order by the use of legitimate authority, forcing citizens/enterprises to follow laws and regulations
- The control role, anchored in this principle, creates an asymmetrical relationship between the regulator and the regulated

Service provider, stimulating towards growth in society
- This role works in a symmetrical way by developing mutual arenas for improvement, learning and building mutual confidence between state and public institutions, industrial sectors, etc.

Which of these roles are the most robust?
Models of Governance - Enforcement of regulations

- Parliament
- Ministry of ?
- Ministry of ?
- Agency
- Agency
- Agency

Pyramid Diagram:

- Acts
- Regulations stipulated by Ministries
- Regulations stipulated by regulatory agencies
- Guidelines
- Company specifications
- Industry standards
Focus on the purpose - Governance models

Cross industry  or  Sector specific regulations?

Single purpose approach

Multi purpose approach

Dilemma: Balancing the administrative burden between the regulator and those being regulated?
The enforcing body must be empowered to employ adequate corrective measures.

Regulators exercise of discretionary power - Which means and measures are effective and proportionate in promoting the regulatory goals?
Development of a “robust regulatory system”
A thorny path or a freeway

What regulative approach should we choose?

- Significant international trend towards “Self regulation”
- A greater belief in using both approaches under one regulating context
- Trend towards more extensive use of common norms and standards within the same disciplines cross borders
- Command and control versus Self regulation – More both – and than either- or when regulating HSE?
Regulatory development - focus

Command and control

- Complying with straightforward regulatory obligations
  - Focus on finding the (minimum) way of compliance

Self regulation

- Obligation to establish a system for identifying relevant norms applicable for complying with principle based requirements (Development of the “internal control system”)
  - Focus on establishing a system for identifying relevant norms to meet the requirements

The regulated

Legal Requirements

The management system

The business
Flexible requirement – example from the Norwegian safety regulations

Section 34 Gas release systems
Facilities equipped with or connected to a processing plant, **shall have** a gas release system. The system **shall prevent** escalation of situations of hazard and accident by rapid reduction of the pressure in the equipment, and it **shall be designed so that** release of gas does not entail injury or harm to personnel or equipment. (....)

Re section 34 Gas release systems

(...)*In order to fulfil the requirement to the gas release system ...., the ISO 13702 standard .. , NORSOK S-001 standard ...and P-100 system 43 should be used....,
Development of a “robust regulatory system”
Two major players in a new alliance

The Regulator
and
Those being regulated (Entities, operators)

Principle based approach compels a need for both players to develop a “management system thinking” comprising two elements:
- You need to define the norms needed to meet the goals set up in the requirements
- You need to establish a management system for ensuring/safeguarding that these norms are met

Which pave the way for new (other) modes of regulator oversight, inspection, compliance mentoring, and enforcement

The enforcing body must be given the right to have insight into the activities
The responsible parties must be obliged to document how they organise (manage) their activities, e.g. by submitting applications, plans, reports etc.
Regulatory development – enforcement strategy

Command and control

Direct rules with straightforward legal obligations and control based enforcement of compliance

Self regulation

Indirect more complex rules forms the legal basis of control
Passive aspect - How rules are observed in the operations
Active aspect - Monitoring the operations to reveal a need for corrective measures
## Development of a “robust regulatory system”

<table>
<thead>
<tr>
<th>Regulators enforcing strategy</th>
<th>Command and control</th>
<th>Authority based self regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adverse interest Policing approach</td>
<td>Control based checking of compliance</td>
<td>Dialogue oriented approach</td>
</tr>
<tr>
<td>• Unannounced inspections</td>
<td>• Announced supervision</td>
<td>• Influencing compliance</td>
</tr>
<tr>
<td>• Use of checklists</td>
<td>• Focus on management systems and follow up verifications</td>
<td>• Driving compliance</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Type of relationship</th>
<th>Command and control</th>
<th>Authority based self regulation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non or minimum involvement of stakeholders</td>
<td></td>
<td>Common interest and trust</td>
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<tr>
<td></td>
<td></td>
<td>• Announced supervision</td>
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<th>Involvement of stakeholders</th>
<th>Command and control</th>
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</thead>
<tbody>
<tr>
<td>Strong involvement of stakeholders in different arenas of cooperation; policy, industrial and entity level</td>
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</table>
### Development of a regulatory regime – different approaches

<table>
<thead>
<tr>
<th>Early stage of development</th>
<th>Operational mode</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Attention from the regulator</strong></td>
<td><strong>Great</strong> (Prescriptive based regulations - command and control)</td>
</tr>
<tr>
<td>When there are <em>conflicting</em> interests</td>
<td>Medium (Transformation to more principle based regulations)</td>
</tr>
<tr>
<td>When there are <em>corporate</em> interests</td>
<td>Little (Principle based self regulatory regime)</td>
</tr>
</tbody>
</table>
Development of a regulative regime - how?

Command and control ↔ Self regulation

Regulative approach

Type of requirements
- Prescriptive or Goal-setting

Philosophy of regulatory action
- Restricting industry’s independence or Stimulating industry’s initiative

Competence of regulator
- Technical or Multi-disciplinary

Nature of regulatory activities
- Work-place inspection or Assessing industry’s self-regulation
Cowboy – the lonesome autonomic rider
Cowboy – from a prescriptive safe view

- Safety rope when other systems fail
- Automatic high-volume "Whoa"
- Bird cage mask and safety goggles
- 180° rear view mirror
- Head lights
- Prescription safety goggles to insure horses good vision
- Grab-rail
- Safety switches and hot line to insurance company
- Steel-toad stirrups
- Safety net all around
- 4 wheels to keep horse upright in case he slips—hence not endangering the rider
- Dual cinch
- Hard hat with wide brim and ear protectors
- Padded-back seat and head restraint
- Back up lights
- Tail lights directional lights
- Shoulder harness
- Automatic, air-filled chest protector
- Maps, if you get lost and check list before riding
- Blue-tail fly repellent
- Seat belt
- Self starter (accessory)
- Knee pads (just in case) and quilted pants
- E.P.A. emissions control system
- Non skid spark suppressors
Development of a “robust regulatory system”

What regulative approach should we choose?

Command and control ← Self regulation

From

Rigidly prescriptive technical detailed regulation

To

Flexible regulations which establishes broad performance goals and management functions for companies to fulfil by self-regulation

Which also pave the way for

New (other) modes of regulator oversight, inspection, compliance mentoring, and enforcement.
Development of a “robust regulatory system”

What regulative approach should we choose?

Command and control  ⟷  Self regulation

“Authority based” self regulation

Flexible regulations which establishes broad performance goals and management functions for companies to fulfil by self-regulation

The regulations should be risk based and emphasize the obligated party’s responsibility and duty to act

Involvement of relevant stakeholders is a presumption
Authority based self regulation
Demands new (other) modes of regulator oversight

Knowledge based enforcement – how?

Checking of the obligated party’s compliance

Play a key role in influencing compliance

Act as a prime mover in driving compliance (In a desired direction)
Key elements in a self regulative context
(Authority based Self Regulation):

- Develop co-operate interest
  - Building of trust between authority and industry
- Stakeholder management (Organised involvement of stakeholders)
  - Develop collaboration with key stakeholders and establish institutions to conduct this through
- Participation in the regulation making processes
- Capacity building among all stakeholders
- Coordinated follow up of the industry from the authority
New (other) modes of regulator oversight

Command and control

Regulative approach

Self regulation

**Enforcement in a self regulation context (ASR)**
*(through a system of intervention)*

- Intervention strategy based on dialogue and trust (co-operate interest)
- Authority intervention should be system oriented and risk based
- The intervention must be a supplement – not a replacement of the industry’s own follow up
- The Intervention should be balanced between different purposes (in a multi purpose governance environment)
- Stakeholder participation (workforce involvement) and collaboration are presumptions for the intervention
- Adequate use of enforcement mechanism
New (other) modes of regulator oversight

Command and control

Self regulation

Elements in Legislative Work
The use of legal VS non legal documents

- International agreements and other national legislation
  - Acts and regulations issued by central authority
    - Regulations issued by regulatory agencies
      - Guidelines
        - General publications and information

Legal requirements

Non-legal supplements

- National and international conventions, codes and standards
Risk based approach – how to govern risk?

From a governance perspective you need to balance a regulatory role which encompasses:

**A technical aspect**
Technological challenges with a high risk potential:
- Facilities and transport pipelines
- Process equipment
- Emergency preparedness

**A human aspect**
The working environment
- Labour welfare
- Occupational health

Which means that you have to look into the interrelationship between
New (other) modes of regulator oversight

Risk based approach demands knowledge about risk

- Any human activity implies a risk
- Uncertainty about the consequences of an activity will always exist
- There is always something we do not know
- Zero risk can be achieved only by zero activity
- Zero uncertainty can be achieved only by zero activity
The Risk approach also demands use of Barriers

Barriers could be:
- Technical
- Operational
- Organisational

Incident or triggering event

Active failures and latent conditions (Reason)

Barrier system
Barrier functions (elements)
Performance influencing conditions
Risk and rationality in a Human – Technology - Organisation-perspective

Human needs and behaviour
- Career planning
- Job satisfaction (content and variation in the job)
- On the job training/learning
- Empowerment and decision-making
- Execution of power
- Reputation/prestige (support, trust etc)
- Integrity and autonomy

Systemic characteristics - Rationality
- Scientific approach to ensure rational and effective production
- Specialisation
- Clarified roles (who does what)
- Standardisation
- Automation

Social system
- individuals
- groups
- needs

Mutual influence

Technological system
System perspectives

Complex dynamic (socio-technical) systems

- Includes interactions between people, and between people and machines
- PTO-interactions cannot be decomposed to linear combination of single component functions
- The system as a whole is functional as a result of a dynamic and nonlinear pattern of connections between PTO

Linear systems (the machine perspective)

- Can explain complex (machines) contexts by decomposing single elements and describe the functionality of the single components
- The system function as a whole is a result of linear combinations between the single elements, these elements can be organised into large complex systems
Trends and development in modern industry

- Multinational
- International
- Global
- Cross border

Linear Interactions Complex

Tight Connections Loose
Trends

- Ability to change is the key to market position
- Market driven change processes
- Traditional industrial management
- New business concepts and products
- Still core products orientation
- Stable product-marked constellations

T and P+T-relations
P+P and P+T-relations
Specialisation around similar work tasks
- standardisation
- common procedures

Elimination of overlapping work

Synergy of large-scale operations
- Optimal investments
- low unit costs

Management tool
- hierarchy
- instructions and procedures

Depended on internal and external stability

How to utilize tacit knowledge?

Development and utilisation of knowledge and knowledge systems

Development of strategic expertise platforms with greater width and depth
The empowered employee
- autonomy
- integrity

Management tool
- team (virtual)
- network
Adaptive to uncertainty in the market
The Risk based approach
How do we manage business in a new and virtual intelligent environment?

1. New conditions for management and managing in new organisational boundaries
2. New conditions in the decision-making processes (interaction and collaboration between different professionals in virtual and real decision-making environments)
3. The element of power can't be ignored when safety critical decisions shall be made in team based and distributed decision-making processes
4. Work processes (as described) – versus work mode (as performed)
Managing Risk - Capacity and capacity building

Know what?
Know why?
Know how?
Care why?

Quality

Experience/competence
The Norwegian Context

Regulating Safety, health and environment in the petroleum sector

- Rules and Regulations

Are there any robust elements?
Some fast facts about Norway’s petroleum industry

- Oil and gas is Norway’s largest industry
- Net cash flow from the petroleum industry is around 25% of GNP
- More than 40 years of operations
- 75 permanent installations producing more than 55 oil & gas fields
- Near 3000 wells for production or injection purposes
- More than 15000 km of subsea pipelines
- Employment for 130,000 of 4.9 million population
- Produces 20 times more than our domestic consumption
- Exporting gas (liquefied) also to markets outside Europe
Historical review - Miscellaneous production installations

PRODUCTION INSTALLATIONS

- Main steel structure (Valhall)
- Gravity basis structure (Statfjord)
- Tension leg structure (Heidrun)
- Floating production platform,
  - Mobile drilling unit
- Floating production unit
- Mobile offshore unit

Sea bottom installations

Jacket GBS TLP Semi Ship

Mobile offshore units

PRODUCTION INSTALLATIONS

Late -60-ties Middel 70-ties 80-ties 90-ties Millennium
Historical review – Field development
- Parts of the production (more and more) moves onshore
- Technology development leads to more integrated offshore/onshore operations (Intelligent fields) by use of ICT, video conferencing, real-time data etc
- Plants onshore are becoming more and more important in a holistic exploration and exploitation perspective
Political commitment

The Soria Moria Declaration expresses the ambition that the petroleum sector in Norway should lead the world when it comes to health, safety and the environment. On this basis, the Government's goal is for the petroleum sector to continue being a pioneering industry that creates values for society through a conscious commitment to quality and knowledge, while also being based on an objective of continuous improvement...
Development of a “robust regulatory system”
Two major players in a new alliance

- The most important means
  - Awarding licence system
    - concession rounds
    - qualifying newcomers / acquisition
  - Development of adequate framework
  - Follow up the licensees management of Safety, Health and Environment
  - The use of coercive measures
  - Give advise and guidance to influence how the licensees should comply with own duties according to the regulations
A predictable licensing system

- The Norwegian system is a discretionary licensing system
  - Awards based on technical competence and geological understanding
  - Composition of companies in the license
    - Licensees are awarded licence shares and thereby compelled to form a business partnership in a licence – one is appointed as operator
  - Work program
- No signature bonuses
- 28% corporation tax and 50% special petroleum tax
- Full consolidation of income and expenses
- All expenses are tax deductible
Evaluation of newcommers on NCS
Prequalification of licensee's

Operator - Licensee

Ministry of Petroleum and Energy (NPD)
Operator and partner
- Financial capacity
  1. Principal rule: Corporate guarantees and assurance for unforeseen incidents
  2. Specific requirements for special cases
    - Few awarded licenses
    - Disposal
- Technical competence
  - Geology
  - Other relevant technical competence

Ministry of Labour and Social inclusion (PSA)
Operator and partner
- HSE
  - Management system
  - Technical safety
  - Working environment

Either... or
- Partner
- Operator
- Both... and

Your own organisation or consultancy?
Chronicle of events – Major changes made in 1985

- **First Petroleum Law**
  - Important elements from Safety regulation included in the law
    - Underlining of prudent conduct
    - See to principle
    - Emphasised responsibility put on the operator

- **Major shift in the regulating approach regarding safety and working environment**
  - Risk based approach and underlining of the importance of continuous improvement
  - Coordination between different authorities
  - Establishment of a new consent system
  - Ongoing and systematic regulatory development

- **State Direct Participating Interest**
The safety concept

“The petroleum activities shall take due account of the safety of personnel, the environment and of the financial values which the facilities and vessels represent, including also operational availability.”

(Norwegian Petroleum Activities Act 10-1)
Ekofisk today

Production:
Oil - 360 000 bpd
Gas - 350 mmcmd
Water injection - 900 000 bpd
Obligation to comply with the Act and to see to it that provisions are complied with

The licensee and other persons engaged in petroleum activities comprised by this Act are obliged to comply with the Act, regulations and individual administrative decisions issued by virtue of the Act through the implementation of necessary systematic measures.

In addition the licensee shall see to it that anyone performing work for him, either personally, through employees or through contractors or subcontractors, shall comply with the provisions laid down in or pursuant to the Act.
Regulations: Framework HSE

Section 7: Responsibilities

Licensee responsible for:
• Facilitating the operator’s execution of tasks
• See to that the operator carries out tasks and duties

Licensee shall
• Receive information regarding the activities
• Ensure that it receives sufficient information
• Act, as regards conditions that are not in agreement with the regulations

Central and important matters
• Operators management system
• Capacity
• Operator handles areas of concern

Licensees’ need to act as a competent board, to support and control the operator’s management of major accident risks
Operating licensee – in the Safety Health and Environment regulations

"Duty to see to it"

"Framework Regulations" (FR) Sct. 7 - Responsibility

- The operator shall ensure that everyone who carries out work on its behalf, either personally, through employees, contractors or subcontractors, complies with requirements stipulated in the health, safety and environment legislation
Achilles JQS (Joint Qualification System) is a qualification system for those who want to supply to the oil and gas industry operating in the Norwegian and Danish Continental Shelves. Achilles JQS is administered by Achilles, one of the world’s leading managers of supplier information. Achilles stores each supplier’s information in searchable, easily used systems, which create unique networks between suppliers and buyers. This offers new business opportunities to both buyers and suppliers.
Regulatory strategy - On-going regulation making processes

Separation reporting lines for Resource and HSE mgnt

1985
First petroleum law in place
New framework
(Self regulation principle introduced)
New coordination system
New Consent system
Historical review - Regulatory development

- Major shift in the regulating approach regarding safety and working environment
  - Risk based approach and underlining of the importance of continuous improvement
  - Coordination between different authorities
  - Establishment of a new consent system
  - Ongoing and systematic regulatory development
How to find the Norwegian SHE regulations

- **www.ptil.no**
  - English
  - Regulations (top gray line)
  - Regulations (list on left side)
  - Guidelines
  - PDF-version (last point on the list)

or **www.klif.no**
Co-ordinated authorities in the petroleum activity

Separated reporting lines for Resource and HSE mgnt

1985
First petroleum law in place
New framework
(Self regulation principle introduced)
New coordination system
New Consent system
Governance models

Separate regulators approach versus multipurpose regulations with one agency appointed as coordinating body responsible for enforcement

Cross industry  or  Sector specific regulations?

HSE Regulations in the Norwegian Petroleum Industry
Type of relationship between Government Agencies in an integrated Safety, Health and Environment (SHE) regime

Bilateral agreements which details the necessary partnership with other agencies

Independent Agency

Coordination
Cooperation
Technical support
Co-ordinated authorities in the petroleum activity

- Coordinated authorities:
  - Petroleum Activity Co-ordination
  - Health Directorate
  - Radiation Protection Authority
  - Maritime Directorate
  - Coast Directorate
  - Civil Aviation Authority
  - Direct. of Civil Prot. & Em. Plan.
  - Electricity Board
  - Meteorology Institute
  - Telecom.

- Duty holders:
  - Climate and Pollution Authority
  - Emission permits

- Professional Assistance

- Multi-purpose Regulator

- Framework Regulations
- Management Regulations
- The Information Duty Reg.
- Facilities Regulations
- Activities Regulations
- Health Legislations
- Petroleum Act
- Working Environment Act
Involvement of stakeholders - Stakeholder management

How to:
- Identify the most important stakeholders
- Develop a system of involvement and collaboration

Political commitment

Work force participation and collaboration between the parts in working life are essential presumptions in the development of the HSE framework
Involvement of stakeholders - Stakeholder management

- Identify the most important stakeholders
- Development of a system of involvement and collaboration

The Tripartite System

Government

Employers

Interaction

Interaction

Interaction

Unions

SH&E

Work force participation and collaboration between the parts in working life are essential presumptions in the development of the HSE framework

Transparency, trust and dialogue between all involved parties are preconditions for safe activity
You need institutional arrangements to develop a collaborative culture between the stakeholders.
The Safety Forum (Sikkerhetsforum) is the central arena for cooperation between the industry and the authorities as regards HSE. Main task is to initiate, discuss and follow up relevant safety and working environment issues.

- Hosted by the PSA Norway
- Four regular meetings pr year
  - Working groups reporting to the forum
- Responsible for organizing an annual conference

The following member organisations are represented in the Safety Forum:
- Norwegian Oil Industry Association (OLF)
- The Federation of Norwegian Industries
- The Norwegian Ship-owners Association
- The Norwegian Union of Energy Workers (SAFE)
- Lederne
- The Norwegian Union of Marine Engineers (DSO)
- Industry Energy (IE)
- The Norwegian Confederation of Trade Unions (LO)
- The Norwegian United Federation of Trade Unions

Collaboration in the “Regelverksforum” (Regulatory Forum) strengthens HSE regulation

The Regulatory Forum is an advisory forum for discussions related to development of HSE-regulations. The Petroleum Safety Authority Norway (PSA), the Norwegian Pollution Control Authority (SFT) and the health authorities represent the authorities in the forum. The Ministry of labour and social inclusion participates as an observer.

http://www.ptil.no/regulatory-forum/category168.html

- The object of the Regulatory Forum is to contribute towards safeguarding the influence of employers and employees on the development of and experience with the framework
- Transfer of experience between the various players in the petroleum activities
- A common understanding of the framework and its application by the various players in the petroleum activities
- Improved quality of the regulations through participation by various players
"Working Together for Safety" is one of the most extensive collaboration projects initiated within health safety and the environment (HSE) in the oil and gas industry. Participants in the project are oil companies and supplier companies represented through the Norwegian Oil Industry Association (OLF), the Norwegian Confederation of Trade Unions (LO), Lederne, Industri Energi, Fellesforbundet, Korrosjonsisoleringso og Service Entreprenørenes Forening (KIS), Norsk Industri, the Norwegian Shipowners’ Association (NSA), The Collaborating Organisations (DSO) and The Petroleum Safety Authority.
Knowledge about SHE-regulations

Regulatory Competence Project

A training program for the petroleum industry

http://www.rvk.no/courses-in-english.html

"Knowledge about the regulations not only affects HSE results in the activities, but it can also have substantial financial consequences for the industry.....

"Of a total target group of about 70,000 employees in oil-related industry, it is estimated that about 10,000 of these would derive great benefit from an introduction to the regulations. At the end of 2005, more than 6000 people had completed courses under the direction of RVK"
Regulating Risk in a self regulating context
“Statfjord C”
“Piper Alpha”
“Mumbay high north”
“Mumbai high north”
Lesson learned from investigation of serious incidents, accidents and near misses

- Lack of understanding of implication of risk
- Poor (risk) management
- Lack of capacity and capacity building
- Lack of adherence to procedures
Focus on enforcement of regulations

What kind of opportunities/tools are available for the regulator when he is interacting/enforcing/inspecting/auditing or in other way communicating with the operators and other players in the Oil &Gas industry?

In what sense are these activities registered and used in a follow up system as part of a intervention strategy?
Regulators intervention - strategies
New (other) modes of regulator oversight, inspection, compliance mentoring, and enforcement.

Trends in Risk Level
Petroleum Safety Authority Norway’s
Risk Level Measuring Scheme
How data are collected and used
Trends in risk level
Participants and contributors

Reference group: employers, unions and government in the “tripartite context”

Data / information/knowledge
Responsible for the product

Advise on further development. Tripartite

Safety Forum
The industry
PSA Norway
Advisory group
HSE Professional group
Professional experts

PSA Norway
Norway
Professional group
Advisory group
Reference group: employers, unions and government in the “tripartite context”
Trends in risk level
Methodology

- Major accident precursors
- Barriers and maintenance
- Questionnaire survey
- Qualitative studies
- Occupational illnesses and injury
- Other accident precursors

RISK
Collecting data

Data collected from the industry on request → Quality assurance of information – PSA → Analysis → Data collected from databases within PSA → Quality assurance of information – Industry
Sanctions

The use of sanctions must reflect the nature of the violation
PSA’s means of enforcement

- Dialogue
- Notification of order
- Order
- Suspend operations
- Legal prosecution
- Expulsion

PSA’s preferred strategy vs. Degree of severity
www.ptil.no

Laws and regulation on web

Thank you!