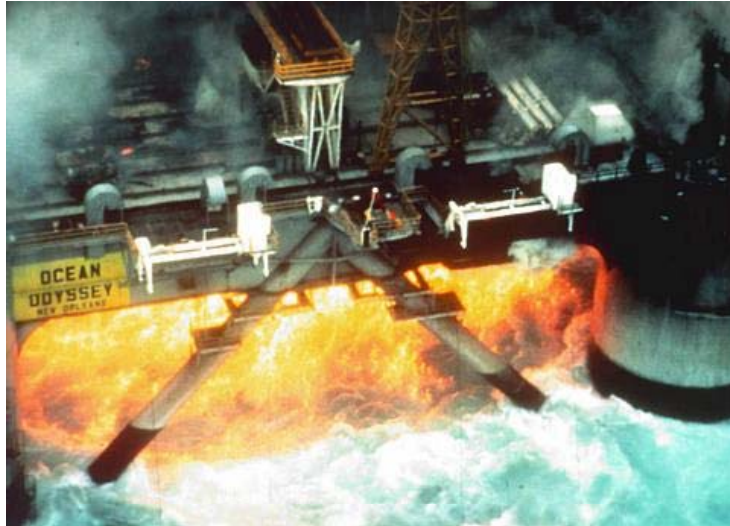


Wells Group Strategy



Contents:

Purpose: To ensure that the risks to people from wells and well related activities are properly controlled.	3
The Wells Group	3
Environment	3
Strategic Objectives	3
1. Securing compliance with the law	3
2. Prevention of major accident hazards	4
3. Maintaining the confidence of HSE's Stakeholders	4
4. Managing our resources and systems	5
Wells Challenges	5
Wells Group Stakeholders	6
IADC, UKOOA, The Energy Institute	6
International Regulators	7
DTI	7
Table 1 – Risk Hierarchy & Control Measures	8

Purpose: To ensure that the risks to people from wells and well related activities are properly controlled.

The Wells Group

The Wells Group is made up of expert teams of industry experienced inspectors and dedicated support staff. It takes the lead in all activities relating to the wells aspects of the design and construction regulations and the investigation of “well incidents” (a specific category in RIDDOR). It similarly carries out the same role for onshore wells. It also provides expertise to the IMTs in assessing safety cases and assisting in the investigation of various incidents. It uses a bespoke IT system to record and interrogate technical data relating to the wells.

Environment

The UK continental shelf is one of the largest producers of offshore oil and gas in the world, and remaining reserves are likely to be equivalent to those produced already. There are about 25,000 people directly employed offshore and about 300,000 other jobs either dependent on or supported by the offshore sector.

The wells group have a role to play in sustaining the country’s ability to produce sufficient oil and gas. DTI are currently working to encourage more HPHT developments. We share information and have good informal communication paths.

The offshore industry traditionally comprised large international companies with considerable expertise, but the industry is now changing. Trade associations are restructuring, companies are amalgamating and assets are being sold to newcomers. New technology is being introduced for which there is little or no operational experience. Questions are being asked as to whether ageing equipment should be kept going, reused elsewhere or decommissioned. Environmental concerns, such as demands for complete removal of redundant installations, also have safety implications.

Strategic Objectives

The Wells Group plan of work is based on the achievement of 4 key objectives through specific programmes of work targeted at specific hazards. These contribute to HSE’s Offshore Health and safety Strategy that in turn contribute to the national ‘Revitalising Health and Safety’ and ‘Securing Health Together’ initiatives. OSD’s three main field programmes (TP1, KP2 and KP3) meet HSE’s public sector agreement targets for the offshore industry.

1. Our strategic objectives are:
2. securing compliance with the law;
3. preventing major accident hazards
4. maintaining the confidence of our stakeholders; and
5. managing HSE’s resources and systems.

1. Securing compliance with the law

To secure compliance we will conduct carefully planned inspection programmes and a fit for purpose investigation and enforcement programme to target risk and comply with the HSC’s enforcement policy. Our programme will include particular focus on the prevention of major accident hazards from wells and well-related activities.

Inspection and Investigation Programme

Regulatory tasks include:

- Visits to offshore installations to inspect activities on and in connection with the installation, the wells and well activities;
- Investigation of incidents and complaints;
- Assessment of safety cases;
- Provision of advice, guidance and technical information.

The Wells Group approach to inspection combines local knowledge of the duty holders (installation duty holders, well operators and contractors), gained through safety case assessment, inspection and investigation, with overall general knowledge of the offshore sector. We will concentrate on management systems, particularly how jobs are organised, the quality of supervision and monitoring of work activities, and how risks are assessed before and during the job.

Enforcement

Where necessary, formal enforcement action may be taken. Inspectors apply the HSE Enforcement Management Model, a framework that helps inspectors make fair and consistent enforcement decisions in line with HSE's Enforcement Policy Statement. This sets out principles that Inspectors should apply when determining what enforcement action to take in response to breaches of health and safety legislation. Enforcement action should be proportional to the health and safety risks and the seriousness of the breach.

2. Prevention of major accident hazards

One of OSD's continuing goals is to prevent major accidents with catastrophic consequences offshore. The Wells Group have a large contribution to make in this area as wells are, for most installations, the largest contributor to risk.

Assessment of safety cases, well notifications and weekly drilling reports are all used in the prevention of major accident hazards. Installation duty holders must demonstrate that major accident hazards are identified and appropriate control measures are provided and an effective management system is in place on their installation. The safety case has to be accepted by HSE before operations can start or continue. We will carry out prompt and effective assessment of safety cases ensuring consistency of and transparency in assessment.

Notifications are a subset of safety cases. For certain well operations, Well Operators are required to notify HSE with relevant operational details including the well and site specific hazards. These will be assessed to ensure that the well specific hazards are ALARP. Weekly reports provide a check that plans are being followed.

3. Maintaining the confidence of HSE's Stakeholders

General

We endeavour to recognise the needs of all of our stakeholders and work in partnership with them, without prejudicing our enforcement role.

Working with industry

We will encourage industry to develop standards and, where appropriate, research to:

- Improve understanding on risks and how they can be controlled
- Contribute to the development of authoritative standards where there are gaps
- Develop and publish guidance to inspectors where necessary to increase our efficacy
- Identify risks from emerging technology.

We will contribute to research with an appropriate content to ensure effectiveness of our regulatory activity.

We will continue to give advice to contribute to relevant health and safety interests and concerns of the offshore industry.

Key commitments

We are committed to building stakeholder confidence and to facilitate this we will endeavour to:

- Maintain the confidence of the people we are protecting by meeting with offshore staff and their safety representatives at each installation visit. We will explain the purpose and the findings of the visit and we will listen to the concerns and views of the workforce. We will respond promptly and diligently to all complaints. We will deal openly and fairly with all those who can assist our aims.
- Maintain the respect of duty holders and employers by striving to improve our performance in line with the HSC policy on enforcement: that our actions are targeted; proportionate; transparent; accountable and consistent.
- Maintain high levels of communication. The Wells Group shares HSE aims to be an open organisation, sharing information with others where reasonably possible. We will work within the boundaries of the Open Government Code. We will adopt the language, style and type of communication that best fits the need. Internally we will share information with other parts of HSE. Externally we will make the best use of external communications and monitor their effectiveness. We will seek out opportunities to engage stakeholders, establishing and maintaining contacts with organisations involved in the offshore industry (see Annex A).

4. Managing our resources and systems

Our internal organisation and processes will support the preceding objectives by:

- Providing the minimum necessary human resources to deliver our objectives by organising our staff to suit our priorities and by anticipating and filling agreed vacancies in time.
- Continuing to emphasise the role of the authoritative good practice and good engineering judgement in decision-making in preference to quantitative risk assessment.
- Providing adequate and effective physical and financial resources to enable staff to work effectively without undue stress.
- Maintaining effective staff, now and for the future by providing suitable training and guidance and monitoring performance. We will be fair and open and promote values of diversity and we will correct unacceptable behaviour. We will adapt to changing priorities in HSE and in our sector. We will make information available to staff to help them be effective in their jobs.

Wells Challenges

The threats to the wells group achieving its purpose and the control measures in place to target the threats were tabulated (table 1). For each threat, primary and secondary controls were identified. The threats were assigned to a risk hierarchy based on the consequences of the risk occurring and the likelihood.

Well integrity is the biggest influencer in achieving our objectives of reducing risks from wells and associated activities and the main challenges are related, unsurprisingly, to challenges confronting the industry as a whole in respect of integrity of plant and structures.

Reducing competency of the staff involved in well operations is of primary concern: there is an ageing workforce and a relative haemorrhage of well engineering experience and expertise from the supermajors in the North Sea that is difficult to replicate from amongst the slimmer majors, contractors and independent operators. **Reduced tolerances and safety factors** in well design is another primary concern. Well costs are extremely high and whilst it is acceptable to challenge excessive design tolerances, there is a clear and present risk that cost cutting, aligned with loss of experience will have an adverse effect on well integrity, particularly in extended life-of-field situations. Finally there is evidence of **inadequate maintenance** of development wells (those used for production or reservoir pressure support). This situation directly threatens integrity of active wells and the safe abandonment of older or damaged wells.

Primary controls for these highest priorities are through inspection – especially offshore Key Programme 3 (installation integrity) and the statutory wells notification scheme (embedded within the safety case system).

The sustainability of the North Sea depends on developing the **leading edge technology** to produce from the remaining known reservoirs, most of whom pose new challenges of distance from the wellhead or difficult reservoir conditions. The control of risks ALARP in such an environment where reliability and performance data is theoretical is a major challenge to industry and regulator and requires a partnership approach to managing innovation, for example incorporating safety into design.

Controls are: adequate assessment at the well notification stage; intelligence from investigation of failures; and conducting joint research.

We are concerned there appears to be an increase in **non compliance with the agreed drilling and workover programmes**, and that the changes are not properly controlled leading to working outside of the risk assessment envelope increasing risks of both loss of integrity and drill floor and deck related handling accidents. There is also evidence of an increase in **poorly conducted operations** leading to fatal and major injury accidents (and near misses) to well operations staff. The key factors are inadequate risk assessment, poor job organisation, and inadequate monitoring and supervision of the work.

We aim to secure improved controls through offshore Key Programme 2 (reducing drill floor and deck accidents).

A number of areas of potential risk require continuing vigilance, particularly in an environment of cost cutting, reducing competency and experience and so on. The assessment process (well notifications) helps monitor and help control the likelihood of **unsuitable well design** (designs that are fundamentally flawed) and reliance on **inadequate subsurface information**. In spite of the maturity of the UKCS sector, there is evidence of such defects. Management of **ageing infrastructure** – drill packages on platforms, old rigs, and drilling equipment - is also important to reduce injury and accidents and this is a key objective of our strategic inspection programme.

Wells Group Stakeholders

IADC, UKOOA, The Energy Institute

There are many trade associations that we interact with. All present a valuable method of communicating with the industry particularly on specific technology issues. Although many of the larger trade associations have recently re-organised and have not established technical committees, we will establish working relationships with all relevant trade associations in an effort to achieve our objectives.

International Regulators

Good working relationships exist between the Wells group and similar groups within the Norwegian (PSA), Danish (DEA) and Dutch (SSM) Regulators. There are annual meetings and workshops to discuss wells related topics. A joint position paper was presented at NSOAF on the subject of well control training which resulted in well control training being identified in each regulators workplans for the coming year. Regular communication and participation in initiatives exist with MMS and have been initiated with the Canadian regulators, under the auspices of the International Regulators' Forum.

DTI

DTI have responsibility for the licensing, environmental implications of and the promotion of the oil and gas industry. We regularly exchange information on wells, serious well integrity issues that could significantly affect production, new technologies and innovations.

Table 1 – Risk Hierarchy & Control Measures

Risk Hierarchy	Agent of Risk [Drivers]	Safety Cases	Well Notifications	Weekly Operations Reports	Inspection	Investigation & Complaints	Research & Standards
1	Reduced Competency [Age profile/ shortage of people, unattractive industry, contractisation]		Secondary		Primary	Secondary	Primary
2	Reduced tolerances & SFs [Cost cutting, legitimate redesign]		Primary	Secondary			Primary
3	Inadequate maintenance [Cost cutting]	Secondary			Primary	Secondary	
4	Inadequate understanding of leading edge technology [Sustainability]		Primary			Secondary	Secondary
5	Not complying with programme [Cost cutting, competency]			Primary	Secondary		
6	Poorly conducted operations [planning, competency, monitoring & supervision, risk assessments/SMS]		Secondary		Primary		
7	Unsuitable design [Eng + Ops] [cost cutting, competency]		Primary	Secondary	Primary	Secondary	Secondary
8	Inadequate subsurface information [Available technology, water injection, lack of analysis, cost cutting]		Primary			Secondary	
9	Ageing Infrastructure [Cost, market conditions, competency]	Secondary	Secondary		Primary		Secondary
	All above	6	29	11	28	15	19
	Top 3	3	8	3	10	6	10
	Top 8	3	16	8	18	9	13

Primary – score 5, Secondary – score 3