Overview of health, safety and environmental regulation relating to the offshore oil and gas industry

Professor John Paterson
Centre for Energy Law
University of Aberdeen
Stages of hydrocarbon operations

Broadly, authorities have a role to play in regulating the health, safety and environmental (HS&E) dimensions of the offshore industry at the following stages:

• Exploration and appraisal
• Development
• Production
• Decommissioning

Each involves some risk of hydrocarbon release
Stages of hydrocarbon operations

• **Exploration and appraisal**: encompasses seismic survey and exploratory and appraisal drilling

• **Development**: involves establishing the infrastructure required to produce hydrocarbons from a reservoir deemed to be commercially viable
Stages of hydrocarbon operations

• **Production**: usually the longest phase of hydrocarbon operations, when oil or gas (or both) are produced from a reservoir

• **Decommissioning**: capping the well after commercial operations are complete and removing infrastructure
The role of licensing

• The **licence** is a permission for a commercial entity to explore for and produce hydrocarbons which are owned by the state or over which the state enjoys sovereign rights under international law

• Example: the Model Clauses annexed to the Petroleum Licensing (Production) (Seaward Areas) Regulations 2008, SI 2008/225 (UK)

• The licence will specify the terms and conditions (including in relation to HS&E) under which each phase of the work must be carried out
The role of legislation, regulation and contracts

• HS&E requirements may also be contained in other instruments including legislation, regulation, Production Sharing Agreements (e.g. Cyprus)

• These may well be influenced by international legal obligations, esp. in relation to the environment, less so in relation to H&S, e.g.
  – Oslo Paris Convention for the Protection of the Marine Environment of the North-East Atlantic
  – Aarhus Convention on access to information, etc.
  – Espoo Convention on trans-boundary environmental assessment
Hydrocarbons Licensing Directive

**Directive 94/22/EC** on the conditions for granting and using authorizations for the prospection, exploration and production of hydrocarbons

Criteria for award of licence
• applicant’s technical and financial capabilities
• manner in which applicant proposes to carry out operations
• the price which the applicant is willing to pay (if applicable)
Who issues the licence?
Who regulates HS&E?

• Is there a **conflict of interest** between responsibility for licensing and responsibility for HS&E regulation?

• This perception led to the separation of licensing and H&S functions in the UK after the Piper Alpha disaster.

• A similar perception has produced a similar separation of functions in the US post-Macondo.

• Norway and Italy both separate licensing and other regulatory functions to ensure checks and balances.
Who issues the licence?  
Who regulates HS&E?

But...

• In the UK, environmental regulation is carried out by the licensing authority following the creation of the Department of Energy and Climate Change (DECC)

• In Cyprus, the Ministry of Commerce, Industry and Tourism is separate from the Department of the Environment, but the former has functions in relation to approval of contingency plans for environmental emergencies
Is there a problem?

• Potential conflict of interest may be apparent but...

• The Commission’s own proposed regulation envisages licensing authorities playing a more significant role in relation to HS&E insofar as these issues are to be a more significant factor in assessing technical and financial capabilities
Is there a solution?

• Regulatory architecture is different in each MS

• Is the issue the architecture or the ability of the specific regulator, wherever they are located, to resist political or commercial pressures?

• Regulatory experts (e.g. Majone) point to the value of international networks of regulators in bolstering independence

• Note the importance of North Sea Offshore Authorities Forum. A similar forum could be envisaged for other offshore areas, perhaps based on regional seas treaties (e.g. the Barcelona Convention for the Mediterranean)
Goal-setting vs prescriptive regulation

- Following major disasters in the North Sea, Norway and the UK both shifted from prescriptive to goal-setting regulation

- Proposed regulation explicitly endorses goal-setting, but critics are worried by Commission’s ability to add prescriptive detail

- Cyprus and Italy both heading more in the direction of goal-setting

- Requires a Safety Case or similar document – to make the case to the regulator that the proposed installation and its operation are safe

- This approach raises the issue of independent verification
Independent verification

- **Independent third party verification**, eg of safety critical elements, Environmental Management Systems

- Called for by Commission proposal

- Already a feature of the UK approach

- Endorsed by Italy and Cyprus

- Not a feature of the Norwegian approach
Is independent verification essential?

• Norway demonstrates that it is less the architecture that matters than the ability of those operating within a particular system to achieve the desired goals

• The well-established *tripartite dialogue* between industry, unions and workforce appears to work well
Workforce involvement

• It is interesting to note that while workforce involvement is a feature of some EU/EEA MS approaches (notably Norway and to some extent the UK), it was not mentioned in the proposed regulation

• Are not those responsible for the operation of equipment best placed to feed information into Safety and Environmental Management Systems?
Conclusions

• The proposed regulation risks **unravelling well-established systems**

• While those systems could all be improved (none claims perfection), this could be achieved more effectively through **sharing best practice**

• The Commission’s willingness to proceed by way of a **directive**, therefore, appears eminently sensible

• This is not a political conclusion, but rather one based on the **regulatory experience** of jurisdictions such as Norway and the UK in responding to complex problems in ways which are well-adapted to local conditions