Preventing offshore major accidents & limiting their consequences

(Text with EEA relevance)

A primer by
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for

4th January 2017
The Hague
Underlying drivers in the EU

EU offshore industry
- Ageing production infrastructure & structural shifts
- Challenges of the new frontiers
- Inadequate safety culture & transparency

EU Regulation
- Uneven technical expertise amongst regulators
- Inconsistent application of current EU frameworks

Emergency preparedness & response
- Inconsistent industry capacity to limit escalation
- Inconsistent national emergency planning

Liability & recovery
- Financial mechanisms unsuitable for traditional damages
- Lack of clarity for environmental liability
Offshore licensing in EU/EEA & adjoining states

Location of major offshore installations

- Oil installations

Depth, m

- 0 - 200
- 200 - 500
- 500 - 1000
- 1000 - 2000
- > 2000
# Intervention scope of EU Directive 2013/30/EU

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<th>Problem part</th>
<th>Objectives</th>
<th>Tools/Measures</th>
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<td>Risks can be lowered to better prevent a major incident (i.e. risks currently too high to accept)</td>
<td>1. Attain best industry practices in the EU</td>
<td>Primary duty of risk control with industry → safety case as risk management tool</td>
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<td>2. Implement best regulatory practices for major accident prevention and mitigation</td>
<td>Corporate policies/management systems to ensure risk controls remain effective</td>
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<td>Response measures need improvement</td>
<td>3. Implement fully joined-up emergency preparedness and response in all EU offshore regions</td>
<td>Independent, expert regulators in each Member State</td>
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<td>Verification of capacities during licensing</td>
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<td>EU-wide information sharing and transparency</td>
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<td>Liability provisions incomplete</td>
<td>4. Improve and clarify existing EU liability and compensation provisions</td>
<td>Cross-border availability and compatibility of response assets</td>
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<td>Duty to cooperate and share info</td>
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<td>Scope of environment liability</td>
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<td>Financial capacity requirements</td>
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<td>Compensation regimes</td>
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What is required to fully implement the directive

Requirements act on industry, regulators and the Commission

- Scrutiny by Member State of technical and financial liability at licensing
- Industry prepares detailed risk assessment and associated control measures for each installation
- Expert, independent competent authority (CA) formally 'accepts' risk assessments and makes risk-based inspections
- Industry introduces independent verification for critical safety systems and well plans
- EU Companies furnish reports on overseas major accidents to the Member State; all companies' corporate global safety policies to be scrutinised by CA
- Member States and industry cooperate with EU Offshore Authorities Group (Commission)
- Industry/CA/Commission participate in x-EU reporting systems
THANK YOU FOR YOUR ATTENTION

Link to European Commission 'offshore' website:
http://ec.europa.eu/energy/oil/offshore/standards_en.htm

English version of EU offshore directive:
What is necessary for proper implementation? (Member States)

- Scrutiny of technical and financial liability at licensing
- Ensure public participation before any new areas are drilled
- Appoint independent and robust competent authority (CA) for major hazard regulation – safety & environment
- CA must publish plans and procedures for handling risk assessment documents, inspections, investigations and enforcement
- CA must report offshore performance annually to COM
- 'Inactive' coastal MS to cooperate with neighboring MS
- Companies registered in EU to furnish reports on overseas major accidents to the MS
- CA to cooperate with EU Offshore Authorities Group
What is necessary for proper implementation? (Industry)

- Technical & financial capacity assessed at licensing stage
- 'safety case' to include major environmental consequences and be 'accepted' by regulator
- Installation emergency response plans prepared for preventing escalation
- Every well to be notified → regulator; weekly well reports
- Must have scheme for independent verification of safety critical elements, and well plans
- Corporate major accident prevention policy → regulator
- EU-based operators to report on overseas major accidents
- Workforce to be consulted; whistle blowers protected
- Incidents and near-misses reported in EU standard format
What changes even in the North Sea countries?

- Safety considered when awarding license
- Environmental consequences to be incorporated into the regime:
  - major hazard scenarios following a major accident → safety case
  - Emergency response planning based on the safety case
- New competent authority integrating safety & environment – must be independent from economic regulation
- Transparency/sharing of information:
  - new EU – wide reporting system
  - Member State makes reports to the Commission
- Co-ordination and co-operation amongst regulators, and with non-EU countries
- EU- based companies to make 'best endeavours' overseas and to report their overseas major accidents
Measures relating to asset integrity

- **Major accident prevention policy** – corporate statement by the operator
- **Report on major hazards ("safety case")** – living document assessing risks of a major accident and necessary control measures – including response throughout the lifecycle of the installation
- **Safety management system** to ensure ongoing attention to integrity of the control systems
- **Independent verification of safety critical elements**
- **Expert, well-resourced and independent regulatory authority:**
  - 'accepting' the report on major hazards (FSA)
  - Ongoing oversight of compliance
EU Offshore Authorities Group
(EU-wide/EEA forum for regulators, builds on NSOAF and IRF

- Advises Commission
- Identifies and exchanges best practices for industry
- Disseminates lessons
- Identification and exchange of best practices for competent authorities
- Comment on new legislation and international proposals for oil and gas industry
Baseline costs – key points

• Historical figures suggest a recurrence rate of 35 years for a blowout lasting 15+ days in Europe.

• Assuming a cost range of $7-40 billion, this amounts to annualized costs of $188-1140 million per year.

• Add this to the annual figure of $87 million in property losses resulting from less costly, but more common, major accidents

Estimated total annual average figure for direct, tangible costs of offshore accidents in Europe: $275 million to $1.23 billion