

# Petroleum Safety Framework A New Oil and Gas Safety Regulatory System for Ireland

#### **Atlantic Ireland Conference**

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#### **Overview of Presentation**



- Background to the CER
- Petroleum Safety Framework Project
- Guidance for Prospective Petroleum Undertakings
- Future considerations



# **Background to the CER**



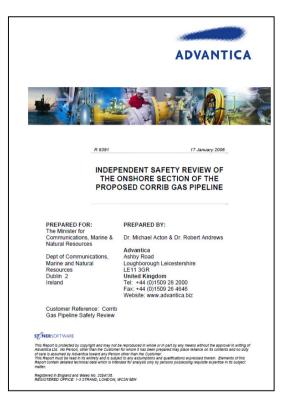
# Commission for Energy Regulation

- Economic energy regulator since 1999
- Safety regulatory responsibilities since 2006:
  - Regulation of gas installers (including LPG) and electrical contractors;
  - Gas supply;
  - Gas networks (including LPG); and
  - Gas safety promotion.
- Upstream (offshore and onshore) petroleum safety regulatory responsibilities since 2010

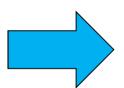
# **Background to CER Petroleum Safety Regulation**



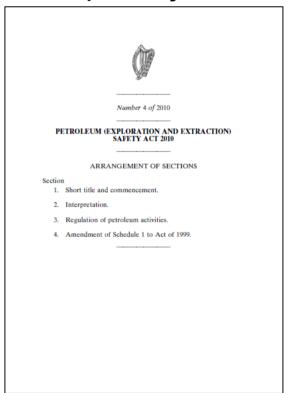
**2006: The Advantica Report** 



Recommended a risk-based framework for decisions on proposed and existing major hazard pipelines and related infrastructure



# Petroleum (Exploration and Extraction) Safety Act 2010



CER shall establish & implement a risk based petroleum safety framework in relation to the carrying on of designated petroleum activities

# **Key Provisions of the Act**



- CER to implement a risk based petroleum safety framework.
   Petroleum undertakings obliged to reduce risks to a level that is As Low As Reasonably Practicable (ALARP)
- Designated Petroleum Activities cannot be carried out without a Safety Permit from the CER
- CER to monitor and enforce compliance of petroleum undertakings with their obligations under the Act
- Petroleum incident investigation and reporting functions



# What is regulated

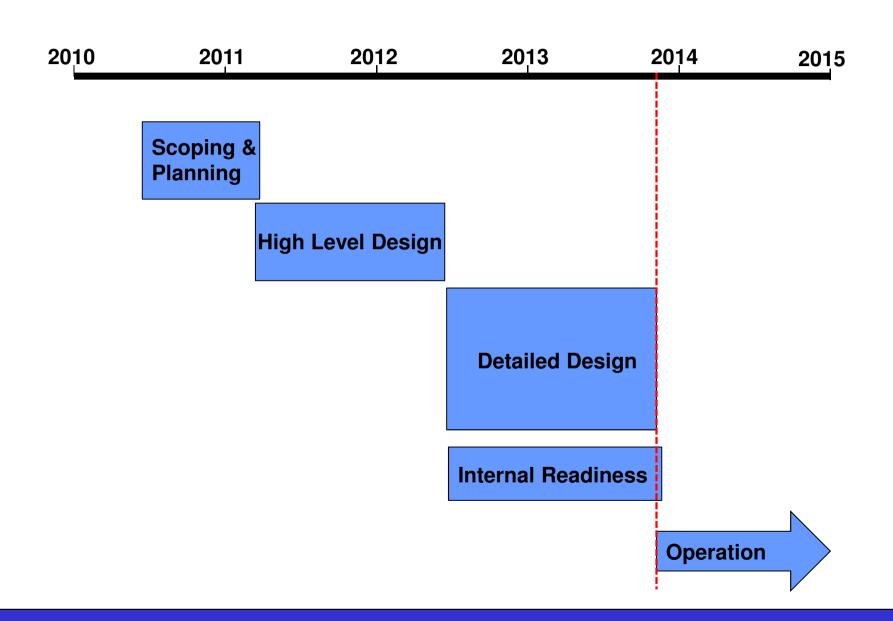
- <u>Petroleum undertakings</u> are entities that hold a petroleum authorisation
  - Exploration licence
  - Petroleum prospecting licence
  - Reserved area licence
  - Petroleum Lease
  - Lease option
  - Section 5 consent (Continental Shelf Act 1968)
  - Section 40 (Gas Act 1976)
- Designated Petroleum Activities
  - Well work
  - Production
  - Decommissioning



# **Petroleum Safety Framework Project**

### **Project Approach**





## **Project Approach**



- Significant project to design & implement the Framework involving:
  - Implementing the provisions of the Act in full
  - Putting in place the people, processes and procedures to enable the effective operation of the Framework

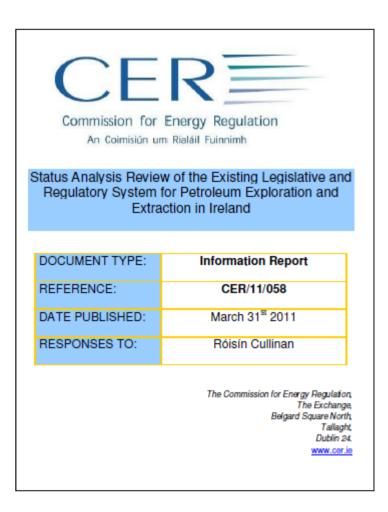
#### Benefits:

- Safety regulatory system in line with best international practice
- Confidence & assurance amongst the public & industry
- Greater clarity & transparency to safety regulation of industry
- Extensive consultation

### **Scoping & Planning (1)**



#### Mar '11: Status Analysis Review

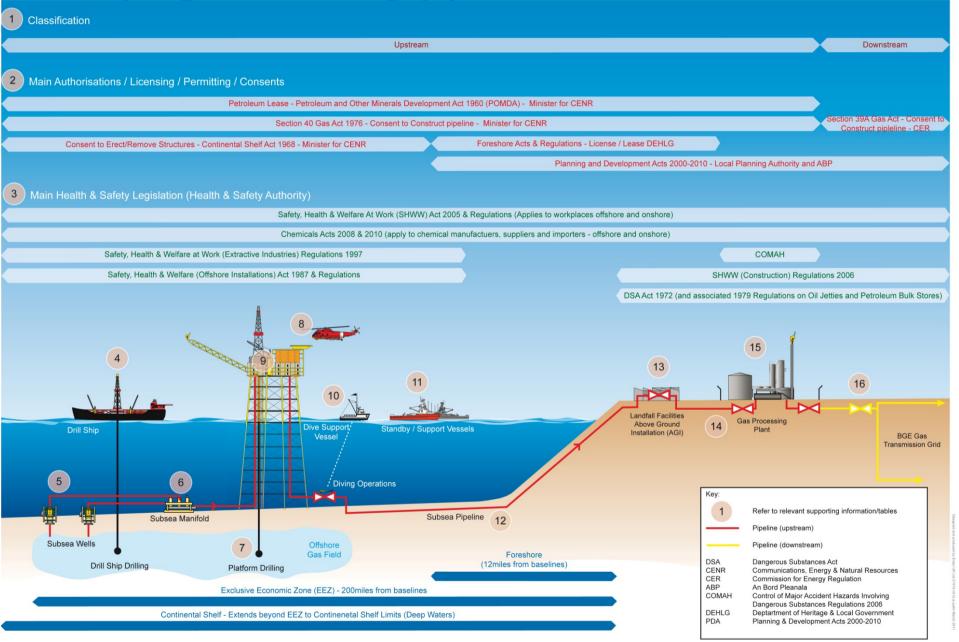


#### **Key Points**

- Considerable amount of existing international, European and national legislation in place
- High number of statutory agencies with both regulatory & investigative responsibilities in Ireland
- Need for co-operation and coordination across statutory agencies is essential
- Conclusion: need to establish interface arrangements with other statutory agencies

## **Scoping & Planning (2)**

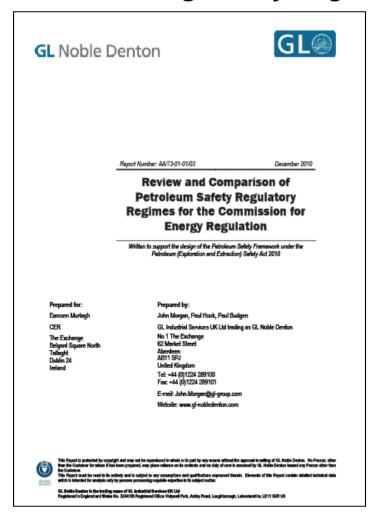




## **Scoping & Planning (3)**



# Jan '11: Review & Comparison of International Regulatory Regimes



#### **Similarities**

- Goal setting regimes
- Risk-based regimes although some refer more directly to standards in the legislation
- All use Safety Case or equivalent
- Permissioning Regimes

#### **Differences:**

- Use of 3<sup>rd</sup> parties for compliance assurance activities
- The level of significant guidance and detail in legislation

## **High Level Design**



#### **VISION**

A safe petroleum exploration and extraction industry in Ireland

#### **MISSION**

Independently regulate petroleum exploration & extraction activities to protect life

#### **GOALS**

- 1. Petroleum undertakings reduce risks to safety to a level that is ALARP
- 2. Petroleum undertakings achieve safety performance commensurate with the best internationally
- 3. Engender confidence that the regulatory framework is protecting the public

## **High Level Design**



#### The components of the Petroleum Safety Framework are:

- 1. ALARP Demonstration Requirements
- 2. Permissioning System
- 3. Compliance Assurance System
- 4. Incident Investigation System
- Agreed Interfaces, Co-operation and Co-ordination with other Regulatory Authorities
- 6. Enforcement System
- 7. Safety Reporting and Published Safety Information System
- 8. Continuous Improvement

#### **ALARP**



### **Demonstrating ALARP**

- Responsibility of the petroleum undertaking to ensure that the risks from its activities are reduced to a level that is ALARP and to demonstrate this through its safety case
- Based on the principle that those who create and control over risks have responsibility for their management
- Undertaking's responsibility maintain risks ALARP (and submit safety case which demonstrates this to the CER)
- Reasonably practicable not required to implement a risk reduction measure where the associated effort and cost is grossly disproportionate to the level of risk reduction achieved

## Permissioning / Interagency co-operation



# Safety Permit from the CER required to carry on the following designated petroleum activities:

- Well Work
- Production
- Decommissioning

#### **Inter-Agency co-operation**

- Permissioning to be co-ordinated with permissioning regimes (onshore and offshore) of other Statutory Agencies such as HSA, ABP, EPA, IRCG, IAA etc
- Issuing of a safety permit for a designated petroleum activity is within the sole and exclusive jurisdiction of the CER

# **Compliance Assurance / Performance Reporting**



- Safety Case Assessments
- Audits and Inspections
- Verification
  - Facilities Verification Scheme
  - Well Examination Scheme
  - Safety Critical Elements tested against defined Performance Standards to ensure ALARP
  - Independent Competent Body
- Performance Reporting
  - Reporting scheme consistent with other schemes in Ireland and internationally

## **Incident Investigation**



- Regulations set out which petroleum incidents must be reported to the CER
  - Separate requirement to performance reporting
- CER may appoint a petroleum safety officer to investigate a petroleum incident
- Incident investigation may lead to enforcement action

#### **Enforcement**



- The PSF is underpinned by a comprehensive Enforcement System. CER can
  - Require an Improvement Plan
  - Issue an Improvement Notice
  - Issue a Prohibition Notice
  - Require a safety case is revised
  - Revoke a Safety Permit
  - Issue an Emergency Direction Order
  - Apply for Court Order to restrict or prohibit petroleum activities
- The Act creates duties upon petroleum undertakings, contravention of which can give rise to criminal prosecution:
  - Imprisonment for up to 3 years; and/or
  - Fines ranging from €1 million to €3 million



# **Guidance for Petroleum Undertakings**

## **Guidance for Petroleum Undertakings**



- To carry out a designated petroleum activity a petroleum undertaking:
  - Engages in pre-safety case submission talks with CER (advised)
  - Submits a safety case to the CER for assessment in advance (3 months Wells safety case, 6 months Production safety case) in line with published CER guidance:
    - Safety Case Guidelines
    - ALARP Demonstration Guidance
    - Safety Case Assessment Procedures
  - Submits the associated safety case fee according to the
    - Safety Case Fees Decision Paper
- All documentation is available on the CER website at www.cer.ie



# **Future Considerations**





- PSF becomes operational November 30<sup>th</sup> 2013
- Pre-submission on going with petroleum undertakings
- CER are internally ready project documentation is on schedule and the PSF team is in place
- Framework is subject to continuous improvement to reflect changes in technology and best international practice
- CER will continue to engage with other European and international petroleum safety regulators to maximise learnings and maintain a safe petroleum exploration and extraction industry in Ireland



# **Going forward**

- PSF will evolve with legislative changes and technological developments
  - Directive on Offshore Safety Transposition by July 2015
- CER will focus on continuous improvement to the PSF through:
  - Outcomes from performance reporting and audits and inspections;
  - Outcomes of enforcement actions; and
  - Interactions with international regulators and statutory stakeholders.



# Thank you

www.cer.ie