Offshore Decommissioning

An analysis of the UK approach and considerations for New Zealand

Sean Rush, Spindletop - April 2015
Overview

• Introduction
• International Regulatory Regime & UK approach
• OSPAR
• Pipelines
• Time scales and Cost data
• UK regulation and NZ equivalent
• Security for decommissioning costs
• Decommissioning in context – a broader discussion
• Q & A
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1987 – 1994 Napier/Wellington
Victoria University, LLB

Eni - Legal Adviser to UK operations – 1996 - 1999

Petro-Canada - Head of Legal North West Europe – 2001 - 2010

Memery Crystal LLP – Partner, Head of Oil and Gas, London 2010 - 2012

Todd Energy – Commercial Manager 2013 – 2015 Wellington NZ – NZ domestic oil and gas

Experience with Government/Trade Associations

• Oil & Gas UK Legal drafting committee for the UK Decommissioning Security Agreement

• Member of Oil & Gas UK’s decommissioning relief deed group

• Adviser to DECC/SoS on Oil & Gas infrastructure matters

• Member of ‘PILOT’ the UK Government – Industry steering group

• Chairman of IBA’s UK Energy Lawyer’s Group and member of IBA Work group on EU regulatory reform re Macondo

Spindletop Legal & Commercial
International Regulatory Regime: UK and differences to NZ

- UNCLOS 1982 Art 60 prescribes installations to be removed per accepted standards established by IMO
- IMO Guidelines Resolution A.672(16) 1989 on the Removal of Offshore Installations
  - Non-removal or partial removal consistent with IMO guidelines is permissible.
  - Prescribed standards referring to water depth, weight and effect on navigation and marine environment should be taken into account
  - Installations that might form enhanced habitat if left on the sea bed may also be left wholly or partially in place
  - Removal at an unacceptable risk to life, marine environment or cost may also be left in place
  - Liability and financial security for installations left in place need to be clear
- OSPAR Decision 98/3 for installations. No NZ equivalent
OSPAR Decision 98/3 requirements

• No dumping or leaving in place of installations in the marine environment

• Must be brought ashore for re-use, recycling or final disposal

• Possible exceptions for large concrete substructures, footings of jackets >10,000 tes, concrete anchor bases and damaged structures

• No requirements for pipelines or wells

OSPAR Derogations (at 2010)

• Ekofisk tank – concrete - Norway

• Frigg TP1 and CDP1 – concrete – UK

• Frigg TCP2 – concrete – Norway

• Frigg MCP01 – concrete – UK

• North West Hutton – steel footings – UK
Pipelines – UK Guidance

• OSPAR does not apply

• Decisions will be taken in the light of individual circumstances;

• The potential for reuse of the pipeline in connection with further hydrocarbon developments should be considered

• All feasible decommissioning options should be considered and a comparative assessment made;

• Any removal or partial removal of a pipeline should be performed in such a way as to cause no significant adverse effects upon the marine environment;

• Any decision that a pipeline may be left in place should have regard to the likely deterioration of the material involved and its present and possible future effect on the marine environment.

• Account should be taken of other users of the sea.
Time scales and Comparative Costs

From Keith Mayo, DECC presentation August 2010

<table>
<thead>
<tr>
<th>Installations</th>
<th>Leave in Place</th>
<th>Removal</th>
<th>Unplanned event</th>
<th>Estimate year</th>
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<td>516</td>
<td>570-890</td>
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<tr>
<td>N W Hutton</td>
<td>163</td>
<td>195</td>
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<td>2005</td>
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<tr>
<td>“ano”</td>
<td>300</td>
<td>390-420</td>
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<td>2010</td>
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</tbody>
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From Iain Riach, Wood Group, Amsterdam August 2010
UK Decommissioning Regime - Overview

FDP Approved

S29 Issued

Decom Program Approved

Security Sought

Pre-development

- Triggers right for SoS to require submission of a decommissioning programme
- Brings in parent and other group companies
- Liability is joint and several
- Maintained while a recipient of s.29

- Approval of Decommissioning Programme
  - Incl.s ongoing monitoring
  - Triggers a right to require financial security

- AA rated (S & P) UK located LoC/cash
- Decommissioning Security Agreement

Point of difference is in timing. Decom plan may be submitted at end of field life. Too late for security.

UK Decommissioning: Security

- DSA Agreed
- ‘Trigger Point’
- Adequate security posted
- Distributed when costs incurred

Pre plateau production:

- Reached when costs (+~50%) > Revenues
- Estimated annually by OpCom
- Independently verifiable
- Post tax estimated if Decommissioning Cost Contribution Deed in place

Cash/LoC AA S & P Aa2 Moodys
- Actionable in UK courts
- Held in trust
- Insolvency Rules adjusted

AA LoC/cash/PCG
- Decommissioning Security Agreement
Decommissioning in Context – a Broader Discussion

Maximising recovery
New smaller entrants? LoC’s?

Tax treatment
Correct incentives? Government share? Tax payer burden?

Int’l Obligations
Political climate? Taxpayer interest?

Other Uses
CCS/Wind/Reefs 3rd party

Partial/Full?
Discussion of Context - Maximising Recovery - 3rd party use

2011

2025

UK risks losing key infrastructure prematurely

Modified after Toole, S., A Government Perspective on Ageing North Sea Installations & Infrastructure, Offshore Europe September 2011
But by 2020, the areal coverage of “live” hubs appears to shrink to less than 50% of the area containing prospects or discoveries.

Some 3000 mmboe would remain “unassigned” to hubs and would require either standalone development or extended hub sweep.
Discussion of Context: Timing of Decommissioning

- Consider what is in the ‘sweep’ of current infrastructure
- Marketability of prospective areas with/without infrastructure
- Consider 3rd party access rights?
Discussion of Context: Rigs to Reefs: Gulf of Mexico

- Rigs to Reef Program in Louisiana Administered by the Department of Wildlife and Fisheries (LDWF)
- LDWF coordinates application approvals or denials with the MMS
- If a good candidate for reefing, permits from the US CoE are required
- Legal title and liability for the jacket turned over to the state of Louisiana after reefing
- LDWF staff onsite to witness reefing event
- Monetary donation by operator to LDWF rigs to reef program required
Partial or Full removal

• What is the best solution for the environment?
• Cost to tax payer?
• Are there employment or other benefits?
• Government share – certainty for IOCs
  • Insolvency legislation?
  • Do the carry back provisions provide appropriate incentives?

Decommissioning on the platform as opposed to heavy lift and remove
In pack:
Decommissioning Security on the UKCS – Securing the Future Today
International Bar Association – Submissions to EU re Regulatory