-PILOT & Industry development
- Decommissioning

Audrey Banner – Head of Offshore Decommissioning Unit, DECC
PILOT

• Joint Industry/Government Strategic Forum
• Membership includes; 8 members of the board of Oil & Gas UK, and around 5 independent members – all industry leaders at a managing director / chief executive level.
• Forum is Chaired by Secretary of State and Vice Chaired by Energy Minister
• Secure full economic recovery of our hydrocarbon reserves
Achievements of PILOT

Successes:

• Changes to Licensing
• Fallow
• Access to Infrastructure
• Stewardship
• Technology
• Jobs
• Exports
• Investment
PILOT – current

• Refocused in 2011 and moved from targets to tackling ‘Big Ticket’ issues

• Key Working Areas:
  • Infrastructure
  • Area Rejuvenation (*Infrastructure*)
  • EOR
  • Exploration
  • Production Efficiency
  • Technology
  • Supply Chain
Promoting the Supply Chain

- Working with BIS, Scotland office and Scottish Government.
- Work with OGUK Supply Chain team
- Support Supply Chain and Supply Chain Code of Practice
- PILOT Share Fairs
- Information Sharing – PILOT Forward Work Plan Website
- Project Pathfinder
- Participate on board of Trade Associations – Energy North, Decom North Sea, NOF Energy, EEEGR and Subsea UK
- OGUK Supply Chain Forum and sub group members
- Trade Association Group
- Direct engagement with Major Purchasers
- Promote UK content
- Fabrication Group
Current focus on Supply chain promotion

- Encourage UK Content
- Provide accessible Information
- Special focus on promotion of fabrication sector
- Oil and Gas industrial strategy –
  - DECC, BIS and Industry
  - Sustain and promote growth of UK Supply Chain
  - Renewed focus on UK content
  - Oil and Gas Industry Council 40 action points
Competitiveness – Project Pathfinder

• Promoting a capable and competent supply chain:
  • Project Pathfinder: https://www.gov.uk/oil-and-gas-project-pathfinder
Competitiveness – Forward Workplan

- Promoting a capable and competent supply chain:
Technology Development

- Understand the technology priorities of the industry
- Liaise with Industry Technology Facilitator
- Supporting small innovative companies
- Technology “demand-chain” annual event

**Innovate UK (formerly TSB):**
- UK's innovation agency
- Investments between 2007 and 2012 in oil and gas was £6M

**Technology Liaison Board:**
- Key focus of identifying technology areas and closely aligned with the aims and visions of the Wood Review.
- Single industry voice giving strategic technology clarity, direction and priorities.
Buoyant Basin/UKCS
Size of opportunity for UK Supply Chain

2012
Total CAPEX £8.1 billion
Average UK content 73%
Value to UK Supply Chain £6 billion

2013
28 projects with value up to £14 billion
27th licensing round – 167 licences awarded covering 330 blocks – largest number ever
OGUK activity report suggests £100 billion of new projects in the pipeline
Over 100 undeveloped discoveries
New companies arriving in basin bringing new money
New developments

Mariner
Bressay
MAR – Montrose/Arbroath
Clair Phase 3
2013 saw record investment in the UKCS

The UKCS is one of the most mature offshore basins, but still offers new opportunities – for example frontier regions such as West of Shetland.

Over £14bn was invested in 2013 – a UKCS record.

The 27th licencing round was the most successful to date.
UKCS one of the most expensive offshore basins in the world – development costs per barrel have risen five fold over the last decade.

Huge competition for investment and resources from the international market.

Government and Industry under pressure to keep the UKCS commercially attractive.

… growing competition for investment…

OFFSHORE CAPEX EXPECTED 2013-16 BY MARKET

Markets represent capital expenditure of U$1,25 trillion dollar in 2013-16

Growing from $250 billion in 2012 to $350 billion in 2016

Source: INTSOK market report 2012 - Rystad Energy
Some operating assets are more than 30 years old – at or beyond the end of their intended design life.

DECC & Industry face challenges of needing to maintain ageing infrastructure, encourage new infrastructure investment, and ensure full infrastructure utilisation through better industry collaboration.
New Opportunities

Carbon Capture and Storage

- Shale Gas and Oil

(Credit Image – DNV)
1995 - UK Government approved disposal of the Brent Spar in a deep sea trench in the Atlantic

Shell reversed its plans following Greenpeace campaign and the Spar was recycled as foundations for a quay in Norway

Oslo/Paris Convention for the Protection of the Marine Environment of the N E Atlantic

Installation decommissioning - OSPAR rules apply

OSPAR 98/3 agreed by the 15 member countries
Unit is responsible for:

Accounting for UK’s international obligations and maintaining statutory liabilities on operators covering all of the infrastructure on the UKCS;

Maintaining and developing Offshore Decommissioning policy, and industry guidelines;

Supporting operators as they develop their decommissioning programmes;

Approving decommissioning programmes and monitoring programme execution;

40 Billion £ liability - Protecting the Government and Taxpayer from incurring decommissioning liabilities;

Maintaining statutory liabilities on operators / field partners covering all of the infrastructure on the UKCS;

Supporting operators as they develop their decommissioning programmes and monitor post decommissioning activities.
UK - DECC decommissioning policy

- DECC ensures companies involved in decommissioning can afford the work
- 325 groups of companies sharing ownership or interests in UK installations and pipelines – There is joint and several liability for all companies concerned
- Liability maintained throughout field life; new owners get liability notices; notices may be withdrawn from sellers, but if there is a default they will be brought back in
- DECC can insist on financial security if concerned about ability to pay for decommissioning, e.g. if costs = > half net worth – Several
- No dumping or leaving in place of installations in the marine environment – it must be brought ashore for re-use, recycling or final disposal
- Possible exceptions for large concrete substructures, footings of jackets >10,000 tonnes, concrete anchor bases and damaged structures
- Petroleum Act requires programme for installation or pipeline – This must cover removal and disposal proposals, waste inventory, EIA, wells, cuttings, costs, schedule, site clearance, surveys
What’s already been Decommissioned

- 3 installations with large concrete substructures*
- 1 with large steel jacket (> 10,000 tonnes)*OSPAR derogation cases
- 15 other steel jackets
- 7 floating production systems
- 2 subsea production systems
- 10 other facilities (loading buoys, flares etc)
- 16 pipeline programmes

10% of installations decommissioned to date
Infrastructure still in place –
Estimated expenditure – between £30 bn and £35 bn

- 8 installations with large concrete substructures
- 32 with large steel jackets (> 10,000 tonnes)
- 244 other steel jackets
- 311 subsea production systems
- 30 floating production systems
- 3,300 pipelines – around 25,000 kms
- <5,000 wells
- <200 cuttings piles

Last Estimates of Cost – about to start new survey
- 253 offshore installations £15bn to £16 bn
- 278 subsea production systems £7 bn
- 3300 pipelines £2bn to £7 bn
Total – between £30 bn and £35 bn
Increasing level of decommissioning

- 44 draft decommissioning programmes under consideration
- Approximately £7 - £8 Billion estimated decommissioning costs over next 3-5 years
- Further 63 programmes on the horizon
- Volume of work is increasing – in 2013 we were looking at 21 DPs
Cessation of production dates

Programmes

- Programmes
Brent decommissioning

Largest decommissioning project to date

Complex decisions being made on methods of decommissioning

How to treat cell contents

Where and how to cut the concrete legs.

Some large contracts already awarded
UKCS £35 Billion Decommissioning Market

There are around 470 installations
- 10% floating
- 30% subsea
- 50% small steel
- 10% large steel or concrete potential derogations
- >35,000km pipelines
- 233 suspended wells
Current issues for regulators

Areas where companies are actively looking for technology development

- Pipelines – leave in place or remove? Pipeline bundles? – cutting techniques
- Mattresses – leave in place or remove – location and diver-less retrieval
- Drill Cuttings Piles - cover, remove, leave to degrade naturally?
- Wells – standards for plug and abandonment, cost efficiency
- Radioactive scale in pipes and vessels
- Low carbon decommissioning
  – Energy Efficiency
Projects and issues for the future

- Re-use of oil and gas facilities
  - Gas storage,
  - CO2 sequestration,
  - Wind farms
- Re-use/recycling of parts and machinery from installations.
- Cost reduction
- Lessons learned from previous decommissioning programmes – topic based areas
- Publishing all studies quoted in programmes
Working to provide more market intelligence to the Supply chain

- Project pathfinder on the DECC website shows information on decommissioning projects – hope to expand to provide contacts awarded information.
- Forward Workplan also available via a link on DECC website shows ongoing decommissioning contracts.
- Plans to do more to provide more detailed information to the supply chain – vital to ensuring companies are able to decommission during periods of high activity – working with Decom North Sea
Wood review

- A 25% cost reduction in decommissioning would save the Exchequer £5bn

- Delaying UKCS decommissioning by five years could allow an extra 1bn boe to be recovered

- Set up a single decommissioning forum through Oil and Gas authority
  - to deliver significant cost reductions, look at cost efficiency.
  - Promote innovation and technology development
  - Require greater collaboration and cooperation between companies
Thank you for listening

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