

35th PILOT MEETING – CHURCH HOUSE, LONDON, 2ND MAY 2013

NOTE OF MEETING

- Attendees listed at Annex 1

ACTIONS AGREED

- Develop a Production Efficiency workstream in the Industry Production Forum and work up a proposal to take this new workstream forward in a “Step Change” type model. - *action OGUK/DECC*
- Identify and appoint new Infrastructure workgroup lead – *action OGUK*
- Contact ITF to establish what level of focus they have in continued support of the technology development for the UKCS. – *action DECC*
- Develop a UKCS technology strategy by the end of the year – *action OGUK/DECC*
- EOR - Cross industry Work group to continue to look for ways to collaborate and progress the agreed work plan. – *action EOR workgroup*

Post meeting request

- All workgroup leads to identify main technology themes from their group and provide the information to Oonagh Wengren – *action all workgroup leads*

PILOT Dinner – 1st May

The Secretary of State invited Chris Austin, an official from the Cabinet Office, to provide details on the new requirement for the extractive industries to disclose any payments made to government. Oil and gas companies operating in the UK will be required to report all payments, ranging from taxes to licensing fees, for each field/project. This change has been made to align the UK and Europe with the USA in the push towards global transparency standards on payments made by the extractive industries. BP and Shell noted they were supportive of this intent, provided undue bureaucracy was avoided.

Government supports the release of information on a project level, rather than at company level, because this fits with the standards currently used in North America. Government believed that introducing a different reporting structure could introduce extra costs for international operators.

A conference on the issue of payment transparency will be held at Lancaster House on June 15th, at which UK Government hopes that some of the international operators will be forthcoming in their support for transparency on payments.

The issues of resourcing at DECC was also discussed. Industry noted that expediting the BFA approvals process is an area for improvement.

Item 1; Chairman's opening remarks

Michael Fallon opened the meeting and introduced himself as the new Energy Minister he went on to say he was not new to Energy as had engaged with the sector in his BIS role. He mentioned the recent launch of the Industrial strategy and stressed that oil and gas was extremely important in relation to Governments growth agenda. He was aware of the valuable work PILOT had achieved over the years and was intent in maintaining it as an action focused forum.

He then invited Fergus Ewing to cover any specific Scottish matters.

In his remarks Fergus congratulated UK Government in the publication of their industrial strategy and that he wanted to play a constructive role in driving success in the future of the UKCS. He reported that the Scottish innovation fund (£10 million) was now up and running and there were many common areas between the two strategies and there was a real desire to work collectively for the greater good of the industry. Fergus also added that it was important we seek solutions for aging infrastructure – this was an area we had to get right as it could hold enormous benefits.

Fergus mentioned the investor's event for SME's on 13th June with Michael Moore in Aberdeen and said it was important that politics were left outside the room.

Item 2; Linkages between PILOT and the Industry Council

Stephen Speed led on this item and informed PILOT there had been good co-operation in the development of the strategy between Industry, BIS and DECC and it was very helpful to have Gordon Ballard playing a strong role on both forums. PILOT currently has 6 workstreams which is perhaps too many and as the Council will be more focussed on supply chain issues it would be sensible to move Skills, Access to Capital and Technology funding over to it. This view was endorsed from around the table as a sensible way forward.

Gordon Ballard went on to explain his skills group had substantially delivered on all 3 work areas including - engaging with the military and establishing a mechanism for conversion training, extending the scope of the modern apprenticeship scheme in relation to offshore and establishing a “gateway” into the industry for job seekers. The scope of his work was deemed to be complete and the group would be stood down.

The question of Council membership was raised and it was decided that a trade union representative should be invited; it was suggested that this could be Grahame Smith of STUC.

Item 3; Production Efficiency

This item was led by Simon Toole who started by challenging PILOT as to why this was a major problem which everyone should care about. The issue had significantly worsened in the past few years and many assets were currently performing well below optimum production with as much as 500,000 barrels of lost production per day. This was clearly unacceptable to Government but should also be unacceptable to company shareholders. There had been a dramatic increase of unplanned shutdowns at least in part a reflection of inadequate investment and maintenance.

Poor production efficiency is undermining the new investment coming forward and is an area which could contribute significantly to improving overall production from the basin. Turning this around will require lots of investment and expenditure as most installations have a backlog of repairs.

There then followed a lively discussion on the issue centring around whether there should be greater consequences for poor P.E. and whether there was enough leadership in industry to turn this around.

Oil and Gas UK indicated they had re-energised their production forum and that seemed the most appropriate vehicle to work this issue. Some of the solutions could be based on industry campaigns similar to Step Change with tough improvement targets being set. These could be linked to league tables which would make production data transparent throughout industry, but which would require cross industry buy in. The aim would be to establish pathways for each asset to get P.E up over 80%, and onwards towards 90% over a given timescale. The Minister challenged PILOT on this and asked that everyone get behind work to improve production which should be in everyone's

interest, he asked for swift action and a progress report for the next meeting, he also commended the “Step Change” approach.

Item 4; Infrastructure

Jonathan Roger provided an update from his workgroup which had been in place for a year. He reported that phase 1 was now complete and they would be moving to phase 2. Initial work had highlighted that up to 6 billion barrels of production were at risk if no access to significant infrastructure. In his progress update he informed PILOT that the Infrastructure Code of Practice (ICOP) had been improved and there was also evidence of commercial behaviours getting better. However in relation to risks he highlighted timely exploration around infrastructure hubs would be critical and there may be a case for some form of new infrastructure ownership model coupled to a more flexible and innovative late life tariff mechanism.

Moving to phase 2 a four point implementation plan had been approved and they had established 3 regional sub groups to look at the Northern, Central and Southern parts of the basin as all had different challenges. The Northern area would be led by Taqa, the Central by Shell and they were still to confirm a lead for the Southern area. Overall there was good engagement from industry and he expected the group would be able to report good progress at the next meeting.

From conversation around the table there was agreement that the Southern basin was under immense economic pressure and while it still had significant potential with over 3 billion stranded barrels, it may need some special assistance to exploit its full value. It will also be important to give careful consideration to any decommissioning proposals in the SNS to ensure critical infrastructure is not prematurely removed.

As this would be Jonathans last PILOT, Minister thanked him for his active participation and for all the work he had done in leading the Infrastructure workstream.

Item 5; Exploration

This is a new PILOT work area led by John Austin. He defined the issue as declining numbers of exploration wells only drilling 20 per year and reducing volumes of discoveries. There had been good initial engagement with over 20 operators participating (less engagement from smaller operators). Early observations were that there was still good potential in the basin but industry needs to compete less and collaborate more and be prepared to share knowledge and data. There also needs to be better information on the geology of the basin as there has been a decline in success rate in recent years. While there are a number of challenges there was also good news reported in that over 4 billion barrels of new hydrocarbons have been discovered in the last 12 years.

In the discussion it was accepted there was some urgency associated with exploration and a strong link to the infrastructure work. We must endeavour to locate and recover

all viable accumulations of hydrocarbons before critical infrastructure is removed. It was agreed there needs to be a renewed focus on seismic to ensure we have the best information covering all prospective parts of the basin. Technology will be an important enabler and we must make full use of emerging techniques to understand the geology better and reduce the risks of exploration. Costs are also a barrier and innovative ways must be developed to drive these down.

Item 6; EOR

Trevor Garlick updated the group on the focus of the next phase of the PILOT EOR work;

- Promoting waterflood excellence, and
- Identifying further Losal (low salinity water flood) candidate-fields in the North Sea.

(These have been selected as the two most material benefits; the group will then progress to look at polymer and miscible-gas options).

Trevor introduced the EOR low-salinity waterflood “pyramid of proof” which requires screening tests by core flooding to initiate the possibility for a larger scale EOR project. The optionality shown is currently populated with fields from five operators; two others are to join the group. Field trialling will only progress up the various levels of testing (core scale; well scale; sub field pilot and full-field) if it is technically feasible and deemed to add value. Currently, only the Clair field has committed to deploy the technology, but 11 other fields are now actively being screened; the core-flooding best practice and results-sharing are being facilitated by this group.

Given time, the pyramid should be populated with cases of increased maturity. if some of these were technically doable and material, but not commercially viable, they could be raised for discussion at the Fiscal Forum.

It was noted that EOR is a longer term benefit but that a pre-requisite for an efficient EOR scheme; effective water-flooding, is also likely to benefit absolute production (and production efficiency) in the short term.

Item 7; IOR

Glen Cayley led on this item and reported there could be as much as 3 billion barrels of a prize from IOR. There was real industry interest in this issue with over 40 companies participating in a recent lively workshop at which time the main issues to arise were

- Reducing drilling costs (this could unlock many barrels)
- Establishing a more efficient spares database and market
- Wider use of 4 D seismic

- More research into understanding tight reservoirs

These are all areas which will now be considered by the group.

Item 8; Technology

Oonagh Werngren led on this item, she reported that technology was a thread which ran through all areas of the business yet there was not currently an overarching UKCS strategy. This was an area her group would be working on and she had recently engaged an industry expert to work on this issue with the remit of having it developed by the end of the year.

In the discussion it was acknowledged many technologies are developed by small supply companies and funding was often a major issue with Government agencies not currently very active in the Oil and Gas sector.

Technology development for the UKCS has in recent years been driven by ITF but they have internationalised their remit and are now less focused on the North Sea. This is an issue which needs to be addressed with ITF.

Item 9; Summing up

The Minister left at this point and Stephen Speed summed up and closed the meeting.

Stephen thanked all the workstream leaders for the sheer amount of work that has gone into these groups. He said it would be interesting to see what we get if we add all the identified work together to see the size of the prize we can achieve.

He also said it was interesting to see that industry would welcome a stronger push and acknowledged that there needs to be a drive from DECC on its resource base and the SoS realises this.

Collaboration was a common theme but what work would that focus on and what would it really look like. No doubt that collaboration would give some substance and better result to problems.

Annex 1

PILOT Dinner Chaired by Edward Davey, Secretary of State for Energy & Climate Change

PILOT Meeting Chaired by Michael Fallon, Minister of State for Energy & Climate Change

List of PILOT Meeting Attendees – 2nd May 2013

Malcolm Webb	- Oil & Gas UK
Gordon Ballard	- Schlumberger
Trevor Garlick	- BP
John Pearson	- Amec
Archie Kennedy	- Nexen
Glen Cayley	- Shell
Jonathan Roger	- Centrica
Andrew McBoyle	- CNR
Steve Jenkins	- Cairn Energy
Jim House	- Apache
Dennis Clark	- OGN Group
Oonagh Wengren	- Oil & Gas UK
Fergus Ewing	- Scottish Government Minister for Energy, Enterprise & Tourism
Margaret Porteous	- Deputy Director - Scotland Office
Stephen Speed	- Head of Energy and Development Unit – DECC
Simon Toole	- Director, Licensing, Exploration & Development – EDU –DECC
Wendy Kennedy	- Head of Offshore Environment & Decommissioning - DECC
Bill Cattanach	- Head of PILOT Secretariat/PILOT Secretary – DECC
Hugh Hedges	- Head of North Sea Policy Team – HMRC LBS Oil & Gas
Nico Heslop	- Environment & Transportation Tax Team – HM Treasury
Grahame Smith	- STUC
John Austin	- Exploration Taskforce

Apologies

Paul Warwick	- Talisman
Michael Moore	- Secretary of State for Scotland – Scotland Office
James Edens	- CNR