I ask the question today: Is there a future for Exploration in UK? As a backdrop I use a photo of the Nelson Platform which I took myself over 10 years ago, and this is deliberate, as Nelson is a great example of a game-changing discovery made by an innovative exploration company – Enterprise Oil. Do we have more Nelsons to be discovered? More Buzzards? More Catchers?

These questions have exercised DECC and the industry and have come together into the Exploration Task Force initiative under the aegis of PILOT and Oil & Gas UK. I also have a role as President of PESGB, which I would like to use to access the collective knowledge of our members – and DEVEX attendees – to foster the aims of the ETF.

It’s important to pose the question now, after almost fifty years of exploration on the UKCS, as drilling rates are declining and discoveries are becoming less frequent and smaller.

Is this a sign of terminal decline in the exploration business for offshore UK? Is it a reflection of the UK’s perceived lack of potential? Is it due to a lack of risk funds available in a high cost environment? Or is the current situation a temporary blip and there are real prospects for long-term sustainability of exploration in the UK?
These questions were raised within the PILOT forum and stimulated the formation of the Exploration Task Force. PILOT is a high-level forum between Government and Industry, which addresses the knotty problem of prolonging UK production, ensuring a stream of jobs in the industry and of course continuous significant tax payments to the Exchequer to underpin the UK economy.

The Exploration Task Force is chaired jointly by DECC and the industry, and with high level representation from a wide section of operators and contractors, it is charged with providing answers to the questions, forming solutions and working collaboratively towards actions to improve the prospects for the future.
Let’s look first at the nature of the challenges facing us.
Over the last 50 years, the UKCS exhibits many of the features of other mature exploration areas, with a peak of exploration activity after 20 years, declining thereafter. However, it is complicated by the fact that different basins kicked off at different times, technological innovations caused changes and overlying everything is the oil price. There is also an imprint of competition from other breaking new areas, as funds are diverted away from UK to exciting new areas such as Brazil, Africa, Australia, all with much more potential for giant finds.
If we look at just this millennium, drilling activity actually appears fairly flat. There is some coupling with oil price in the early years, an apparently decoupling since the financial crash of 2008. There are clear drops of activity at times of tax increases, although I would have expected there to be more of a lag on these, and the two tax incentives on small fields have apparently resulted in increases of activity.
Looked at in terms of volumes per year, there appears to be a flattening or slow decline in volumes to go with the drill rate decline.
So when the ETF first convened we were faced with a rather gloomy prospect of not only exploration wells dropping to 20-30 per year. Also, rigs are more difficult to find, capital is harder, success rates are dropping, as are volumes, all in a rising cost environment. The bottom line, however, is that companies either cannot find the finance to invest as much in exploration in UKCS, or they choose to fund exploration elsewhere, due to a PERCEIVED more attractive value proposition elsewhere.
The picture is not so bleak, however.
Exploration must always be seen as a long-term game and with over 4 billion boe discovered from 358 E wells since 2000 (12 million boe per well) this gives some cause for optimism. However, the discovery rate has fallen to around 8 million boe per E well since 2008, which may explain some growing pessimism.

The spread of discovery sizes is also relevant. If a company finds a median discovery of 13 mn boe in the CNS, it will likely be commercial – providing infrastructure is in place. The median discovery of 44 mn boe WoS is still way below the current commercial limit, which is something like 200 mn boe in deep water.
The UK still has great undiscovered potential as DECC estimate that there are 3-9 billion boe to be found in the UKCS. However, with the number of wells being drilled per year declining, it could take around 20 years to find DECC’s central yet to find estimate of 6 billion boe, by which time some of the necessary infrastructure will be gone and those barrels will never be recovered.
Creaming curves also give room for optimism, with CNS and WoS especially showing the most potential.
So, although we started off fairly gloomily, most explorers are half-full people by definition, so our collective optimism started to kick in and we started trying to figure out what the Task Force could do to increase exploration success in the UKCS. We initially set up work groups to address four separate (although inextricably linked) topics - Collaboration; Comparative; New Plays; and Technology.

It was important to come up with new ideas and new ways of working, as otherwise we would carry on the slow and inexorable decline. I was particularly enthused by the energy evident in the Task Force.

Everybody cared, everybody thought there was a prize worth fighting for, and of course unless everybody can see the business propositions to put to their managements or fund providers, we will fail.
The intermediate result, after 6 months of the Task Force, was to present initial recommendations to PILOT, which we did 2 weeks ago.

The principal key to future success is the use of the latest technology to identify and explore new plays based on a regional scale understanding of geology and hydrocarbon habitats. Let’s move away from “postage-stamp” interpretation.

We definitely need to improve subsurface imaging and geological modelling. To improve our understanding of what is yet to be found on the UKCS, access to better quality seismic is crucial, especially for the smaller companies who do not have the capital to spare. We need to identify the new plays and recognise those which are neglected and remind ourselves of the untapped sources of value under our noses.

Already at DEVEX I have seen great examples of new technologies and new ideas, so you are the people who can help deliver these to the Task Force and IDENTIFY NEW AND NEGLECTED PLAYS AND SOURCES OF VALUE IN EXPLORATION.
There must also be more collaboration and sharing of knowledge and data between industry, government and academia. We need to ensure that the ongoing NSRP takes account of the needs and ideas of explorers. Collaboration should be promoted within hub areas especially in relation to the sharing of prospect information. Rig clubs should also be utilised more to allow smaller companies access to a drilling rig, seismic group shoots promoted, and there is a greater sharing of regional data and knowledge, with cost effective ways of smaller companies accessing these.

**WE MUST DO WHAT WE CAN AS AN INDUSTRY TO CHANGE OUR ATTITUDES AND COLLABORATE MORE THAN WE COMPETE. WE HAVE TO DRIVE COSTS DOWN.**
And finally we need to do a better job at promoting the value of UK exploration, both internally within our companies, and externally. The fiscal question is always raised at this point, but a fiscal stimulus is not necessarily the first step to increasing exploration.

There are some things we can do to not only promote UKCS, but that will help our geoscientists to access more regional knowledge. An update of the Millennium Atlas is being considered, but as a first step the New Plays group will come up with “fliers” to help spread the word by the end of Q3 2013.

We need to ensure the rewards of exploring in UKCS are clearly understood and that these are competitive with other opportunities for investment.
We are at the end of the first 6 month phase of the Task Force and we need to channel the energy, enthusiasm and optimism in our members in actions in the second phase which will start setting the scene for increasing exploration success in the long term.

I ask you all what you can do to help collaborate, to come up with ideas for better geological imaging and to optimise our costs. I have seen many examples already from papers at DEVEX, so I am confident that we can do it!
As a final point, I should also like to express the views from my company. OMV is a small company in UK, but certainly not small globally. We may be a typical investor in UK in coming years, as we look to develop our existing but undeveloped resource base, and create a sustainable business underpinned by successful exploration. The fact that we have a significant resource base in UK created entirely from successful exploration gives us optimism that we can continue to grow through exploration here for years to come.
I will finish with another photo I took, this time more recently of the drillship which made OMV’s first operated UK discovery, Tornado, WoS. It’s not a Nelson, and it’s not yet sanctionable, but the future of the UK will involve more and more deepwater and difficult exploration, as well as an underpinning of many small discoveries, so that we have a sustainable production base long into the future.

I am convinced there is a future for exploration in UK, but we will need to change our attitudes as an industry and we will need government support. Sharing our technical knowledge, as evident at DEVEX, is an important part of this.

There is a Future!