



NORTH SEA KNOWLEDGE

Hiren Sanghrajka,
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looks at the findings of the
Wood Review and discusses
how the proposed regulatory
changes will need to be
supported and facilitated
in order to improve the
prospects of one of the
world's most mature oil and
gas basins.



How the UK can maximise recovery in its ageing North Sea basin has been in the spotlight and debated heavily in recent months following the publication of the Wood Review and the upcoming referendum on Scottish independence. The need for better collaboration and sharing of knowledge and data has been at the forefront of these debates. While this argument has not been contested by any of the parties in the discussion, some key landscape changes will need to take place for it to occur.

In June last year, Energy Secretary Ed Davey, called for a review of the UK's offshore oil and gas recovery and regulation, and commissioned oil veteran Ian Wood to lead it. Earlier this year Wood published a final report of recommendations, suitably called the Wood Review, following eight months of dialogue with UK license holders, contractors, government officials and exemplary regulatory bodies abroad.

The report makes four key recommendations on how the UK can optimise its recovery of hydrocarbon resources – based on a shared strategy basis titled 'Maximising Economic Strategy for the UK'. It argues

that the market has changed since the '70s and '80s and in order for the UK to improve its declining production rates; it has to push companies to take a more holistic approach in maximising recovery on the entire shelf and not just for themselves. The need for collaboration, co-operation, access and a tougher regulator all feature greatly.

While there is no debate on the role these elements play in the future of the North Sea, it is important to look at each one in more detail and assess whether the industry is positioned to incorporate them successfully.

Collaboration and co-operation

The UK is one of the most mature oil and gas basins in the world with over 40 years of operations. The knowledge and data that accompanies this experience is vast. Further, the basin is not uniform but has a diverse mix of plays both in new frontier areas as well as more mature regions. The harsh environment it sits in also means that it is one of the more technically challenging areas of oil and gas exploration and production. All these factors tell us that the information that exists in the region will therefore be equally diverse, complex and vast in nature. What it also tells us, more critically, is that making this information available is not enough on its own in order for it to be exploitable, receiving parties must have the skills and expertise to understand and manage it too.

Access

In the early days there were few large fields and few major operators in the market. Today the story is quite different. The number of oil and gas fields off the UK has increased to over 300 and many discoveries are now much smaller in size. There is also a much more diverse set of companies, with varying levels of experience and objectives. As the Wood Review points out, due to these factors the level of interdependence among operators has increased significantly. However, companies have been struggling to adapt to the changing market dynamics and this has resulted in disagreements and delays in field development plans. The use of existing infrastructure and agreement on the terms for access to processing and transport facilities has been a key factor. This has resulted in sub-optimal developments in terms of efficiency and cost, or in some cases stranded assets.

Upstream Advisors works with both the established majors and the newer independents. It sees the challenges that the companies face from both sides of the fence. Fundamentally, projects boil down to economics. The cost of maintaining large, old and complex infrastructure beyond its design life is significant for owners and not necessarily a priority for them. Meanwhile, access to this same infrastructure will make or break the development case for smaller nearby projects. Without better collaboration and access the result will ultimately be more fields being left stranded and a loss of potential production and income on the shelf.

In announcing its fast-track implementation plans for the Wood Review recommendations, the government has made clear that it is ready to drive such co-operation through. While this push is welcomed, it is important that the interest of all the parties involved are fairly represented and accounted for. In its efforts to deliver the recommendations the UK government should not only aim to arm a regulatory authority with the best know-how, but ensure there are processes in place for all stakeholders to do the same. A fast turnaround in new rules and regulations will mean a steep learning curve for all involved and therefore access to independent expertise and advisory will be vital in both ensuring optimal progress and supporting the smaller independent investors.

A more engaged regulator

Over the past couple of decades the industry has witnessed a 'light touch regulatory authority' to oversee what were fewer operators and fewer but larger finds and field developments. In line with the government policy at the time, it allowed for a large degree of industry independence.

The Wood Review calls for a change in the regulatory model. It argues that in order to ensure the industry maximises economic recovery, a stronger, more informed and engaged regulator is essential.

The role of the regulator should move from a more passive approvals processor to an active enforcer of a national level strategy. It should be empowered to be able to deliver the full productive potential of the shelf through developing and delivering, together with the industry, a coherent strategy for MER UK, encouraging investment, promoting active exploration and encouraging greater collaboration.

Is better collaboration, access and a stronger regulator the end of the story?

If a successful market scenario where all the above is envisaged – a stronger regulatory authority that is able to implement a national level strategy for optimal recovery and push operators to better collaborate and open up existing infrastructure for new developments – is created, a certain type of business climate will also be created.

In such a scenario the natural progression will be to see an increase in small independent oil and gas companies who will be interested in exploring and developing the more marginal fields. However, in their nature these companies are leaner organisations that seldom carry technical resources beyond geological and geophysical capabilities. They will not be able to cover the full spectrum of technical requirements a full-blown E&P project demands. What this necessarily means is that when these companies reach the development stages of their projects, in order to best assess the options and infrastructure available to them, and analyse the data and information provided, they will come to need development engineering services. The need for a different sort of service sector that lies between the current big engineering, procurement and construction (EPC) contractors and the larger operators will be created. As a consequence, the current landscape of engineering services will have to adapt.

Traditional large international oil companies (IOCs) usually carry vast technical capability, especially in development planning and production technical support. These areas are very specialised and a different type of support services sector would need to emerge as a result. The development function for the smaller oil and gas companies would likely reside in independent niche consultancies. Such companies will be best suited to match the more nimble and agile workflow of the E&P independents.

The diversity of the mix of license holders in the region comes with a mix of experience and capabilities too. Added to the limited technical firepower, many of them also have limited experience of the region. Seasoned consultants can help these companies to equip themselves with the best technical and local know-how to ensure they make the most informed development decisions.

In the same stroke, if the UK regulatory authority is to strive to be effective it too must hold the knowledge, capability and experience to do so. In other countries, such as Norway and the Netherlands, where the regulator is deemed to be successfully influential, independent consultants support it.

Conclusion

While the UK is one of the more mature oil and gas basins globally, it still has significant opportunities going forward. Around 42 billion bbls of oil equivalent have been produced so far and it is estimated a further 12 to 14 billion bbls could be produced. The mix of frontier areas, new plays and brownfield opportunities will attract a diverse mix of industry players going forward. The push for shared knowledge of lessons learnt and better collaboration and access is a no-brainer from all sides. However, how this collaboration is supported and facilitated will be equally as important. It will be fundamental to ensuring that the UK is able to both retain existing investors as well as attract new ones. ■

