

**Offshore Decommissioning Conference – Keynote Speech**  
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Good morning ladies and gentlemen...

Thank you Nigel and Mick and everyone involved at Decom North Sea and Oil & Gas UK for organising this conference and for the invitation to be with you here today in what I anticipate will be a fruitful few days of knowledge sharing, collaboration and discussions on cost-reduction, efficiency and innovation – all underpinned by the overarching theme to ‘deliver the future together’.

The UK North Sea is at a defining moment in its history. Decreasing production levels and rising operational costs are all fuelling a sense of uncertainty. However despite these challenges, we recognise a rich source of opportunity for the industry to maximise oil and gas recovery and to build a decommissioning future fostered on collaboration and innovation and one that is focused on developing market based solutions and supported by a new independent regulator.

The process of decommissioning offshore oil and gas facilities is of course complex. It calls for sophisticated management, planning, coordination and control of a wide range of skills, resources, facilities, technologies, equipment and services. Decommissioning any one platform is a long and expensive process. The Brent field infrastructure alone is expected to take 12 years to decommission.

There is an enormous challenge ahead; potentially almost all of the infrastructure put in place in the North Sea will require decommissioning over the next 30 years in a safe and responsible manner, a task that must be carried out in one of the harshest offshore environments.

This amounts to:

- Over 470 offshore installations of various types
- More than 5,000 wells
- Possibly over 25,000 kilometres of pipelines

From the small steel lattice structures of the southern North Sea to the huge concrete and steel installations in the northerly waters, decommissioning projects are destined to be complex.

The size and tonnage weight of these installations is colossal – OSPAR estimates suggest that this will amount to more than 3.5 million tonnes. To put this in some perspective, it is equivalent to 1700 London Eyes or 500 Eiffel Towers.

In addition to the installations, one of the biggest and most expensive challenges is well plug and abandonment (P&A). P&A costs per well can be in the millions of pounds and can take over a month to complete. In the next 10 years alone we have more than 800 wells scheduled for P&A on the UK Continental Shelf.

Collaborative efforts are well underway between all relevant parties seeking to reduce well P&A costs. At Schlumberger we are working closely with operators, suppliers and co-contractors to improve performance and efficiency. At one major North Sea platform, since the commencement of the project, we have achieved a 40% reduction in our crew size and a 50% reduction in non-productive time - producing top quartile operational performance.

The regulatory framework for UK offshore decommissioning is well established. The Department of Energy and Climate Change (DECC) has made it clear that it will seek to achieve effective and balanced decommissioning solutions, which are consistent with international obligations with an important regard for safety and the environment, as well as social and economic considerations.

At the core, communication and consultation between government, industry and indeed all relevant stakeholders is vital, with the emphasis on high levels of transparency and open dialogue for all activities.

Decommissioning UK North Sea oil and gas facilities is projected to cost £35-40 billion over the next three decades – but we know this comes with much uncertainty. Exact decommissioning costs are notoriously difficult to calculate as there are many unknowns and fluctuations such as estimated risks, change in material condition, market volatility, product-cost inflation and uncertainties in technical data.

The only thing we can be sure of is that in any decommissioning scenario, a large amount of investment will be required. Indeed, the government will incur more than half of these costs through their tax relief mechanisms, making the UK taxpayer one of the most important stakeholders. The cost of decommissioning is clearly an issue that has to be carefully thought through and subjected to detailed reviews at regular intervals.

Let me stress, that this is absolutely core to the Industrial strategy and the goals are very much aligned with the Wood Review. We are all travelling in the same direction, and work by the Government, Decom North Sea and Oil & Gas UK among many others is crucial, if we are to realize our ambitions and make the most of our opportunities. It is important to note that decommissioning will inevitably be part of the overall late-life strategy of the UKCS.

While decommissioning activities represent a significant business opportunity for UK contracting and consulting companies, they can also be viewed as a major liability to the owners of the assets and the UK government: therefore we need a significant drive to reduce costs by learning from experience, sharing of knowledge and innovative approaches. Through engagements like this, we can begin to intelligently and pragmatically address the decommissioning challenges ahead. Indeed, estimates by the Royal Academy of Engineering suggest that the lessons learned from decommissioning any one installation can potentially reduce costs by 10-15% for successive facilities.

Often companies that take the lead on innovation find that they incur all the costs of innovation while those that follow gain all the advantages. Innovation is costly and there can often be a 'race to be second' mentality throughout the industry – together as an industry we cannot afford to take this approach for decommissioning.

One of the many achievements that we should be proud of in our sector is a culture of sharing accumulated knowledge. It is crucial that this is encouraged and developed for the decommissioning phase. Mistakes and failures to plan and execute in an optimal way will be costly for the companies involved as well as impacting our wider industry reputation.

Therefore sharing knowledge and learning from others' successes and mistakes is in the interest of all parties – something I hope will be at fore-front of your minds over the next few days.

We have a rich opportunity to learn from other industries such as the nuclear sector where the UK market for reactor decommissioning is estimated to be worth close to £60bn over the next 30 years, with a worldwide market of £300Bn. If we get this right, together we have the opportunity make the UK North Sea a decommissioning centre of excellence.

The market for decommissioning is expected to grow in the coming years, and we must meet this growth with game-changing innovations. If a sustainable market develops, the incentive to invest in innovative decommissioning technologies will rise.

Our industry has always been at the forefront of technology, making oil and gas safer, cleaner and cheaper to extract and use – let us now begin to transform and develop new technologies that will ensure a safe and efficient future for decommissioning. Indeed, no doubt as with many companies, this is an R&D area of interest for Schlumberger and our research centre in Cambridge is actively involved.

Another area we must address is skills. North Sea decommissioning will be an ongoing activity for the next 30 years with, as I have noted, nearly 500 facilities expected to reach the end of their operational life. Let us address this challenge by promoting apprenticeships, ensuring we recruit the right level of technical graduates and retain experienced workers, as well as looking to bring people in from other industries and indeed the military – an excellent source of talent.

As an industry, let us not repeat the mistake of not recruiting young people in early enough, let us hire and train people now so that we have workers with the right skill set and experience for the decommissioning phase.

We must:

- Promote decommissioning as a long-term opportunity for young engineers and apprentices with integrated environmental and ecological aspects.
- As well as in-house training we should also look to encourage technical education organisations to offer specific courses on decommissioning, to provide students with an understanding of the issues, processes and industry challenges.

It is important we highlight that decommissioning is not simply a UK issue but one with international interest and international opportunities.

At present, decommissioning is an area that is largely below the radar for the majority of the UK population. A much wider engagement with a greater range of stakeholders is required. It is of paramount importance that we communicate decommissioning decisions and justifications to all stakeholders, and indeed the wider public, demonstrating clearly that operations are carried out in a safe, secure and responsible manner.

To conclude: the decommissioning of the UK Continental Shelf is a major engineering and commercial challenge. It will be expensive, take many years and must be carried out with great care to protect the environment. It also represents a significant opportunity for the UK industry. The North Sea is not the only place that will be decommissioning such infrastructure and lessons that we learn should be transferred abroad and business constructed on this knowledge.

We must build on the working relationship between the industry, government and other key stakeholders. We must constantly revise and update decommissioning best practices through knowledge sharing and collaboration and we must nurture the skills that will be the lifeblood of innovation by attracting young apprentices and retaining experienced workers. The whole supply chain will need to work together to provide reliable, safe and cost-effective solutions to the challenges which decommissioning poses. Together we must be determined to ensure the best outcome in our waters.

In the end we all have a common objective – to take on this remarkable challenge, remarkable in scale and remarkable in scope. Acting alone makes change hard to achieve. Let the industry work together, to plan, innovate and grow through an integrated strategy that would encourage new investment, deliver improved asset management and underpin the future success of decommissioning.

Ladies and gentlemen, the spotlight is on us, but the next chapter for the UK North Sea is yet to be written. We are the authors of our own future, not discouraged by the complex challenges ahead, but fortified and gifted with the ideas, creativity and imagination to deliver the future together.

Let us capture this unprecedented opportunity; a strong decommissioning future can be the engine for growth for decades to come, let us build the future together and lead the way to become the decommissioning champions of the world.

Thank you.