Executive summary

Over the next decades offshore decommissioning activity is projected to increase as existing infrastructures approach the end of their productive lives. The oil price collapse combined with deteriorating infrastructure, late-life technical limits and regulatory pressure, has led mature basin operators to focus on the expensive and technically complex challenge of decommissioning.

Between US$100bn and US$200bn is expected to be spent on decommissioning globally, with most of the activity occurring over the next 40 years. This will predominantly take place in mature basins that account for the majority of offshore platforms worldwide.

Companies that operate in these areas now have to make important decisions regarding the late-life management of their mature assets which will require forecasts of oil price, technology and cost. Operators may decide to produce a field for as long as possible, sell their assets early with the associated decommissioning liability or even lease their assets to companies with more experience in managing mature fields prior to decommissioning. In all three options, late-life management and decommissioning cannot be viewed as separate issues when these strategic decisions are being made.

For the oil and gas supply chain, the eight stages of the decommissioning process offer opportunities for both existing and new specialist companies. In each stage there is enormous potential for new ideas and cost-cutting methods due to the industry being in its infancy. Areas such as well plug and abandonment, that make up nearly half of the decommissioning cost, offer huge opportunities for innovative solutions from the supply chain. Other high expenditure stages, such as topside removal, are already using ‘game-changing’ solutions such as the introduction of single-lift vessels.

The Gulf of Mexico, Asia Pacific and the North Sea all offer an abundance of opportunities with the Gulf of Mexico the leading decommissioning market globally, where approximately 4,600 structures have been decommissioned to date. Although activity has been declining since 2011, decommissioning in the Gulf of Mexico is valued at US$26bn. Asia Pacific has great future potential with around 1,800 offshore structures of which half are 20 years or older and over 95% are fixed jackets. Although the market is inevitable, the region is held back by a lack of regulations, and technical and liability issues. The North Sea market has huge near-term potential, with an estimated US$50bn to be spent in the next 25 years. The majority of this expenditure is in the UK sector, with costs expected to reach up to £2bn a year.

With the UK planning to become a decommissioning centre of excellence, British firms are well positioned to take advantage of this growing industry. Operators need to work closely with supply chain companies as they can provide alternative techniques for enhanced cost saving and efficiencies. The three markets present many challenges, some unique to a particular region, others that are replicated in all three. Nonetheless, decommissioning cannot be avoided and the market will undoubtedly grow, offering a vast amount of global supply chain opportunities in the years to come.