decommissioning this year as a result of the ruling. "We expect activity to increase significantly starting in the second quarter of 2011," he stated. "This improvement should continue as we benefit from the anticipated work generated by the Idle Iron regulations."

Members of the IMCA stand to benefit significantly, as many are active in the decommissioning industry. Its CEO, Hugh Williams, agrees: "The industry has to remove structures in accordance with international law, so it will definitely increase the amount of decommissioning work completed in the Gulf of Mexico.

"Doing it early is often best before the structure deteriorates" he continues, adding credence to the US Department of the Interior's argument for improved safety. "IMCA believes that decommissioning should be treated, from an HSE viewpoint, the same as any marine construction project – so full care and attention must be paid to HSE, and extra care must be taken regarding unknowns such as corrosion, weight and centre of gravity, and structural modifications."

Controlling costs

This will also mean increased costs for oil companies that are compelled to remove a large amount of idle equipment. However, every cloud has a silver lining; Williams believes that forcing timelier decommissioning will save oil companies money in the long run.

"Removing structures damaged by age is more difficult, and to do it safely costs more," he explains. "Removing unproductive infra-structure early makes the process much more straightforward."

Of course, avoiding decommissioning altogether is the best way for oil companies to control these costs. Idle Iron incentivises the industry to keep infrastructure productive for as long as possible. This is particularly true of floating platforms, which can be easily redeployed; once a well has become unproductive, they can be towed away and immediately put to work elsewhere. This improves the productivity of equipment and avoids unnecessary expenditure. Still, the wells that are left behind will need to be permanently plugged, something the industry has not always spent money on before.

It is important to remember that the main driver behind the Idle Iron ruling was not a financial one, but an environmental one. With the Macondo incident receiving widespread media attention, pressure to improve the environmental record of the oil industry came not only from environmentalists, but the wider public, forcing the US Government into action.

This may end up costing the industry money, but the benefits to the decommissioning industry should not be forgotten. ■

The removal men

As the platform removal business grows more competitive, engineers must provide flexible solutions to stand out from the crowd. Andreas Rosponi and Jan Henning Günther of **Overdick** tell Rhian Owen how its involvement in the removal of the Welland platform in the southern North Sea has set a precedent for speedy, creative decommissions.

The platform removal space is healthy, steady and is only going to get busier. According to a joint report from energy analysts Douglas-Westwood and Deloitte's Petroleum Services Group, more than 260 fields are nearing the end of their lives on the UK Continental Shelf alone, and will have to be wholly or partially removed over the next 30 years. They estimate that the value of the contracts to process the aged structures could be worth £630 million per year.

"Platform decommissioning specialists are going to be in greater demand," says Andreas Rosponi, managing director of offshore engineering firm Overdick. "It will be an interesting market to watch."

The report highlighted that the majority of decommissioning activity and related spending would occur between 2017 and 2027. But for now, Rosponi says that oil and gas companies want to take their time. "Companies like to postpone as much as they can," he says. "This is money they have on the books, but of course they don't like to spend it."

Founded a decade ago to provide solutions to the maritime, offshore and energy industries, Overdick now has a 50-strong multidisciplinary team. "Our combination of naval architects, marine engineers and structural designers is an advantage when it comes to decommissioning platforms," Rosponi says. "We have all the tools in-house to plan the removal of the platform in detail, and we have been very successful at it."

The increase in activity due to sweep across the industry presents opportunities for platform removal specialists. "We have an advantage," says Rosponi. "Companies like ours, which is orientated to finding a different way to approach a project and is willing to be flexible, will have plenty of business."

Welland good

Flexibility was a vital part of the removal of the Welland gas production platform in the southern North Sea, which was completed in January 2011. "We had to plan with rather fraught weather windows in mind," says Jan Henning Günther, project manager. "We had to have a lot of fall-back scenarios, and unfortunately the weather was actually that bad. In fact, we had bad weather every other day, so we had to be able to cut the deck loose from the jacket, and be able to do it in a way that would be stable and safe in a storm."

Scottish firm Proserv Offshore were contracted for the cutting operations. In addition to the shape of the cut, Overdick designed a set of contingency clamp-on devices that would have allowed the platform to survive a severe storm even if all of its legs had already been cut. The removal also met high environmental standards in terms of disposal, by securing the reuse of the topsides and the reprocessing of the jacket structure.

"The project was scheduled during winter as Perenco UK [the field's operator] wanted to reuse the topsides in another field," says Rosponi. "As the project had been planned with that in mind, we were under greater pressure in terms of time."

The operational concept developed was based on as few offshore heavy-lifts as possible – one lift for the topside and one for the jacket, including the piles. "We could not do it in small pieces," says Günther. "We needed to retrieve the deck in one piece, which is a 1,000t lift."

Overdick's operational concept saw the Welland platform removed in just two lifts – one for the topside and one for the jacket and the piles.

Atypical but effective

Scaldis Salvage & Marine Contractors was selected as the main contractor for the lifting operation. Their twin-crane heavy-lift vessel *Rambiz* had the required lifting capabilities and the deck space to store and operate all of the removal equipment needed and accommodate all of the personnel involved. "This is not usually a typical tool for going offshore and lifting platforms," says Rosponi. "But we showed that the plan was feasible and we demonstrated that in practice."

This achievement sets a new decommissioning performance benchmark for southern North Sea operators and service providers. "We have great people and excellent experience, a by-product of the number of projects we have completed," says Rosponi. "We can participate in large, unique projects, and we are going to be expanding our business activities in that area." ■

Further information
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