

# Off the deep end

Foreign policy and the dash for  
offshore oil and gas



***More governments are approving drilling in deeper, riskier, more ecologically sensitive environments. They justify this through the mantra of “energy security”***

## **Acknowledgements**

This report was researched and written by Adam Ma'anit, with contributions by Ben Amunwa, Mika Minio-Paluello, Kevin Smith and James Marriott of PLATFORM. The research and report has been made possible by support from the Joseph Rowntree Charitable Trust

This is the first in a series of papers looking at the issue of 'energy security' and its impacts on foreign and domestic energy policy. The next paper in the series will focus on the Arctic.

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# Summary

Six months after Deepwater Horizon, the worst oil-disaster in US history, oilrigs have resumed drilling in the Gulf of Mexico. With the inquiry into the failings of BP and its partners ongoing, and many questions still unanswered, the offshore oil industry is implementing plans to drill deeper than ever.<sup>1</sup> The UK alone has seen unprecedented levels of interest in its latest offshore licensing round, granting 144 exploration licenses to explore for oil, despite concerns over environmental protection.<sup>2</sup>

Several political factors have shored up the return to drilling-as-usual. The industry lobby wields a powerful influence over legislators everywhere. Hard lobbying by Oil and Gas UK forced the European Energy Commissioner Gunther Oettinger to back down from an EU-wide moratorium on deepwater drilling. Instead, the Commissioner's current proposal for a "voluntary moratorium" is already being overridden by the rapid expansion of oil exploration in the UK North Sea and the Mediterranean. Calls by the Commission for a new EU regulatory regime and enforcement agency face similar, entrenched opposition from the industry, despite what lawyers describe as 'dangerous voids' in the existing legal framework, and the severe consequences

of potential accidents.<sup>3</sup>

The failures that led to the BP spill and other disasters, such as the Texas City refinery explosion and Piper Alpha, arise from a political environment that still lacks sufficient regulation and strict enforcement. Chris Huhne, the UK Secretary of State for Energy and Climate Change, wants the UK to have a 'state of the art' regulatory regime.<sup>4</sup> It is unfortunate that Huhne has asked Oil and Gas UK to review the legal framework in this area, when the same lobby group has argued against tougher safety measures and resisted any changes which would impose an increased cost on the industry. The coalition government needs to build stronger independent oversight if it wants to end decades of 'light touch regulation' and avoid repeating the same mistakes.

More governments are approving drilling in deeper, riskier, more ecologically sensitive environments. They justify this through the mantra of "energy security". The search for "new" oil supplies has come to dominate policy agendas, at the expense of cleaner, alternative energy sources. The heavy bias towards fossil fuels undermines government

policies to address global climate change and to meet renewable energy targets. In the UK, where the oil industry is threatening to take legal action against offshore wind farm operators to prevent them sharing the same waters, “energy security” has reached a crossroads.<sup>5</sup>

This PLATFORM report provides in-depth analysis of these trends and alert policy makers to the environmental and safety concerns around present and planned offshore drilling in the UK North Sea and the Falklands Islands. It exposes significant capacity shortfalls in government inspection agencies such as the Health and Safety Executive and the Department for Energy and Climate Change, and highlights key areas, such as the decommissioning of wells, where better regulatory oversight is urgently required to prevent future disasters.

Reform of the global oil industry is increasingly necessary after Deepwater Horizon, but it is not inevitable. The rapid return to drilling-as-usual, and current plans to drill deeper in hazardous, ecologically-sensitive regions such as the Arctic, indicate that the oil industry is unlikely to change voluntarily. If governments and their regulators fail to responsibly manage offshore oil production, they place unsustainable risks on the marine environment, local populations and global investors.

The BP spill in the Gulf of Mexico is but the latest reminder of the dangers inherent in the extraction of oil and gas. Much is being made of the technical failures of BP’s operation and the difficulties facing all deepwater operations

and their reliance on the cutting edge of engineering and technological capability. This report argues, however, that beyond the technical considerations, the issue of deepwater expansion has gone hand-in-hand with the erosion of political and economic boundaries that have themselves been pushed to extremes. This has permitted the world’s major oil and gas corporations to plumb new depths in the race for access to ever-diminishing supplies of fossil fuels. At the heart of this is a political adherence on the part of governments to an ideologically flawed and dangerous pursuit of ‘energy security’ at all costs.

*This paper was first presented at a parliamentary event hosted by PLATFORM and Martin Horwood MP, “Off the deep end - Foreign policy, ‘energy security’ and the dash for offshore oil and gas” on 20 July 2010.*

*The report also formed the basis for a submission to an enquiry by the Energy and Climate Change Committee on “UK Deepwater Drilling – implications of the Gulf of Mexico oil spill.”<sup>6</sup> The report from this enquiry is due to be released towards the end of 2010.*

*A very narrow definition of 'energy security', with a strong bias towards continued reliance upon fossil fuels, is increasingly being instrumentalised in both domestic and foreign energy policy, particularly in the UK and US*

# Securing reliance on fossil fuels

The push into the oceans, drilling into ever-deeper waters and increasingly far offshore has been driven and defended in significant part by governments demanding 'energy security'. Sensitivities over 'imported oil' and 'unreliable producers' have helped bolster the demands of oil companies to open up deepwater licence areas, Arctic waters and 'unconventionals' including tar sands. Even as the satellite images were showing the rapid expansion of a giant amoeba-like mass of BP's hydrocarbon sludge growing in the Gulf of Mexico, Louisiana Senator Mary Landrieu was arguing that more offshore drilling was needed to ensure the country's 'energy security':

*"Our country needs this oil, there is no question about that. We have to produce this oil at home unless we want to be completely reliant."*<sup>7</sup>

In the US, new marine regions were made available for oil exploitation in the name of 'energy security', and it was in this context that BP acquired the Macondo prospect that has spilled over four million barrels of oil and became one of the worst offshore platform disasters of all time. The Gulf of Mexico

Energy Security Act, enacted by George Bush in December 2006, added 8.5 million acres of sea floor to those available for leasing to oil companies. This significantly increased the acreage available in the Central Gulf of Mexico Sale 206 in March 2008, during which BP paid \$34 million to snap up the now infamous Block 252, in which Macondo is located.<sup>8</sup>

The waters off the continental US are presented by officials and politicians like Senator Landrieu as truly 'secure'. Landrieu, a right wing Democrat, sits on the Senate Committee on Energy and Natural Resources and the Senate Energy Subcommittee on Energy, committees that are responsible for providing oversight of energy sector regulation and legislation. In November 2009, at a Senate hearing on the issue, she justified expansion of offshore drilling and played down the risks of oil spills on 'energy security' grounds:

*"I mean, just the gallons are so minuscule compared to the benefits of US strength and security, the benefits of job creation and energy security. So while there are risks associated with everything, I think you understand that they are quite, quite minimal."*<sup>9</sup>

Landrieu was one of the leading proponents of the easing of a decades-long moratorium on offshore oil production. The US ban was the result of a similar incident in 1969 in which a blowout at an offshore oil well operated by Unocal (now owned by Chevron) ruptured, creating an oil slick covering some 800 square miles of Pacific Ocean and 35 miles of pristine Californian coastline. Ten years later, the Ixtoc I oil spill of 1979 – again caused by a blowout – in the Gulf of Mexico, spewed approximately 150 million gallons of crude over the nine months it took to cap the well. The hundreds of miles of Mexican and Texan coastline covered in oil, combined with dramatic scenes of endangered baby sea turtles being airlifted to safety, led to the US Congress formalising a freeze on offshore production that would ultimately be extended to most of the United States.

The thawing of this freeze on offshore production began with George Bush, but it was Barack Obama who ushered in the biggest change to the institutional barrier against drilling that had held for decades. During the presidential campaign, Obama had clearly

indicated his opposition to offshore drilling. At a speech in Jacksonville, Florida on 20 June 2008, he lambasted his Republican rival for wanting to end the ban on offshore drilling:

*“Senator McCain’s decision to team up with George Bush on offshore drilling, violates the bipartisan consensus that we’ve had for decades, and that has protected Florida’s pristine coastline from drilling... this is a proposal that would only worsen our addiction to oil, and put off needed investments in clean renewable energy. It’s not the kind of change that the American people are looking for... and when I am President, I intend to keep in place the moratorium, here in Florida and around the country, that prevents oil companies from drilling off Florida’s coasts. That’s how we can protect our coastline, and still make the investments that would reduce our dependence on foreign oil, and bring down gas prices for good.”*<sup>10</sup>

On 31 March 2010, the now US President Barack Obama announced that he was going back on his campaign promise to ban offshore drilling on the US coastline, opening up

***On 31 March 2010, the now US President Barack Obama announced that he was going back on his campaign promise to ban offshore drilling on the US coastline, opening up 167 million acres of coastline for potential exploration and production.***

167 million acres of coastline for potential exploration and production. Unusually, he made the announcement at a military base – Joint Base Andrews Naval Air Facility Washington in Maryland. Standing in front of an F-18 fighter plane dubbed the ‘Green Hornet’ due to it being part-powered by biofuel, he stated:

*“This is not a decision that I’ve made lightly. But the bottom line is this: given our energy needs, in order to sustain economic growth, produce jobs, and keep our businesses competitive, we’re going to need to harness traditional sources of fuel even as we ramp up production of new sources of renewable, home-grown energy.”*<sup>11</sup>

Coincidentally, on the exact same day as Obama’s announcement, Shell had announced that its ultra-deep Perdido development 200 miles from the coast of Texas in the Gulf of Mexico had begun production. The project, drilled at nearly double the depth of BP’s Macondo well – 9,356 feet, equivalent to six Empire State Buildings – was trumpeted by the company as the “world’s deepest offshore

drilling and production facility”.<sup>12</sup> In the announcement, Marvin Odum, Upstream Americas Director for Shell’s Energy Resources Company, made a direct reference to the moratorium:

*“Perdido demonstrates what companies like Shell can do when US federal lands and waters are opened to responsible energy exploration and production.”*<sup>13</sup>

Shell was also careful to draw attention to the US-focused rationale for the project:

*“Perdido marks a new era in innovation and safely unlocks domestic sources of energy for US consumers.”*<sup>14</sup>

Again on the same day, Shell was also given an air quality permit by the US Environmental Protection Agency for its plans to drill three exploration wells in the Chuckchi Sea off of Alaska in the Arctic.<sup>15</sup> A spokesperson for the Anglo-Dutch giant responding to criticisms of its offshore Arctic plans in January, was quick to use the ‘foreign oil’ argument in its defence:

***The UK government, led by the Foreign Office, has also been pursuing an aggressive international diplomacy drive to increase opportunities for British oil and gas interests in remote and frontier areas. This is being done in a manner that is likely to increase reliance on fossil fuel imports, conflict with climate change goals, and create opportunities for diplomatic friction with other states while providing little real benefit to UK citizens.***

*“The Chukchi Sea alone could be home to some of the most prolific undiscovered hydrocarbon basins in the US, and we believe those oil and natural gas reserves could play a major role in reducing our dependence on foreign sources of energy.”*<sup>16</sup>

In the UK, expansion into the deep waters in the West of Shetland and more remote offshore blocks around the British Isles are justified along similar grounds. In January 2010, when Chancellor Alastair Darling announced record tax breaks for oil and gas companies wishing to exploit the West of Shetland, he justified it by saying:

*“The Government recognises the importance of the UK oil and gas industry to our economy and the dependable foundation it provides for the UK’s energy security.”*<sup>17</sup>

A report from the Energy & Climate Change Select Committee in June 2009 recommended exploiting deepwater gas resources off the west of Shetland, having re-affirmed that:

*“When determining policy on UK oil and gas,*

*the Government’s priority should be security of supply.” This support for expanded exploration came despite industry bodies admitting that the region was hampered by, “[a] hostile marine environment, extreme weather and the shortage of infrastructure” making projects, “high risk and technically challenging”. The Committee pushed the government to “take a more active role” that would “not preclude assistance with funding.”*<sup>18</sup>

With the change in government in mid 2010, all signs suggest that this pro-drilling policy in the North Sea is likely to continue, and that the predilection for justifying such expansion under the rubric of ‘energy security’ will, if anything, likely intensify. In his first week on the job, Energy Secretary Chris Huhne spoke at an industry conference in Aberdeen where he gave unequivocal support for continued expansion into the North Sea. “There could be 20 billion barrels of oil equivalent left to exploit,” he said adding, “but the UK competes against every other basin in the world for investment and I am committed to make sure that we have a licensing regime and investment environment that attracts quality companies and investment

to fully exploit the remaining potential. We will work closely with the industry to ensure that we can achieve just that.”<sup>19</sup> He stressed that, “energy security, for too long a second order issue, will be put back at the heart of our national security strategy. The oil and gas sector should take encouragement from that.”<sup>20</sup>

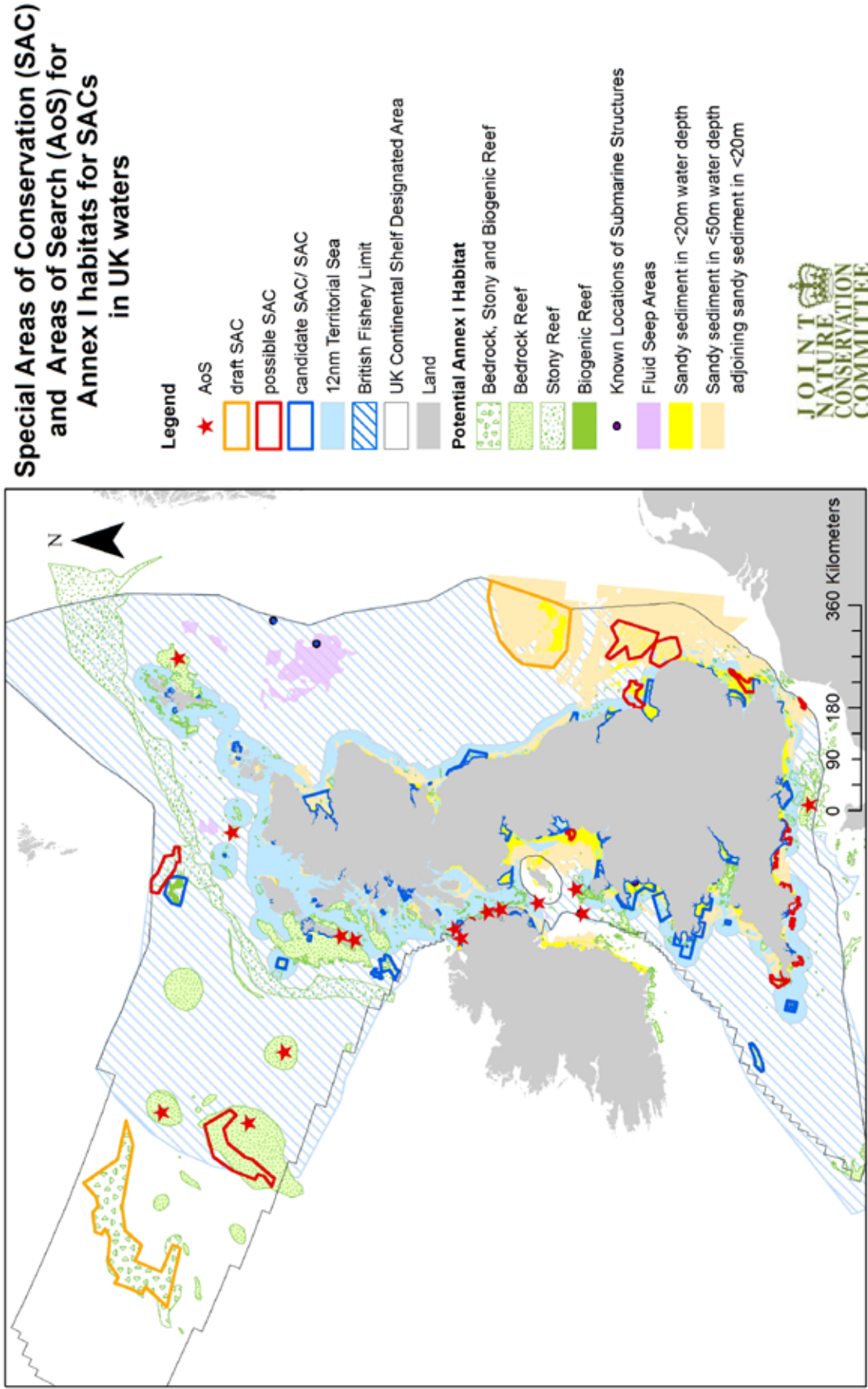
On 27 October 2010, the Department for Energy and Climate Change offered 144 licences to extract oil and gas in British waters in the 26th licensing round. ‘Energy security’ was again cited as a justification, with Energy Minister Charles Hendry stating that, “we have moved swiftly to offer these licences as we must realise the optimum value from the UK’s energy resources and ensure secure energy supplies.”<sup>21</sup>

The UK government, led by the Foreign Office, has also been pursuing an aggressive international diplomacy drive to increase opportunities for British oil and gas interests in remote and frontier areas. This is being done in a manner that is likely to increase reliance on fossil fuel imports, conflict with climate change goals, and create opportunities for diplomatic

friction with other states while providing little real benefit to UK citizens. The most recent cabinet report on the UK’s National Energy Security Strategy outlines the government’s commitment to furthering UK oil and gas interests abroad:

*“Energy reserves are increasingly found in remote areas and it is therefore essential that the UK is able to contribute to a system that allows UK companies to participate safely in the extraction of these fuels and that provides for secure delivery routes for fuels to the UK.”<sup>22</sup>*

Below is a map to show areas where offshore Special Areas of Conservation for Annex I habitats may be located. Applicants for oil and gas licences which may affect any of these areas should consult the Joint Nature Conservation Committee (JNCC) on how this may affect operations on any successful licensees in the future.



Map projected in Europe Albers Equal Area Conic (Modified Standard Parallels - Standard Parallel 1 = 50.2; Standard Parallel 2 = 58.5). The exact limits of the UK Continental Shelf are set out in orders made under section 1(7) of the Continental Shelf Act 1964 (© Crown Copyright). World Vector Shoreline © US Defense Mapping Agency. Seabed habitat derived from BGS 1:250,000 seabed sediment maps © NERC and SeaZone bathymetry. Bathymetry © British Crown and SeaZone Solutions Limited. All rights reserved. Products Licence No. PGA042006.003. This product has been derived in part from material obtained from the UK Hydrographic Office with the permission of the Controller of Her Majesty's Stationery Office and UK Hydrographic Office (www.ukho.gov.uk). NOT TO BE USED FOR NAVIGATION. Map copyright JNCC 2009. NJC. Version 3.1

*The British government, led by the Foreign Office with support from various departments, provides privileged access and support for the private commercial interests of British oil and gas companies in matters of state*

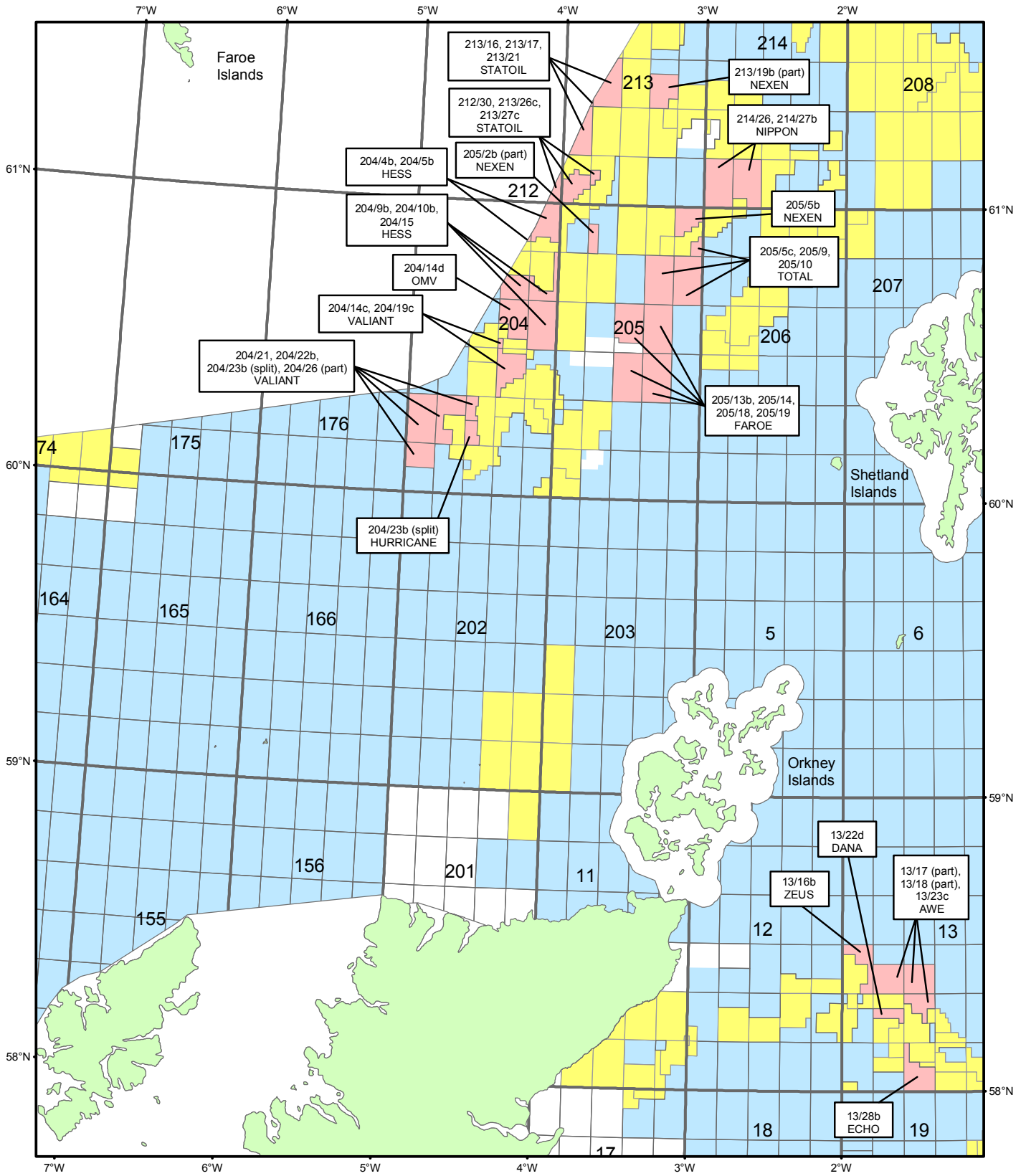
# Energy policy

The current coalition government seems unlikely to deviate drastically from the previous administration's foreign energy policy. Foreign Secretary William Hague recently described the support of British business as "an existential mission for the Foreign Office".<sup>23</sup> The level of diplomatic support afforded to British oil and gas companies internationally is a little-acknowledged form of subsidy that easily amounts to several million pounds annually in terms of person hours, logistical support and consulting services. The diplomatic support that companies like BP and Shell receive has been instrumental in them gaining controversial contracts in places like Libya, Iraq, Azerbaijan and Russia.

The appointment of controversial business leaders to key government positions is also cause for concern. Shortly after the new coalition government took office, Lord John Browne of Madingley was appointed to head the UK government's cost-cutting and efficiency drives. Browne, former CEO of BP, has been under fire for instituting drastic cost-cutting measures in BP, which have been held partly responsible by US officials for

major environmental disasters and accidents that have led to the tragic deaths and injuries of workers. These include oil spills in the Alaskan Arctic, the Texas City refinery disaster, and the current crisis in the Gulf of Mexico.<sup>24</sup> Lord Browne will also be making recommendations for further appointments of business leaders into influential positions within government. Former Monument Oil & Gas CEO and Non-Executive Director of ENI Lasmo, Tim Eggar, has been advising the Chancellor George Osborne on ways to streamline the tax system in the UK in order to promote more offshore oil and gas development. Eggar's report is currently unavailable to the public.<sup>25</sup> This, despite the fact that the current licensing round has had the record number of bids since offshore licensing began.<sup>26</sup>

Several Permanent Under Secretaries to the Foreign Office since the early 1990s have since gone on to take up Director positions in major oil and gas companies including Shell and BP.<sup>27</sup>



**UK Continental Shelf**  
 26th Round of Offshore Licensing  
**MAP 1**  
 West of Shetlands Area  
 and Western North Sea

Scale 1:2,000,000

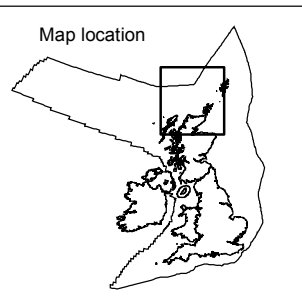
0 20 40 60 80Kms

**Key**

- Blocks potentially awarded
- Blocks on offer
- Blocks currently under licence

**Quadrant & Blocks**

1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20
21	22	23	24	25
26	27	28	29	30



***Despite recent assurances from the Department of Energy and Climate Change that the UK offshore regulatory regime is ‘fit for purpose’, there is a concern that cost-cutting measures, lack of capacity and resources, a general trend towards ‘light-touch regulation’, and a desire to swiftly expand offshore production will lead to insufficient oversight of the industry***

# Regulation

In the wake of the Gulf of Mexico disaster, there has been much condemnation of the failures of the US regulatory regime. In contrast, the regulatory systems of the UK and Norway have been held as examples of best practice. But greater scrutiny of the reality of the supposed gold-standard regimes of these two countries raise critical issues with regards to current practice and capacity.

The 26th licensing round for offshore oil and gas in the UK Continental Shelf (UKCS) attracted record bids. 356 bids for blocks in all parts of the UKCS have been made, the highest ever since bid rounds began. Particular interest has been in the West of Shetland region – the deepest waters in the UKCS. The record interest will require regulatory oversight over the new exploration programmes, appraisal well drilling, sub-sea infrastructure development, pipeline management, spill response and production and transport apparatus.

Regulators from the Health and Safety Executive (HSE) will also be required to inspect the 486 offshore installations currently in operation, thousands of kilometres of pipeline and sub-sea infrastructure, and related facilities.<sup>28</sup> There are 115 inspectors employed by the HSE to supervise all this activity as well as

provide health and safety guidance for the approximately 20,000 workers in the offshore industry.<sup>29</sup> The concern is that there is insufficient capacity in the HSE to adequately monitor, regulate and enforce offshore oil and gas operations in the UKCS at a rigorous enough level.

Concerns are also being expressed with regards to the changing culture and attitude to regulation at the HSE. Academics at Liverpool University and Liverpool John Moores University, have recently completed a study into health and safety regulation of business. They found that in the last ten years:

*“The number of inspections made of business premises have fallen by 69 per cent and investigations of health and safety incidents have declined by 68 per cent.”*

The study also found a 48 per cent reduction in prosecutions of companies who have breached HSE regulations over the same period.<sup>30</sup> One of the report’s authors, Dr David Whyte, observed that:

*“The collapse in inspection, investigation and enforcement has dramatically reduced the chances of businesses being detected and prosecuted for committing safety offences. Most serious injuries now are not even investigated.”<sup>31</sup>*

***The UK Government does not monitor abandoned wells in the UK Continental Shelf. As many as several hundred abandoned wells may have slow leaks, fractures, corrosion and other worrying characteristics that could prove disastrous for the region if they continue to be left unmonitored***

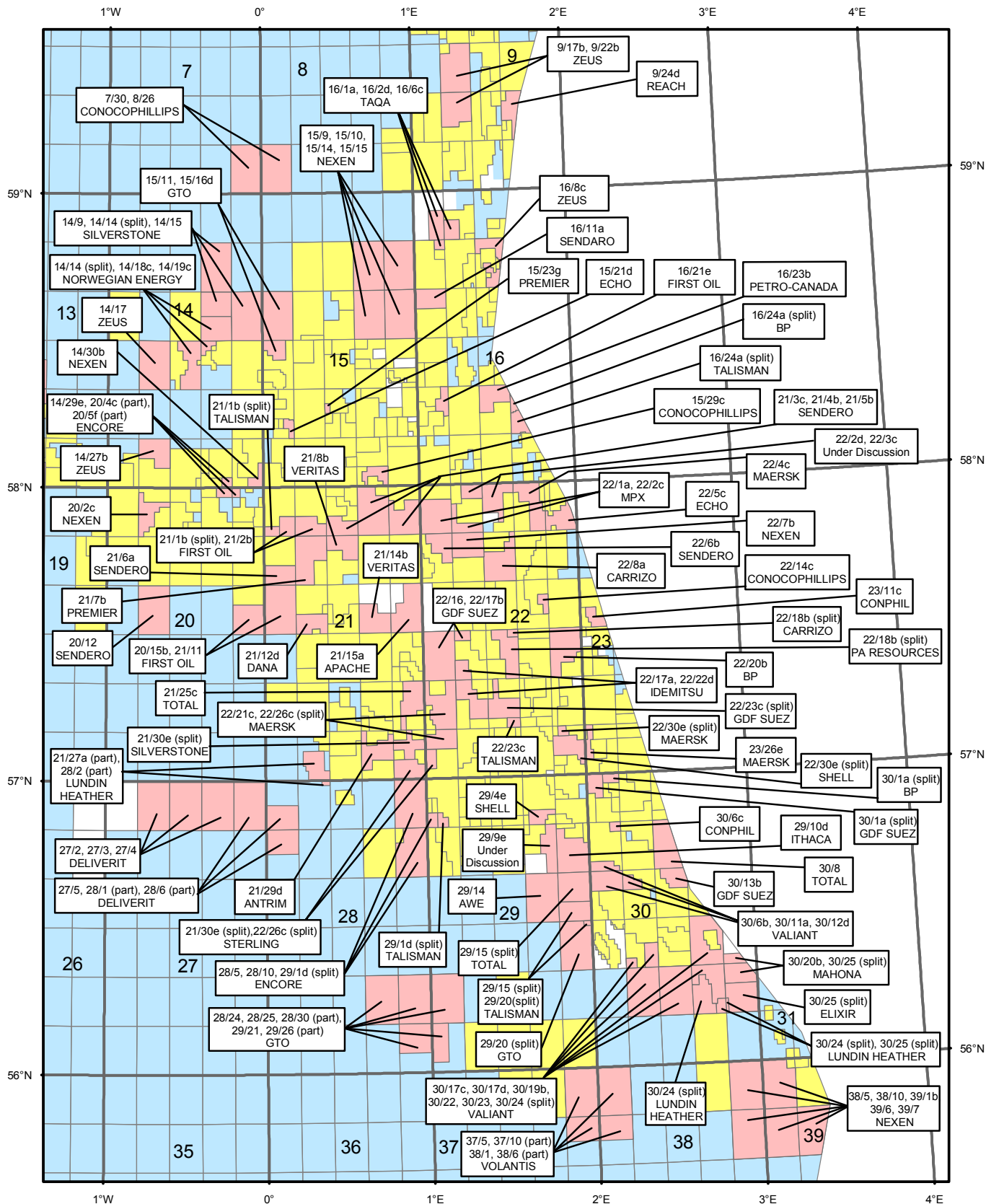
# Health & safety

It has emerged that the HSE does not currently monitor what happens to abandoned wells in UK waters. At the time of this writing there have been 10,972 wells drilled in UK waters since the 1960s.<sup>32</sup> Several thousand of these have been abandoned by the companies. According to a number of studies of abandoned wells in the United States, a high percentage of wells can rupture and leak over time due to poor cement work, erosion/corrosion, and subtle shifts in geology.<sup>33</sup> A recent six-kilometre oil slick in the Danish North Sea has baffled agents from the Environmental Protection Agency in Denmark, leading some to suggest that the source of the oil slick could be a leaking abandoned well.<sup>34</sup> Freedom of information requests to the HSE have revealed that the UK offshore regulator does not monitor abandoned wells in the UKCS, and recommended that: “The best source for this information is most probably going to be the individual licensees.”<sup>35</sup>

The Department for Energy and Climate Change (DECC) does maintain a database of existing wells, but it has no monitoring role over abandoned wells.<sup>36</sup> The lack of oversight of abandoned wells is cause for serious alarm. Some US studies have indicated that onshore

well failure rates were projected to be as high as 17 per cent, and warned that offshore wells may likely have a higher failure rate due to the harsher conditions.<sup>37</sup> If a similar rate were applicable to the offshore wells in the UKCS, several hundred abandoned wells may be slowly leaking and poisoning the local environment and wildlife. A major leak is also possible.

Leaks may also go undetected due to the way hydrocarbons interact with the cold waters of the North Sea. A study by risk-analysts Det Norske Veritas (DNV) found that subsea plumes would likely form in the thermo-climes of the North Sea waters and travel great distances before any oil might appear on the surface.<sup>38</sup> The study also raised concerns about the length of time deepwater operations might require to drill a relief well. One of the key findings of the investigation into the Gulf of Mexico spill is how the a faulty cement seal around the well heightened the risk of a blow-out. If a high-pressure or re-pressurised abandoned well in UK waters were to rupture, it could cause a major environmental and economic disaster for the region.



**UK Continental Shelf**  
26th Round of Offshore Licensing

**MAP 3**  
North Sea  
Eastern Central Area

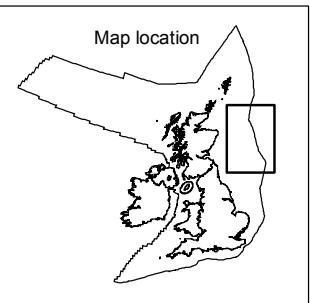
Scale 1:2,000,000  
0 20 40 60 80Kms

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*An industry study of blowouts in the deep waters of the Gulf of Mexico and North Sea suggests that the potential failure rate for blowout preventers (BOPs) in these environments can be as high as 45 per cent*

# Blowouts

A widely reported study by DNV, commissioned by drilling contractor Transocean – the company that owned and operated the ill-fated Deepwater Horizon rig – examined 11 cases where rig managers operating in deepwater areas had to activate a blowout preventer as a final failsafe due to loss of well control. Blowout preventers are the last line of defence in the event of an unstable build-up of pressure in a well. They usually contain several redundant mechanisms designed to seal the well in order to prevent hydrocarbons escaping up the well and potentially igniting on the platform as happened in the Deepwater Horizon explosion. Out of the 11 cases where a BOP was triggered, only six actually succeed in preventing a blowout. The researchers concluded that as a result of their findings, the industry failure rate for blowout preventers in deepwater areas was a staggering 45 per cent.<sup>39</sup>

Industry groups insist blowouts are very rare. However, given that drilling engineers use a variety of methods to maintain well pressure and prevent so-called ‘kicks’ of pressure escaping up the well, even a moderate number of blowouts should be cause for alarm. In most

cases, their occurrence signifies that there was in fact a dramatic cascade of concurrent failures in the well operation. Blowouts are not as rare as many would like to believe. Overall, there have been a total of 237 blowouts in the Gulf of Mexico and North Sea recorded in the period between 1 January 1980 and 1 January 2008 and 573 recorded worldwide.<sup>40</sup>

## Serious Incidents

A recent incident in the Norwegian North Sea at Statoil’s Gullfaks C platform gives cause for concern. On 21 May 2010, an ‘unstable well event’ led to a dangerous level of pressure build-up. This pressure led to the failure of one of the valves of the well’s blowout preventer. All 90 rig workers were forced to evacuate and the event was categorised as ‘critical’.

The remaining valve managed to withstand the escaping pressure and the operations were shut down for two months. The well itself has now been plugged, and one of the senior Statoil staff described the conditions of the well as a “high pressure zone in the Shetland/

***A recent spate of serious incidents in the North Sea underline the inherent risks in all oil and gas extraction projects, and the seeming inability of the industry to demonstrate global excellence in health and safety standards despite the numerous painful lessons of the past***

Lista formation” suggesting that other well operations in the region may also encounter problems with the high pressure hydrocarbon deposits present.<sup>41</sup> This would be the eighth incident in Norway that had “large scale potential” to cause a major disaster since the beginning of 2010.<sup>42</sup>

Shortly after the Gullfaks C shutdown, a major gas leak discovered at the massive Troll fields in the North Sea also led to a major shutdown and reduction of gas flows to the UK. This was the second time in 2010 that production was stopped due to a major gas leak.<sup>43</sup> Blowouts and gas leaks have been at the root cause of many of the world’s worst accidents involving offshore platforms. The infamous Piper Alpha explosion in 1988, which resulted in the deaths of 167 workers, was the result of such a leak.

# Ageing infrastructure

While the Health and Safety Executive has been proactive in working with industry to address the challenges of maintaining ageing infrastructure and ensuring best practice, there nevertheless remain concerns about the continued reliance on decades-old technology and infrastructure. Of the 282 installations active in the UKCS, 93 are older than 30 years old – 43 of those have been in active service for over 40 years, all in the Southern North Sea region close to the Scottish coastline.<sup>44</sup> The typical design life of a platform is between 20 – 25 years.<sup>45</sup> That would suggest that nearly half of all installations are operating beyond their expected design life.<sup>46</sup>

A 2008 report by Norwegian industry researchers SINTEF expressed serious concerns over the ability for companies and regulators to cope with ageing installations in the North Sea due to a lack of knowledge

and experience, absence of coherent standards and procedures, and lack of sufficient regulatory capacity to provide more frequent and comprehensive regulatory scrutiny.<sup>47</sup> The group called for a root-and-branch assessment of ageing platforms and a robust assessment of their extensibility.<sup>48</sup>

***Nearly half of all offshore installations in the UKCS are operating beyond their original design life***

# Industry performance

After the Piper Alpha incident and the subsequent Cullen Inquiry, there has been a presumption that the UK regulatory regime had become one of the strictest and best performing in the world. However, the record to date has been disappointing in many respects.

There has been a marked increase in the number of 'Notice of Improvement' issued by the Health and Safety Executive to offshore platform operators in the past year. In that time period, BP alone was served with 14 notices – 7 for its West of Shetland operation in Schiehallion alone, just 18 months after a fire required the evacuation of staff there. In the past few years, serious concerns have been raised about the safety culture of companies operating in the North Sea.

In 2003, the cost-cutting measures of Shell were held to be responsible for the death of two workers and the near explosion from a gas leak at the Brent Bravo platform in the East of Shetland region. "Shell's negligence came close to destroying the platform that day and killing another 105 souls who were on board," remarked Jake Molloy from the Oil Industry Liaison Committee/Rail, Maritime and Transport union.<sup>49</sup> Despite the negative publicity and record fine of £900,000, the company's safety record has consistently been among the worst in the industry as it has continued to insist on deep cost-cutting measures.

According to industry journal Upstream Online, in 2008 Shell had been "by far the worst performer" having received six out of a total of 18 legal notices issued by the HSE over a two-and-a-half year period.<sup>50</sup> The article revealed that Shell had received more notices than any other operator working in the UK North Sea. A Financial Times investigation in the same year found that, globally, Shell had the highest worker death rate than any other Western oil company.<sup>51</sup>

A recent investigation by The Press and Journal, found that between 2006 and 2008 the HSE was involved in 1,042 incidents offshore. Among these were 841 'dangerous occurrences' and 192 accidents.<sup>52</sup> According to Carlo von Bernem, marine biologist and expert on oil pollution and coastal zone management at the German Institute for Coastal Research, "it is a wonder that an oil spill of the dimensions of the present one in the Gulf of Mexico has not occurred here."<sup>53</sup>

***While improvements have been made, the overall record of industry in the North Sea since the Piper Alpha explosion in 1988 is still patchy and bears greater scrutiny***

*The 'normal' operation of offshore platforms and their attendant infrastructure – including pipelines and tanker traffic, as well as the relatively high frequency of unintended hydrocarbon releases – has resulted in the equivalent of a slow Gulf of Mexico-sized leak in the last two decades*

# Environmental impacts

The steady waste from offshore oil and gas operations is routinely and legally dumped into the surrounding waters after some processing. The result is that each year, an estimated 10,000 tonnes of waste hydrocarbons is released into the North Sea according to Greenpeace Germany's marine pollution expert Christian Bussau.<sup>54</sup> A further 10,000 tonnes is estimated to be illegally dumped by tanker traffic in the region. The combined effect of hundreds of platforms, tanker traffic, pipelines and well leaks, makes the North Sea "one of the most contaminated maritime areas of the world," according to Bussau.<sup>55</sup> Slow multiple-sourced leaks of this magnitude poses a major threat to marine ecosystems and wildlife such as fish stocks and the livelihoods that depend on them, as well as impacts on tourism and other local economic impacts. Over a twenty-year period the amount of pollution would be roughly equivalent to the Gulf of Mexico spill in volume.

As operations move into new areas and deeper waters, concerns mount that threatened ecosystems and marine habitats for endangered species will be severely impacted. Last year, for example, the British Geological Survey found previously unknown pristine deepwater coral reefs in the waters around the Rockall Basin – an area recently opened up for bidding by prospective companies in the 26th Seaward Licensing Round of the UK.<sup>56</sup>

The number of non-permissible hydrocarbon releases into UK waters has seen a sharp increase on previous years. Compared with the year before, the number of minor and 'significant' hydrocarbon releases into the sea in 2009-10 has increased by 20 per cent, and major incidents have doubled.<sup>57</sup> A total of 182 spills have been reported in the period, up from 157 the year before. This despite the fact that the industry together with the HSE has committed to making 10 per cent reductions in hydrocarbon releases year on year. The trend of increasing spills is likely to increase, as according to the HSE, the majority of hydrocarbon releases happen at facilities older than 20 years old, of which more than 50 per cent of existing platforms fall under that category.<sup>58</sup>

*The controversial drilling programme currently underway in the Falkland Islands is directly supported by British government agencies and staff*

# Foreign energy policy

The current exploration campaign taking place in the Falkland Islands, including several deepwater areas, has already uncovered one significant oil discovery and prompted much speculation about a major new oil province opening up in the South Atlantic. The sheer remoteness of the location, and the fractious history of the region give pause for concern about the potential impacts of any major development of offshore oil and gas in the region. The UK government claims to take a hands-off role with regards to the internal affairs of the Falkland Islands government, but the reality is that British government provides critical support to exploration companies and has had a direct hand in developing the territory's offshore licensing round.

Foreign Office officials, keen to stress the right to self-determination of the Falkland Islands, nonetheless acknowledge that every stage of the offshore licensing round in the Falklands Islands has had "ultimate sign-off by the Foreign Secretary".<sup>59</sup> It is estimated that over 30 members of staff and senior government officials across departments including the Department for Energy and Climate Change

(DECC), and the Ministry of Defence (MoD) are regularly involved in discussions, consultations, policy development and planning about energy strategy in the Falkland Islands.<sup>60</sup> At the time of this writing, Foreign Secretary William Hague has been personally briefed on the Falkland Islands oil exploration progress several times since taking office.<sup>61</sup>

# Falklands

FCO officials have stressed that the Falklands explorations programme is “constantly reviewed in order to ensure that it is up to UK standards”.<sup>62</sup> But analysis of the environmental impact statements of the companies currently drilling in the remote waters raises serious concerns, particularly in light of the BP spill in the Gulf of Mexico. Environmental impact assessments carried out by UK-based consultancy RPS Energy for four of the five companies planning to drill in the Falkland Islands, has played down the risks of a blowout as “extremely rare” and suggests that risks of an oil spill reaching the shores of the Falkland Islands are “negligible”.<sup>63</sup> As a result, the company has advised against the need for any shore-based oil spill response measures to be put in place arguing that they are “impractical and unwarranted”.

Without sufficient support infrastructure in place in the Falkland Islands, oil spill response crews and equipment would have to be imported. In the event of a major spill, the company suggested that airplanes could be flown in from the UK mainland in order to spray chemical dispersants. Only two support vessels are available to assist in any major response. A secondary rig could take as long as three months to reach the Falklands from the UK in order to begin drilling a relief well. The BP oil spill response operation deployed thousands of vessels and brought in two rigs from nearby

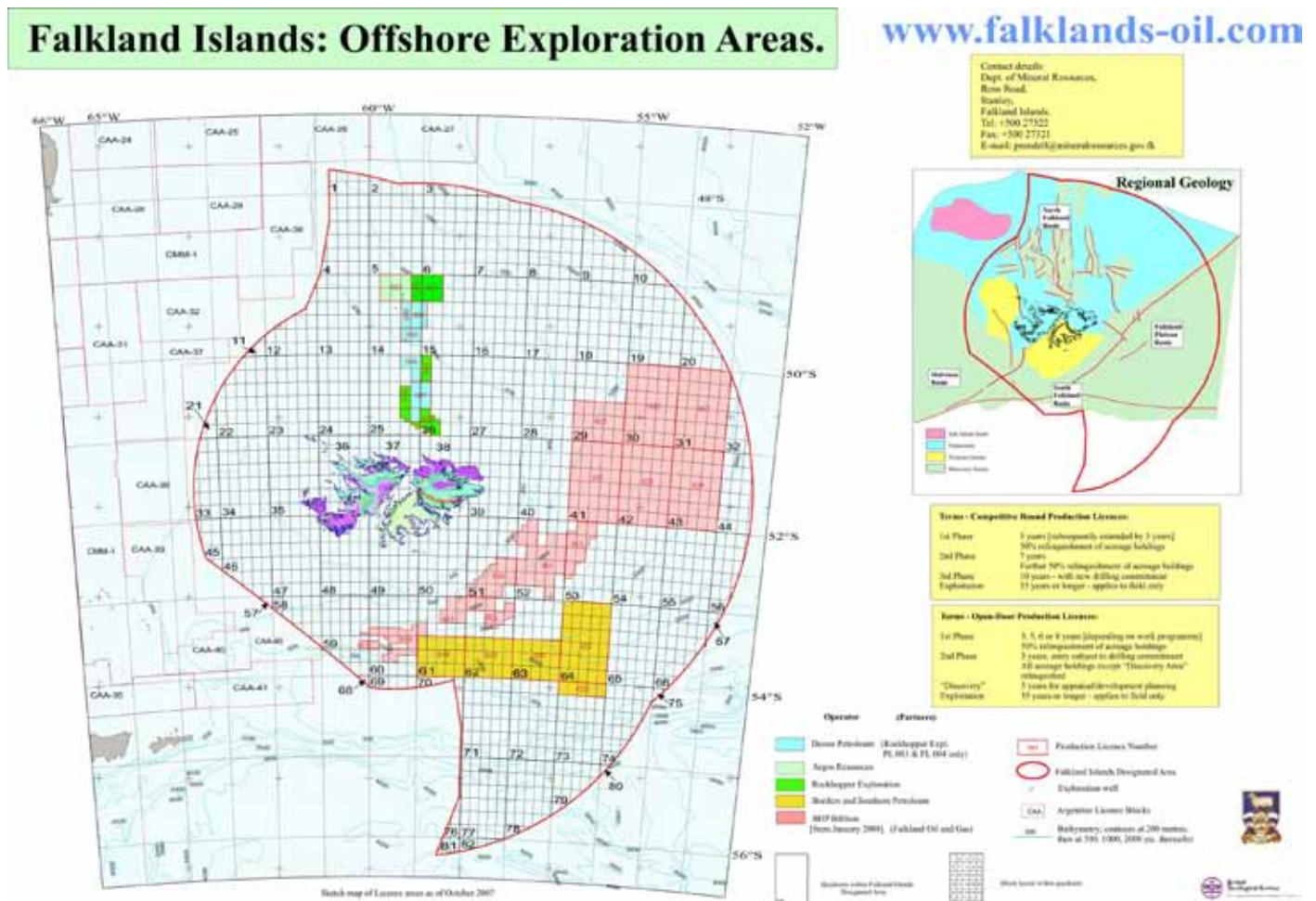
locations to assist in relief well drilling. In the remote context of the Falklands, any extra support apparatus would take a significant length of time (it took approximately three months for the drilling rig Ocean Guardian to reach the Falkland Islands from Scotland) to mobilise, causing potential delays to any response operation.

The contingency plan also includes a provision to use the controversial dispersant Corexit 9500 manufactured by American company Nalco.<sup>64</sup> Corexit is restricted in the UK, after failure of the rocky shore tests required for its approval,<sup>65</sup> and there remain concerns over the overall effects on shore-based animals and wildlife as well as the general toxicity of the product and its effects particularly on fish and marine mammals.<sup>66</sup> The product is currently being used in cleanup operations in the Gulf of Mexico despite a public outcry.

There are also concerns about the financial and insurance safeguards in place in the event of a major accident. To date, all the companies involved in the drilling programme are AIM-listed small-to-medium capitalisation companies. A Gulf of Mexico-type disaster could bankrupt such smaller companies, leaving the UK taxpayer liable for the costs of the cleanup and any compensation claims. After the Gulf of Mexico spill, the DECC announced it would review the indemnity and

**There are serious safety, political and environmental concerns about the drilling programme underway in the Falkland Islands.**

insurance requirements for operators in the UK Continental Shelf, but this would not include the Falkland Islands, and is unlikely to come into force in the current year.<sup>67</sup>



# Conclusion

BP, Shell and their competitors have identified the deep sea floor as a key exploration area for current and future efforts to replace their reserves. At the same time, civil servants and politicians who formulate and implement energy policy in both the UK and US describe the exploitation of offshore oil and gas as a solution within the frame of 'energy security'.

This perception of overlapping interests has defined much of UK and US foreign and domestic energy policy, and led to mutual support in colonising the oceans for fossil fuel extraction. Actors from both the corporate and public sectors have been outspoken in promoting the urgent need to explore the outer reaches of the continental shelves.

British and American state support through various government departments and agencies has helped ensure that oil companies have both formal and informal regulatory, fiscal, diplomatic and social 'licences to operate' in the deep waters off the US, Brazil, Angola, Azerbaijan and elsewhere. The oil majors have developed the technology and hired the contractors to build rigs that will

drill and pump thousands of feet down through water and rock. Yet no one has adequately created the means to deal with the situation when the engineering breaks and the house of cards collapses.

The Gulf of Mexico disaster shows that government policy driven by the current dominant 'energy security' discourse fails to deliver 'security' on many levels. And while we can expect certain ripples from the unfolding crisis in the Gulf to impact the industry as a whole, the long view from insiders suggests that continued expansion into ever more riskier environments is widely seen as inevitable. However, that is predicated on the assumption that the 'energy security' paradigm retains its primacy in decision-makers minds and public attitudes. Recent events may throw that assumption into question.

In light of the crisis in the Gulf of Mexico, the US, Canada, and Norway imposed various restrictions on new offshore drilling. A recent speech by EU Energy Commissioner Günther Oettinger advocated a Europe-wide moratorium arguing that, "any authority in the

world (not only in the US or in Europe) would be advised to implement a precautionary approach.”<sup>68</sup> The UK has so far resisted instituting a freeze on new drilling permits, arguing that its regulatory regime and safety record is “fit for purpose”.

But even a cursory glance at: the health and safety record of the industry in the North Sea; the increasingly ageing infrastructure; the increases in hydrocarbon releases; the lack of regulatory monitoring of abandoned wells; the data demonstrating major concerns over the reliability of failsafe mechanisms; the expansion into new deepwater areas; and the increased workload on the regulators in an era of cost-cutting and ‘light-touch regulation’ are all sufficient reason to suspend new permits and institute a root-and-branch review of the industry and the regulatory regime. In particular, any expansion into deepwater offshore, both domestically and in British Territories such as the Falkland Islands, must be put on indefinite hold.

The role of the Foreign Office and other arms of government must also be held to account.

British foreign policy should be every much subject to public debate and challenge as any other aspect of government, not fixated on promoting narrow commercial interests. The degree of direct and indirect support afforded to British oil and gas corporations at the highest levels of office, cast doubts on the government’s commitment to transparency, democracy and accountability.

A broader critique of ‘energy security’ discourse is also sorely needed. The instrumentalisation of a very narrow definition of energy security lies at the heart of domestic and foreign policy. Its use and misuse in advancing a course of perpetual reliance and dependency on offshore drilling and fossil fuels as a whole, flies in the face of the urgent need to address the root causes of climate change and a just and meaningful transition to a fossil-fuel free economy that does not adversely impact workers and the economy.

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More governments are approving drilling in deeper, riskier, more ecologically sensitive environments. They justify this through the mantra of “energy security”. The search for “new” oil supplies has come to dominate policy agendas, at the expense of cleaner, alternative energy sources. The heavy bias towards fossil fuels undermines government policies to address global climate change and to meet renewable energy targets.

This PLATFORM report provides in-depth analysis of these trends and alert policy makers to the environmental and safety concerns around present and planned offshore drilling in the UK North Sea and the Falklands Islands. It exposes significant capacity shortfalls in government inspection agencies and highlights key areas where better regulatory oversight is urgently required to prevent future disasters.

