Shale Gas in the UK: a year in review
(a regulatory and policy update)

**Introduction** Shale gas exploration is now featuring in the news headlines in the UK on an almost daily basis. The positions of those for and against extraction of unconventional gas through hydraulic fracturing (“fracking” as it is commonly known) are becoming increasingly polarised and entrenched.

The UK Government has made clear its strong support for the rapid development of the UK shale gas industry, hurrying through various legal and fiscal measures to support the industry and taking a hard line against attempts by European legislators to introduce new European-wide regulation of the sector.

The UK Government believes UK shale resources have the potential to create tens of thousands of jobs, drive down energy bills and improve security of supply.

Some, however, argue that the Government’s thinking is muddled and short-termist. They say that even assuming anticipated levels of shale gas production can be achieved (despite the UK’s population density, growing anti-shale sentiment and challenging regulatory environment, among other obstacles), energy prices will not be significantly reduced in the UK in the way that they have been in the United States, because of the way European gas and power markets are interconnected.

Moreover, opponents are concerned that large-scale shale production will add to, rather than displace, reliance on fossil fuels, delay decarbonisation and the uptake of renewables and therefore have a damaging effect on the UK’s ability to achieve vital climate change targets.

Notwithstanding mounting controversy, the appetite for investment in UK shale seems to be growing in reaction to the current Government’s unreservedly pro-shale stance. It has recently been announced that Total is investing in two licences in northern England due to be operated by Island Gas (iGas). This
may be the first of many investments by major oil and gas companies in the nascent UK shale industry.

The Department for Energy and Climate Change’s (DECC) 14th round of onshore oil and gas licensing is currently underway, with results due in 2014. There is plenty of land under consideration:

The blue areas on the map opposite are all parts of Great Britain which are thought to have any kind of potential for oil or gas exploration and are under consideration for the 14th round, and the yellow shows land already licensed.

Against this backdrop, this client briefing reviews some of the main legal and policy developments of the past 12 months, and offers thoughts on some of the key legal issues facing shale sector developers and investors in 2014 and beyond.

**What a difference a year makes**  It is only a little more than a year ago that the UK shale industry was still subject to a complete moratorium on further fracking following tremors induced by Cuadrilla’s activities near Blackpool (the moratorium was lifted on 13 December 2012).

Within the same timeframe, DECC’s office for unconventional gas and oil (OUGO) has been set up and the UK Onshore Operators Group (UKOOG) has significantly expanded its scope and profile as the industry body representative of the shale sector.

The year that followed has seen a flood of pro-shale regulatory and policy developments, as described in detail below, culminating most recently in the EU Commission’s “Shale Gas Initiative” published on 22 January 2014, in what many in the industry will regard as a reassuringly watered-down form.

The developments summarised in this briefing are just some of the key advances taking place. Public and political interest has never been higher, and this is sure to be the case for the remainder of 2014 as the 14th licensing round proceeds.

From our perspective, whilst there are many widely accepted reasons why the UK shale “revolution”, if it occurs, will follow a very different path from the US experience, the single biggest stumbling block is likely to be the attitude, in its many manifestations, of the “great British public” (and to some extent the media that feed and so significantly influence their views), in particular the approach taken by the anti-fracking community.
Early engagement with landowners will be crucial. Many of the developments of 2013 outlined below reflect this, being primarily aimed at reassuring and winning the support of local communities.

While shale gas belongs to the Crown and government licences are required to explore and extract it, the licences do not deal with approvals that are required from landowners to access the gas. As shale wells are drilled both vertically and horizontally, consents will – under current law – be required from multiple landowners for one operation. Ascertaining what rights will be needed, and engaging with relevant landowners at an early stage, will therefore be essential.

The importance of reform of trespass laws  The law of trespass is critical here. It requires either consent from landowners or potentially lengthy application to court under the Mines (Working Facilities and Support) Act 1966 for the compulsory acquisition of such rights and the payment of compensation. Throughout 2013 we saw speculation that anti-fracking groups might try to buy up “ransom strips” in an attempt to ‘block’ shale drilling or otherwise rely on trespass laws to hold up development.

In early February 2014, the most high-profile example of this so far occurred. Landowners in Fernhurst in West Sussex wrote to developer Celtique Energie and the Energy Secretary denying permission for horizontal drilling by the company on or under their land, effectively seeking to surround the well head with hostile landowners and force a protracted legal battle to secure compulsory acquisition rights. Greenpeace supports their stance.

How this situation develops will be of crucial importance to the future of UK shale gas exploration. The government is currently reviewing existing trespass laws, specifically in the context of fracking operations, and there is likely to be more to report on this front in the months to come.

Dealing with protestor action  Another manifestation of public distrust (ill-founded or not) of shale fracking activities, is protestor action of the kind seen at Balcombe in Sussex in 2013. Such action can go well beyond the valid exercise of democratic rights to protest and may amount to illegal interference in legitimate commercial operations, causing potentially substantial disruption and economic loss.

However, it is possible to prevent or limit “direct action” and illegal protest activity by using civil and criminal law, in particular the Protection From Harassment Act 1997 (“PHA”).

The PHA provides that a civil court can issue an injunction against a person who has committed, or is likely to commit, harassment. It is a criminal offence to breach this injunction, with a maximum penalty of up to five years in prison. The courts can also injunct to prevent anticipated trespass or other criminality, although prison is not automatically the consequence of breach. It is well established that such injunctions do not infringe the rights to free expression.
and assembly as long as they are in support of a legitimate objective and are proportionate.

Most of the recent cases involve animal-rights extremists, but there have also been cases relating to airports, power-stations and oil companies. The injunctions typically:

- Prohibit assaults, threats and harassing people at their homes;
- Prohibit publication of personal details (e.g. home addresses, phone numbers);
- Prohibit trespassing;
- Limit demonstrations to specific zones;
- Prohibit threatening behaviour, very loud noise, encroaching on the highway;
- Permit demonstrations only if a certain notice period is given.

Injunction proceedings require detailed evidence and tenacity in the face of counter-measures at protest sites and in the media. They should be used appropriately and sensitively, since over-aggressive tactics risk backfiring.

However, we are told by clients benefitting from these injunctions and by the police that, as a rule, injunctions have served to reduce the number of demonstrations at the inquiring company’s premises, the numbers turning up and the aggression of activists. They tend to increase the efficacy of policing and reduce offending and even low-level harassment activity. They are considered to be an important part of corporate strategy, not least by sending a strong signal of the company’s determination to carry out its legal activities.

Summary of shale regulatory and policy developments 2013-14

**February 2013 – Best Practice Guidance for shale well operations published** In February 2013, UKOOG published industry guidelines covering best practice for shale well operations in the UK for the first time. This is an example of the extensive efforts being made by the industry to reassure the public about the impacts of shale exploration.

The guidelines, which cover hydraulic fracturing and the public disclosure of fracture fluid composition, were written by a high-level workgroup which included operating and service companies with input from The DECC, The Health and Safety Executive (HSE), The Environment Agency (EA) and the Scottish Environment Protection Agency (SEPA). The first issue of the guidelines relates to the exploration and appraisal phase of shale gas well developments (i.e. it does not yet cover the production phase).
Critically, the guidelines stipulate that operators must publically disclose all chemical additives to fracturing fluids on a well-by-well basis, including regulatory authorisations, safety data and maximum concentrations and volumes. These disclosures meet or exceed all known standards in the shale gas industry.

The guidelines can be found at www.ukoog.org.uk/elements/pdfs/ShaleGasWellGuidelines.pdf.

**June 2013 – Shale Community Engagement Charter** In June 2013, in a further demonstration of the importance the industry rightly attaches to engaging in an open and honest dialogue with the public about what the potential for shale gas in the UK means for communities, UKOOG launched its Shale Community Engagement Charter, which outlines the steps that the industry promises to take to mitigate concerns surrounding safety, noise, dust, truck movements and other environmental issues. This can be found at http://www.ukoog.org.uk/community/charter.

**June 2013 – Local community financial benefits announcement** Also in June 2013, the shale gas industry announced through UKOOG that under its community benefits scheme operators would pay:

- £100,000 in community benefits at the exploration phase for each well-site where hydraulic fracturing occurs; and
- 1 percent of revenues from production wells at sites where shale gas is discovered.

Further announcements on community benefits were made in early 2014, as detailed below.

**July 2013 – New planning practice guidance on onshore oil and gas development (including shale gas)** On 19 July 2013, the Department for Communities and Local Government (DCLG) published new planning practice guidance for industry, minerals planning authorities and local communities on how onshore oil and gas (including shale gas) developments should be treated by the planning system in England.

The onshore oil and gas guidance needs to be read alongside other planning guidance and the National Planning Policy Framework (NPPF). The NPPF sets out the national planning policy for England and is a material consideration when local authorities determine a planning application.

The onshore oil and gas guidance aims to provide clarity on the role of the local planning system and its interaction with the separate environmental and health and safety regimes.

Other regulators, including the DECC, the EA and the HSE, will address sub-surface issues to protect against seismic disturbance or pollution of groundwater.
There are usually three phases to onshore hydrocarbon extraction: exploration, testing (appraisal) and production. The onshore oil and gas guidance confirms that planning permission is required for each of these phases of hydrocarbon extraction, although some initial seismic work may have deemed planning consent under general permitted development rules.

Amongst other issues, the new guidance explains:

- How a planning application should be determined by the local planning authority;
- The separate but complementary relationships between the planning and other regulatory regimes;
- That the focus of the planning system should be on whether the development itself is an acceptable use of the land, and the impacts of such uses, rather than control of processes, health and safety issues or emissions that are subject to approval under other regimes;
- How mineral planning authorities should plan for extraction;
- Critically, when an Environmental Impact Assessment (EIA) is required. It states that the minerals planning authority should carry out a screening exercise to determine whether any proposal needs an EIA and explains the screening process. An EIA will only be necessary for the exploratory and appraisal phases if the project is likely to have significant environmental effects. Larger scale production operations, extracting more than 500,000 m$^3$ of gas will require a mandatory EIA; and,
- Who is responsible for aftercare and restoration of sites.


**July 2013 – New Environment Agency Technical Guidance**  On 31 July 2013 the EA published, for consultation, technical guidance to clarify:

- Which environmental regulations apply to the onshore oil and gas exploration sector; and,
- What operators need to do to comply with those regulations

The consultation closed on 23 October 2013 and applied to England only. The final version of the guidance has yet to be published.

The draft guidance only covers exploration (not extraction) and oil and gas (not other minerals). Further permits not covered by this guidance would be required to move from the exploration stage to the commercial exploitation of oil and gas.
The draft guidance applies to all oil and gas operations, and it appears that the UK government does not plan to introduce a different regime for extracting shale gas by hydraulic fracturing. This now seems even less likely given that the European Commission has now backtracked from introducing pan-European shale legislation (see further below).

The draft guidance includes a very helpful and detailed explanation of the various legal requirements a developer must satisfy before it can begin hydrocarbon exploration. It is our experience that pre-application discussions on all the relevant permissions are usually advisable and the technical guidance recommends this too.

The guidance can be found at http://www.environment-agency.gov.uk/business/sectors/148556.aspx.

**October 2013 – Public Health England draft Review** In response to requests for advice by national and local agencies, Public Health England (PHE) established a working group to review the public health implications of fracking.

PHE is part of the Department of Health. As shale gas exploration and fracking have not been undertaken in the UK before, the PHE review relied on experience in other countries, particularly the US.

On 31 October 2013, PHE published a draft report which follows its review of the scientific literature focused on the potential impact of chemicals and radioactive material from all stages of shale gas extraction, including fracking.

The Draft Report concludes that:

- The risks to public health from exposure to emissions from shale gas extraction are low if operations are properly run and regulated;
- Where potential risks have been identified in other countries, the reported problems are typically due to operational failure;
- Good on-site management and appropriate regulation of all aspects of exploratory drilling, gas capture, as well as the use and storage of fracking fluid, are essential to minimise the risks to the environment and health;
- Any contamination of groundwater is likely to be caused by leakage through the vertical borehole. Therefore good well construction and maintenance are essential to reduce the risks of groundwater contamination; and
- Contamination of groundwater from the underground fracking process itself is unlikely because of the depth at which it will generally occur in the UK.

The draft report recommends, amongst other things:

- PHE should continue to work with regulators to ensure that all aspects of shale gas extraction are properly risk assessed as part of the planning and permitting process;
• There should be prior environmental monitoring to provide a baseline for assessment ahead of shale gas extraction;

• There should be effective environmental monitoring in the vicinity of extraction sites during the development, production and post-production stages of shale gas wells;

• Fracking chemicals should be publicly disclosed and risk assessed prior to use;

• Sites should be assessed on a case-by-case basis due to differences in underlying geology; and,

• There should be an assessment of any natural contaminants that could be mobilised by exploration and fracking (including dissolved radioactive material, such as radon, and minerals).

The draft report can be found at www.hpa.org.uk/webc/HPAwebFile/HPAweb_C/1317140158707.

November 2013 – Water and shale gas industry bodies sign memorandum of understanding

On 27 November 2013, DECC announced that the industry representative bodies, Water UK and UKOOG, had signed a memorandum of understanding to ensure cooperation throughout the shale gas exploration and extraction process.

A key aim of the agreement is to give the public greater confidence that both bodies will ensure that the effects on water resources and the environment are minimised during fracking.

Water UK’s position – echoing the conclusions of the PHE report discussed above – is that, while there are potential risks to water and waste water services, these can be mitigated by proper enforcement of the regulatory regime.

December 2013 – Developments announced on shale gas tax regime

The UK Government has pledged to create the world’s most generous tax regime for shale gas.

The Government recognises that shale gas is a new industry which will require substantial expenditure before profits are made. Companies will bear significant risk during the exploration phase and experience high ongoing well intervention costs and longer payback periods than for conventional onshore oil and gas developments. The Government has therefore proposed a tax regime for shale gas which is broadly consistent with the approach taken by it on the challenging oil and gas fields in the North Sea, which has been credited with extending the economic life of those fields.

On 10 December 2013, the UK Government announced a new tax allowance for companies incurring capital expenditure on onshore oil and gas (including shale gas) projects, which will reduce their ring-fence profits which are subject
to the 32 percent supplementary charge to tax by an amount equal to 75 percent of that capital expenditure. This proposal will cut the tax on a portion of the shale gas production income to 30 percent, compared with the 62 percent currently paid by most oil and gas operators in the UK. It is welcome support for the early development of shale gas projects. The measure applies to capital expenditures incurred on or after 5 December 2013.

On 10 December 2013, the UK Government also announced the extension of the ring-fence expenditure supplement (RFES). The proposal is to extend, from six to ten, the number of accounting periods for which a company can claim RFES for onshore oil and gas activity (including shale gas exploration). This is a reflection of the longer payback periods for these type of projects. This measure effectively maintains the time value of companies’ losses for up to 10 years, so that their value does not diminish before they can be offset against future profits. It applies to pre-trading expenditures incurred on or after 5 December 2013.

**January 2014 – Further financial benefits to local communities** On 13 January 2014, the Prime Minister, David Cameron, announced that local authorities in England will be able to keep 100 percent of business rates that they collect from shale gas sites. This is an increase from the 50 percent of business rates that they can currently keep. The government estimates that this commitment could be worth up to £1.7 million a year to a local authority hosting a typical shale gas site. It will be directly funded by central government. However, the move has attracted fierce criticism from opponents who have branded it as little more than a bribe.

On the same day, UKOOG announced that it had launched a pilot scheme in partnership with UK Community Foundations (UKCF), at selected shale gas exploration sites in the UK.

The aim of the scheme announced in June 2013 is to consult on how the £100,000 community benefit and the 1 percent of revenue from production wells could be shared with local communities. The options suggested by the shale gas industry include direct cash payments to people living near a shale gas site and setting up of local funds directly managed by local communities.

**December 2013 – Regulatory Roadmap published** On 17 December 2013, DECC published what it called a “Regulatory Roadmap” for onshore oil and gas licensing (including shale gas), which sets out the permits and permissions that developers need to obtain prior to drilling for onshore oil and gas. There are separate documents for each of England, Scotland, Wales and Northern Ireland, to reflect the regulatory differences between the jurisdictions.

The roadmap provides a basic, indicative overview of the process. It highlights key legislation and identifies required actions and best practice at various stages of the exploration and appraisal phases. It does not cover production and decommissioning.
It is fair to say that the roadmap does not create any new policies, but rather recaps the various permits and permissions that will be required before developers can start fracking.


December 2013 – Strategic environmental assessment (SEA) consultation

Also on 17 December 2013, DECC published a strategic environmental assessment (SEA) on the government’s proposals for onshore oil and gas licensing (including shale gas), for consultation.

The SEA is required under the EU’s SEA Directive. It sets out the potential economic and environmental effects of further oil and gas activity, including shale oil and gas production. The SEA commenced in 2010, but was suspended during the moratorium on fracking which was imposed following two seismic events in Lancashire. As the moratorium was lifted, the SEA has now resumed.

The SEA was carried out in preparation for the launch of the next (14th) round of licenses being made available for onshore oil and gas exploration and production, which will include shale gas exploration. The consultation closes on 28 March 2014.

After the consultation responses to the SEA have been considered, the Minister will issue a post-adoption statement, which will summarise how the government will proceed with the 14th onshore oil and gas licensing round.

The SEA identifies both positive and negative likely effects of unconventional oil and gas exploration. Positive effects are said to include employment benefits (echoed recently by David Cameron in a speech to the World Economic Forum) and the community engagement charter recently published by UKOOG. Another key advantage highlighted is energy security of supply.

The report also reviews the negative consequences, and ways that these could be mitigated, including:

- volumes of wastewater and flowback which will need to be treated, possibly offsite;
- increased greenhouse gas emissions, although the report notes this is likely to have a negligible effect on overall national emissions;
- potential noise, dust and vibrations during construction and drilling which could impact the population and health of local communities; and
- impact on the landscape.

The report considered that “scrutiny through the planning system (and other regulatory regimes)” would address many of these concerns. The report
also recommends several monitoring indicators including noise levels, traffic activity, seismic monitoring, volumes of water consumption, and air quality monitoring.

**January 2014 – Response to consultation on revised planning requirements** Planning laws represent one of the biggest potential hurdles to the development of the shale industry in the UK. Under current law, the fact that landowners technically own all of the air above their property and all of the land below it to the centre of the earth, means that unconsented horizontal drilling beneath an owner’s land (even though the well head itself may be on other land far away) is an actionable trespass.

Even leaving aside the issues of trespass and compulsory purchase, it would be a considerable burden for applicants for planning permission for underground shale activities to have to notify all individual owners or tenants of land through which underground activities might extend.

With this in mind, on 24 January 2014, the DCLG published the Government’s response to its September 2013 consultation on revised requirements for planning applications for onshore oil and gas (including shale gas) developments.

This document summarises stakeholder responses to the consultations and explains the government’s reasons for making the following changes:

- retain the requirement for applicants to serve notice on individual owners and tenants of land above ground area where works are required;
- remove the requirement for applicants to serve notice on owners of land where solely underground operations may take place;
- retain the requirement for applicants to publish the notice in a newspaper circulating in the locality and site displays in parishes; and
- introduce a new requirement for a site display in every local authority ward where no parish exists, or where the parish only covers part of the ward.

The Government has decided not to introduce requirements to serve notice on individual land owners and tenants where development relates to land above a certain depth.

The Government is also introducing a simplified standard application form for onshore oil and gas development, to be published by the Secretary of State. In response to some concerns raised by respondents to the consultation, the response confirms that the new application form will not include specific questions on the impacts of climate change or further questions on groundwater pollution and seismic activity, beyond the questions in the proposed application form in the consultation.
As proposed in the consultation, the government is also amending relevant planning regulations to clarify that the fee payable for applications for onshore oil and gas should be calculated on the basis of the area of the above ground works only. However, the government will also increase fees for planning applications for onshore oil and gas development by 10 percent on the basis of surface area works.

The changes to notice requirements and the requirement for a standard application form to be used were brought into force by amending regulations on 13 January 2014.

January 2014 – European Commission's shale gas initiative

This is perhaps the most significant recent development, and certainly one of the most welcome to the UK shale industry (and the Government).

**Background** In October 2012, the European Commission had alarmed many when it announced that it would introduce a regulatory framework for shale gas and other unconventional hydrocarbons, in its 2013 work programme. This work was later rolled over into the Commission's 2014 work programme. In November 2012, the European Parliament called for the Commission to conduct a thorough assessment of the European regulatory framework for these activities.

In December 2012, the Commission launched a consultation on shale gas and other unconventional fossil fuels. The consultation sought views on the risks and benefits associated with the exploitation of these types of fossil fuels (including fracking of shale gas) and whether additional regulatory safeguards were needed.

The idea of new, shale-specific European legislation, overlapping and potentially conflicting with existing UK legislation, which is seen by most as already fit for purpose, was vigorously opposed by the UK Government and others (most notably Poland).

It was therefore a considerable relief to the industry when on 22 January 2014, the Commission published its dramatically watered down “Shale Gas Initiative”. It published three related documents simultaneously:

(i) **A Recommendation on the minimum principles for the exploration and production of hydrocarbons (such as shale gas) using high volume hydraulic fracturing.**

The Recommendation, which is not legally binding on member states, is intended to complement existing EU legislation on issues such as SEAs, planning, underground risk assessment, well integrity, baseline reporting and operational monitoring, the capture of methane emissions and the disclosure of chemicals used in wells.
By providing member states with a set of minimum principles to guide how they apply existing EU legislation, the Commission hopes to improve the consistency with which high volume fracking projects are regulated across the EU.

(ii) A Communication on the exploration and production of hydrocarbons (such as shale gas) using high volume hydraulic fracturing in the EU, which outlines the Commission’s view of the opportunities (which include improving energy security, competitiveness and public revenues) and challenges (which include water and air pollution and land take) of shale gas extraction in the EU.

(iii) An Impact Assessment and an Executive Summary of the Impact Assessment, which examines the impact of a range of possible actions that the EU could take to regulate fracking for shale gas, including the option of a Recommendation, amending existing EU legislation and new legislation.

The Shale Gas Initiative documents were published alongside the Commission’s 2030 climate and energy framework.

**Shale Gas Recommendation** The Recommendation sets out voluntary minimum principles for member states to apply if they intend to permit the exploration and production of hydrocarbons (such as shale gas) using high volume fracking.

High volume fracking is defined in the Recommendation as operations that inject 1,000 m³ or more of water per fracturing stage or 10,000 m³ or more of water during the entire fracking process.

The main suggestions made in the Recommendation are for member states to ensure that:

- An SEA and EIA are undertaken before granting licences for exploration of hydrocarbons that may lead to high volume fracking. The public should be given early and effective opportunities to engage in these processes.

- The conditions and procedures for obtaining permits are coordinated where, more than one competent authority is responsible for issuing the permit(s), more than one operator is involved; or multiple permits are required for the same project phase or under EU and national legislation.

- Sites to be drilled should be geologically suitable for fracking by carrying out a characterisation and risk assessment of the site and the surrounding area.

- Operators conduct a baseline study of the environmental status (including the air and water quality, seismicity and biodiversity) of the site prior to the start of fracking operations.

- Installations are constructed in a way to prevent possible surface leaks and spills to soil, water or air.
Operators manage and reduce the impacts and risk associated with these projects, by using best available techniques (BAT) that take account of:

- BAT reference documents to be developed by the Commission with member states, the industry and non-governmental organisations (NGOs); and
- industry good practice.

Operators are required to:

- develop project-specific water management plans and transport management plans; and
- capture gases for subsequent use, to minimise flaring (that is, burning of gases) and to avoid venting (that is, the release of gases to atmosphere) in all but exceptional safety cases.

Manufacturers, importers and downstream users refer to fracking when complying with their obligations under the EU’s REACH chemicals regulation.

Operators are encouraged to minimise water consumption and the use of hazardous chemicals wherever technically feasible, and where improvements will result to human health, the environment and the climate.

Operators are required to publish information on the chemical substances and volumes of water used at each well.

Operators are required to monitor regularly the installation and the surrounding area against the baseline study, including before, during and after fracking. The resulting data should be reported to the competent authorities.

Operators are required to compare the environmental status of the site and surrounding area to the baseline study following closure of an installation.

The Commission also suggests in the Recommendation that EU laws on environmental liability should apply to all activities taking place at an installation, including those that do not currently fall under the scope of the Environmental Liability Directives and REACH Regulation and that operators should be required to provide a financial guarantee or equivalent covering the permit and the potential liabilities for environmental damage.

The Commission states that it opted for a recommendation, rather than the other policy options that it considered in its Impact Assessment, as it had been asked to act urgently and a recommendation has the advantage of being applied faster.
Next steps  The Recommendation proposes (rather than requires, because it is voluntary) that:

- Member states should apply the principles in the Recommendation within six months of its publication in the Official Journal (OJ) and should inform the Commission of the measures that they have taken by December 2014 and annually thereafter.

- The Commission will monitor its application by member states and publish a scoreboard comparing the approaches taken in different member states.

- Within 18 months, the Commission will review how effective this voluntary approach has been, including:
  - how the Recommendation has been applied;
  - how the BAT reference documents have been applied;
  - whether the Recommendation needs to be updated; and
  - whether legislative proposals on the exploration and production of hydrocarbons using fracking are needed.

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Future Reed Smith shale related client alerts in 2014 will focus further on some of these key issues and other significant developments, in the context of continuing announcements from the UK government and the EU.

With its HQ in Pittsburgh, and extensive experience of legal work for the US shale industry, particularly in relation to the Marcellus and Utica shales, and with our largest global office of nearly 350 lawyers in London, Reed Smith is uniquely placed to advise companies throughout the UK shale gas delivery chain. To learn more, click here.

1 http://blog.decc.gov.uk/2013/12/17/preparing-for-the-14th-round-of-onshore-oil-and-gas-licences/

2 Exemplified in the widely discussed Supreme Court decision of Bocardo SA v Star Energy UK Onshore Ltd.