Significant attention has been given to the pros and cons of shale gas exploration and fracking in England, but little if any attention has been given to how decisions over applications are made and how such decisions are perceived by members of the public. This briefing paper sets out the findings from a recent AHRC and SLSA funded research study which exposes the key factors that shape how the public perceive the relevant decision making processes and their legitimacy.

**Background**

Shale gas exploration and fracking has proved to be a contentious issue in England. Public concern has been on the rise and there have been a number of high profile protests against the industry. Shale gas is termed an unconventional resource due to the fact that additional stimulation (i.e. fracking) is required in order to release the gas from shale formations. The debate so far has focused on the pros and cons of the technique/associated industry, and little attention has been paid to how it is regulated/how decisions about fracking are made.

The way in which a decision is made, and its perceived legitimacy, is fundamental in determining whether a decision will be respected regardless of whether it is aligned to someone’s own personal opinion. Where decisions lack legitimacy opposition and protest often follow.

The study revealed that in the context of fracking legitimacy stems from the process through which decisions are made. Given the potential scale of the shale gas industry in England understanding whether decisions can achieve this legitimate status, and why, is of fundamental importance in acknowledging and

### Summary of Key Findings

The study revealed the key criteria that make a decision regarding shale gas exploration and fracking legitimate. To be considered legitimate the research found that in the context of fracking members of the public wanted to see:

- Expert led decision making. ‘Expert’ had a very clear and specific definition which pre-determined decision making goals/outcomes in accordance with public concerns
- The availability of information justifying how experts’ decisions had been made
- The presence of clear rules based controls to manage risk
- The enforcement of such rules in a deterrence style which punished offenders immediately
- The availability of a clear legal means to protect private property interests
engaging with an area of the shale gas debate that is currently being neglected.

The findings discussed are drawn from a study which spoke to members of the public living close to six sites in England affected by existing/potential shale gas exploration (both individual interviews and focus groups took place with twenty-seven participants). People were selected at random meaning that those taking part held a range of views (i.e. there was a mix of pro-fracking, anti-fracking, and those that held no strong opinion either way). In addition, seven members of the shale gas industry (through a focus group) and a member of a regulatory body (through an interview) were asked to discuss their own perspectives and experiences of fracking regulation/regulatory decision making. The findings reflect the key common factors that emerged from discussions with people across the six sites. Whilst the findings cannot be said to be representative of the entire public they provide a new insight into how public perceptions of legitimacy are currently being built by those actually affected by shale gas exploration and fracking.

What makes a legitimate decision? The public perspective.
Most people trusted experts to make fracking related decisions.

We want experts. We want people who know about these things. [Int. 16]

I think it has to be long term science as much as it is government. Government in this country lasts as long as a parliament lasts. If we’re dealing with something to do with the environment we’re talking about a long term environment and that lasts longer than a term of parliament. [Int. 6]

Who is an expert?
This expert status was initially related to the possession of scientific qualifications. However this alone was insufficient. Expert status was connected to much more than the possession of scientific qualifications/experience and was strongly connected to experts’ perceived independence.

(in reference to anti-fracking/opposition action): If there was, yeah, a totally independent body that was set up with qualified people in each section of everything that there is – as we know, there’s agriculture, there’s heritage, there’s culture, there’s noise, there’s water, there’s waste, and if they were truly independent, we wouldn’t particularly feel the need to do what we’re doing. [FG 2]

As long as they are independent. Any studies – take a toothpaste advert – depending who’s paid for it is what they’ll tell you you should be using..., yes, independent experts, so long as they really are independent. [Int. 13]

In defining experts, and in deciding whether or not they were independent, it became clear that a person needed the relevant scientific qualifications but also needed to show a clear commitment to environmental and health protection, to show concern for those affected by decisions and needed to be trusted to act predictably in pursuing those goals. At present neither industry nor government bodies were perceived as fulfilling this criteria (and consequently were not regarded as experts).

Why was the demand for expertise so strong?
The use of experts and science as the dominant basis of decision making is usually considered to deprive the public of power, meaning that the decision is less likely to be considered legitimate. (Wynne, 1996, 2010; Jasanoff, 2003, 2014; Lee, 2015). However, the study clearly shows that this is not the case in the context of fracking. In fact, there is a positive desire to rely on expertise and science i.e. people feel that allocating decision making responsibility to experts is the best way to ensure protection of themselves and their environment. This was clear in the corresponding lack of demand for public participation. People tended to view themselves as unqualified to take part in decisions regarding fracking.

Well, it can’t be Joe Soap, can it, because we don’t know enough about it. It has to be professionals in the industry. [Int. 13]

In addition to this, people were concerned that a large number of locals were simply not interested in taking part in decisions relating to fracking.

That was in the village. But it also means that there’s over 4000 people didn’t turn up. And it’s the same with most issues – very few turn up. I thought 270 was a good turnout. [Int. 12]
(Referring to poll on fracking in the village) Yes, based on the turnout of 19% in the parish council poll. Most people are simply indifferent. [Int. 1]

As a result, there was concern over whether the public voice in decision making was actually representative of
the general public view (Lee & Abbot 2003). This was particularly so given the polarized nature of the existing debate around fracking.

One protest does not fit all! In some cases I’m sure that it negatively impacts on the concerns raised by local people...a forum of experts should be available to answer questions from the floor....as residents living close to a site we have a right to know what to expect. [Int. 10]

For me that is because of the whole lack of communication from day 1, and the fact that it’s become very entrenched and we’ve got the people that will have it, they’ve no interest in this whatever on whatever basis, the green people and all this – it’s a ‘no’, irrespective of whatever. And the other people are saying, well, we need this and it’s going to go ahead, whatever. And in the middle we as a community are squeezed. [FG 1]

What are experts expected to do?
Address public concerns and impose rules
Experts were expected to address public concerns by assessing and managing the risks associated with fracking. Where such an assessment showed that the risks could not be managed experts were expected to prevent exploration/deny permission for planning or permits. The type of regulation which was expected to manage such risks consisted of a clear set of rules which bound industry members.

It needs regulating. Everything in life is regulated. If we put up a little extension, you have the building control fella and he trots round and he looks to see if you’ve put that concrete in the right place where you said you were going to put it, and is it right, and will it hold up your 8 inch wall.
And if it’s half an inch wrong, you take it down and start again. [Int. 15]

At present there was a perception that the industry was self-regulated. Current environmental permits are target based and allow industry to meet the permit conditions using their own strategies and internal management system (Environment Agency and Department for Food and Rural Affairs, 2016). This approach was not perceived by the public as imposing clear rules to bind industry. The desired rules were also expected to be consistently enforced through visible punishment. At present there is a perception that regulators are not in a position to do this.

The mechanisms don’t work, they’re broken, you see they can’t work unless you’ve got real independence. You can’t have people scared for their jobs, you can’t have people that have got no independence, no courage. You’ve got a load of people who simply won’t enforce the regulation because the following day it’ll be in the paper that Joe Blogs has told Cuadrilla they can’t do this because its breaching this regulation when you’ve got David Cameron saying no regulation should stop this. They know the rules. [Int. 5]

Now what you need is the regulation that hammers them from the word go, before it goes wrong. And if something does go wrong, somebody says, you put it right now. [Int. 17]

I think the regulators, when they’re put in, need a big, big stick if something goes wrong. A big stick. [Int. 9]

If such rules and punishments are not perceived to be in place, then experts are unable to fulfill their expected role and the trust placed in them to make decisions is likely to be damaged.

Experience has also shown that what science and experts consider an issue in relation to a development and the things that concern the public do not always match up (Wynne, 2010). Given that experts are expected to impose these controls to address public concerns, if experts do not consider certain public concerns to be warranted/worthy of imposing management controls they are no longer fulfilling their expected role. This mismatch has caused public concern and frustration in relation to other developments and if it continues to appear in the context of fracking looks set to undermine the legitimating value of expertise in decision making. Again, what is of very evident importance here in establishing the legitimacy of decisions is that those making decisions conform to the public definition of an expert. If the people making a decision are trusted, and are pursuing the goals as set out by members of the public, then their decision, and assessment and management of risks is less likely to be challenged and more likely to be aligned with public concerns.

Provide information
The information which experts use to make their decisions over whether risks can be controlled/mitigated is also central to legitimising experts’ role in decision making. This information was perceived as having a reassuring function by illustrating that the decisions were
being made by the desired experts in line with the goals set out by members of the public (i.e. commitment to environmental and health protection, concern for the impact developments would have on locals and acting predictably in pursuance of such goals).

These are the scientific consequences that we anticipate, these are the levels of safety we're working to and we do not anticipate that we will get beyond that point, if we do we'll have to do something about it which may mean closing down the site. [Int. 6]

Predictability was particularly important when the impact of government policy on lower level regulatory and planning decisions was considered. People felt that the best way to avoid the pre-emption of decisions was to ensure that accountability was provided through expert oversight of decisions. The current political accountability was considered far from satisfactory.

(In reference to MPs) Surely, aren't they already the bought parties? If they don't do as they're told, the whip kicks in. I don't think if they put a clown's costume on and dance in the street, it would make a lot of difference. [FG 2]

The production of information to explain expert decisions and how risks will be managed/why risks cannot be managed and applications denied fits well with the desire to rely on experts in decision making. However, past experiences and studies suggest that, although it may not be produced with increased public debate in mind, the availability of more information can often prompt further questions and concerns about the way the information has been used in decisions/where it has come from (Castellini et al, 2007; Lusk et al, 2004; McAuslan, 1980). Again, the importance of recognizing that expert status is connected to more than scientific qualifications is vital. If experts are not trusted, i.e. fail to meet the criteria set out by the public, then their role in decision making and the information they produce will likely give rise to increased challenges and public concern (undermining the legitimating value of the information).

What about private property?
People were very aware of the UK's high energy demand and were not generally averse to the idea that shale gas could help in the energy mix.

Would I have it here through choice, no. Do I understand the need, I do. [Int. 3]

We can't put our heads down and I don't want to be a NIMBY and say, 'oh yes, I want it down but in some other county, but I'm quite happy to plug my mobile phone in and have my fire and everything on', so I'm quite accepting of it, but I want to know that it's safe. [FG 2]

However, in considering whether they would accept a decision to allow exploration it was very clear that private property was a prominent concern. People were very aware of the fact that private actions for potential damage/potential loss of value is complex and often expensive.

Yes I am concerned because I think if anything does go wrong, we'll all be left, we'll just be hung out to dry. We see nothing to offer any...there's nothing suggesting we're going to be given any protection by government, council. [Int. 3]

People wanted to see a dedicated fund in place to guarantee against damage/property devaluation and to pay should either of these occur.

They want the regulating bodies to take some ownership of this and for the government to stand by any losses that may occur in the event of any environmental impacts caused by fracking...put your money where your mouth is, and say, right, we'll compensate you. [Int. 11]

Notably, such guarantees for private property interests were perceived differently to the proposed community benefits package and existing industry sponsorship within the community. Such financial schemes were regarded with skepticism and generally viewed as 'bribes'. The fact that funds to protect private property exist in relation to other developments such as nuclear energy and High Speed Rail meant that people questioned why such a scheme was not in place for fracking. Should such a scheme be implemented people generally felt it would act to provide the reassurance needed to allay concerns over the impact of developments on property rights.

It's a monstrous subject. But if somebody would be prepared to underwrite it, I don't think there'd be a lot to bother us. [FG 2]

How does this fit with industry and regulator perspectives?
Interestingly the desire for expertise and information as the dominant basis of decision making is also reflective of both industry and regulators' desired model of
decision making. They too want to see science and expertise dominating.

Various people/NGOs will have legitimate concerns and these should be heard in the general debate – and of course justified through rational/scientific argument [Regulator int.]

However, what is notable is that their definition of expertise is not necessarily aligned to the publics (i.e. it is focused on scientific qualifications). It is this difference that is fundamental and gives rise to the perceived lack of expertise in current decision making. In addition to this, industry consider the existing controls to be more than adequate and as such believe reform would be extremely time consuming. This is problematic given that the public do not think that the existing controls are rules based and do not perceive them to be enforced in a way which punishes violations immediately. However, industry members stressed that regulatory reform is problematic not only in terms of delaying the development of the industry but also because as the industry develops new practices and standards are likely to develop, built through practical experience, that render the new controls outdated. Industry members and the regulator also stressed that an approach with high levels of regulator enforcement and on site presence was contrary to the general approach to regulating industries in the UK and was unnecessary and not the best means of ensuring regulatory compliance (Balck 1997, 2008).

I think the expectation’s been created now that these regulators are not doing a very good job unless they’re camping out on these sites and watching everything that goes on. And that’s clearly not how regulation works in this country or the environment, but that’s the expectation that’s been conjured up by these people now. [Industry FG]

What does this mean for fracking and regulatory decisions?

At present fracking related decisions lack legitimacy due to the perceived lack of expertise in current decision making processes. The public have a very clear definition of who they trust as an expert. They feel that assigning decision making responsibility to these people is the best means to achieve local, environmental and health protection. Due to the polarized nature of the current fracking debate public participation in decision making is not seen as the best means of achieving these goals. If scientists that do not meet the ‘expert’ criteria take part in decision making their expert status will not be accepted by the public and neither will their decisions. This can help explain why those involved in the current decision making procedure, such as the Environment Agency, are not currently considered to be experts within the decision-making process (i.e. they aren’t considered to be committed to environmental protection, sufficiently concerned about the welfare of locals and aren’t trusted to act predictably in pursing such goals given the perceived government pressure to develop shale gas). At present, there is very clear concern over political pressure and influence and experts are seen as the best way to ensure that decisions are based on risk assessment and management that is not pre-empted by government or industry. It is assumed that in managing risks experts will implement clear regulatory rules and that any regulatory violations will be punished immediately. At present, such a regulatory approach is not perceived to be present. As stressed by industry and the regulator, the use of rules and high level enforcement/regulator presence on site are contrary to the general approach towards regulating industries in the UK. In light of this regulatory reform looks unlikely. This means that the perceived lack of rules/enforcement is likely to continue. This needs to be reconsidered if experts are to fulfill the role which the public have set for them and if the legitimacy of their decisions is to be secured.

In sum, the demand for expert led decision making needs to be recognized. However, this must only be done with a corresponding recognition of who the public define as an expert and why. Without acknowledging this definition, the increased use of science/scientists alone will do little if anything to alter public perceptions of decision making legitimacy. Attention also needs to be given to the fact that experts are expected to address public concerns and manage risks through the imposition of rules which are strictly enforced by punishing violations. This is an inherent part of what an expert is expected to do and if they are unable to fulfill this expectation then the legitimacy of their decisions, even if they comply with the public’s expert criteria, is likely to be damaged.
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