



To:
Commission for Energy Regulation

Response and grounds for opposition
to the proposed Regulatory Safety Framework
as set out by CER in the
Draft Decision Paper and Consultation Response Paper

29 March 2012

**Response and Grounds for Talamh’s Opposition
to the proposed Regulatory Safety Framework
as set out by CER in their
Draft Decision Paper and Consultation Response Paper**

For the avoidance of doubt we set out the dictionary definitions of words that are used in this report and in the documents generated by CER

“Standard” – (noun) that which stands or is fixed, as a rule, that which is established as a rule or model; a rule or measure, criterion, test.

(adj) having a fixed or permanent value, legal; serving as a standard, satisfying certain legal conditions.

“code” – (noun) a collection or digest of laws. (n) a digest of laws, a collection of rules.

“risk” – (noun) a situation involving exposure to danger, the possibility that something unpleasant or unwelcome will happen; (adj.) a thing regarded as likely to result in a specified danger

Talamh set out below our concerns under the following five headings.

These represent our major concerns, but are not meant to be an exhaustive list.

- 1. Goal setting is not what the Legislators intended. Legislators required a prescriptive and not a “goal setting” or self regulating Safety Framework, and Undertakings to achieve a level that is as low as is reasonably practicable within prescriptive boundaries.**
- 2. ‘Risks’ are not confined to Major Accident Hazards (MAH)**
- 3. ALARP principle is wrongly employed**
- 4. We reiterate CER do not have a mandate to determine Societal Risk**
- 5. Abdication of responsibility to control petroleum activities.**

1. Goal setting is not what the Legislators intended. Legislators required a prescriptive and not a “goal setting” or self regulating Safety Framework, and Undertakings to achieve a level that is as low as is reasonably practicable within prescriptive boundaries.

CER stated at page 17 (3.3.2) of the originating Consultation Paper CER/11/137:

3.3.2 Discussion 3.3.2.1 "Goal Setting Regulatory System

*The safety regulatory system established by virtue of the Act is **goal setting** in nature in that it requires undertakings to meet the goal of reducing risks to a level that is ALARP, but leaves some discretion as to how to achieve this. This is fundamentally different from a prescriptive approach where the regulator defines the way in which an undertaking should design and operate an installation and thereby dilutes the responsibility of the undertaking for safety standards on the installation. A prescriptive approach, which defines all requirements, gives clarity on what is required but may lead to risks not being fully and appropriately addressed for the particular undertaking. A goal setting approach has many advantages over a prescriptive approach. Rather than simply complying with prescriptive requirements, goal setting requires undertakings to understand the hazards their operations present and to demonstrate that the safety measures they have in place are appropriate. Prescriptive requirements also tend to lag technical developments, whereas adoption of the ALARP principle requires consideration of new knowledge and incorporates continuous improvement."*

Given the provisions of the Act, the Petroleum Safety Framework is intended to be goal setting. However, this does not preclude the CER from including elements of prescription within the Safety Case Guidelines where it may be beneficial in certain circumstances...

In adopting an approach that is generally goal setting, but with elements of prescription, the CER proposes an approach that is aligned with best practice in many existing regulatory regimes across the world"

This statement must be contrasted with the legislation itself which states at 13L, Safety Case Guidelines, that the Safety Framework will be and is expected to be strongly prescriptive and that the a petroleum undertaking will reduce any risk to safety to a level that is as low as is reasonably practicable only once a petroleum undertaking has satisfied the safety criterias set out in the Guidelines.

Safety case guidelines.

13L.—(3) The safety case guidelines may include provision for all or any of the following:

- a. the appropriate contents of a safety case,*
- b. the **appropriate technical principles and specifications** relating to the design, construction, operation, maintenance, modification and decommissioning of petroleum infrastructure,*
- c. the **standards and codes of practice applicable** to designated petroleum activities including **relevant standards and codes of practice**, that have been formulated or recommended by the National Standards Authority of Ireland,*
- d. the **safety standards to be achieved and maintained** in respect of each designated petroleum activity,*
- e. the procedures to be followed by a petroleum undertaking for the submission of a safety case or a revised safety case for approval by the Commission,*

- a. *the relevant performance indicators according to which safety performance in respect of each designated petroleum activity will be assessed.*

The following selected terms and phrases, taken from Section 13L above, are all very prescriptive in their meaning and it is incumbent upon CER to adhere to what the legislation requires i.e. for the Safety Case Guidelines to be prescriptive,

**“appropriate technical principles and specifications
standards and codes of practice applicable
relevant standards and codes of practice
safety standards to be achieved and maintained
relevant performance indicators”**

The CER have wrongly claimed an interpretation of the Act as being “Goal setting ... but with elements of prescription.” which is an inversion of how it was put through the Oireachtas.

*Petroleum (Exploration and Extraction) Safety Bill 2010: Second Stage.
Thursday, 28 January 2010
Seanad Eireann Debate
Vol. 200 No. 5*

*The Minister stated: “The National Standards Authority of Ireland, NSAI, will also be a mandatory consultee. The NSAI is responsible for the development of Irish standards, representing Irish interests in the work of the European and international standards bodies CEN and ISO, and for the publication of Irish standards. In effect, the NSAI certification creates, maintains and promotes recognised standards. **To ensure there is clarity with respect to the appropriate standards applicable to the petroleum activities and infrastructure that will be designated by the commission, the NSAI will create a petroleum exploration and extraction standards committee in accordance with section 10 of the National Standards Authority of Ireland Act 1996. The purpose of this consultative committee will be to advise the authority on the need for and the content of standardisation in the field of petroleum exploration and extraction. The commission will liaise with the NSAI when it is setting out in the safety framework the appropriate code or standard with respect to safety, to which all petroleum undertakings must conform when carrying out each designated activity.”***

*Petroleum (Exploration and Extraction) Safety Bill 2010: Second Stage.
Thursday, 28 January 2010
Seanad Eireann Debate
Vol. 200 No. 5.*

*The Minister stated: “This Bill ... **will establish the appropriate code or standard with respect to safety relevant to each designated activity to be regulated by the Commission. It will also provide for the issue of safety permits by the Commission, which will enable petroleum undertakings to carry on their business in conformity with their approved safety case.”***

Petroleum (Exploration and Extraction) Safety Bill 2010: Second Stage.

Thursday, 28 January 2010

Seanad Éireann Debate

Vol. 200 No. 5

The Minister stated “While petroleum undertakings must comply with the specific requirements of the safety framework, section 13K also places a general duty on petroleum undertakings with respect to reducing risks with regard to safety to a level that is as low as is reasonably practicable.”

Nowhere in the debates in either of the houses of the Oireachtas, nor in the Petroleum (Exploration and Extraction) Safety Act, 2010 does the word “goal” occur, nor the phrase or term “self-regulation”.

In the latest “Consultation Response Paper” at 5.1.7.2 CER states their position as

*“The adoption of **advisory limits**, which are strictly imposed, provides the regulator with adequate means to control risks while allowing for flexibility in the adoption of said limits. There may be circumstances, as yet unforeseen, where the broader societal requirements are such that a particular activity may be deemed necessary, even if it breaches the said limits. Such an activity would be an exception and only approved after detailed consideration by the CER. In this context, it is notable that the adoption of advisory upper limits for risk tolerability is consistent with practices in many other jurisdictions and the existing HSA approach. It is proposed in the Draft Decision Paper that upper limits will be included in the Framework for individual and societal risk and that the limits will be strongly advisory in nature. The CER’s function under the Act is to promote safety as respects the carrying on of designated petroleum activities. Hence the adoption of tolerability levels with respect to environmental risks or risks to property would not be appropriate. Individual and societal risk calculations will however have to take account of environmental type impacts which would present a risk to safety, either immediate or delayed.”*

Nothing said in the Oireachtas or in the Act itself empowers or entitles CER to take the view that adoption of advisory limits provides the Regulator with adequate means to control risks.

At point **6.3.6** (below) in the Draft Decision Paper the prescriptive nature of the Safety Case Guidelines is downgraded to

“may include elements of prescription within the Safety Case Guidelines”

– but only where it might benefit the petroleum undertaking (the oil company)

“Although the Framework is goal setting in nature, the CER may include elements of prescription within the Safety Case Guidelines where it may be beneficial in certain circumstances such as the following:

- *Where the hazards are well understood and there are established protective or preventive measures adopted in the industry;*

- *Where cost benefit analysis would not necessarily support the adoption of accepted good practice; and*
- *Where the regulator recognises some element of advantage in having a common approach i.e. all helidecks should comply with the same standard and all navigation aids should be standardised."*

It is clear from the Draft Decision Paper, that CER have disregarded the comments made by the majority of Respondents to the Consultation document, including those made by the NSAI and An Bord Pleanála, which pointed out the lack of prescription in the CER proposals and the inadequacy of such a system in respect of safety requirements.

The NSAI Standards Petroleum Exploration and Extraction Technical Standards Committee Consultation submission stated,

In answer to question 14, NSAI stated:

" Yes Risk based framework should be common to all regulators (CER, HSA, etc) and PU's. The risks should be prescriptive and defined and set by the CER which should be consistent with already defined values, for example, values set by the HSA.

Comments of the Executive of An Bord Pleanála on the CER Draft Consultation Paper on the High Level Design of the Petroleum Safety Framework

OVERVIEW *We note that the ALARP principle is derived from best international practice and the Petroleum (Exploration and Extraction) Safety Act, 2010. In acknowledging the adoption of this principle by the CER, it is important to note that the Board's approach in dealing with strategic infrastructure planning applications and development applications in general is prescriptive in nature, whereby there is a requirement for precise and enforceable conditions attached with the grant of planning permission or approval. When framing a grant of permission, subject to conditions, the Board is cognisant of the advice contained in the Development Management Guidelines for Planning Authorities published by the Department of the Environment, Heritage and Local Government in June 2007. Section 7.3.4 of the guidelines advises that conditions should be precise. Vagueness is to be avoided because imprecise conditions may well prove unenforceable. The Board would be concerned that any condition incorporating words such as "as low as reasonably practicable" may suffer from such imprecision and unenforceability.*

Evidence of where the opposing principles of goal setting and prescription collide is shown by CER in the Consultation Response paper, where the ICBs will not be required to make verifications against a standard.

that the CER should provide a check, before commencement of the verification contract, that the proposed ICB has the appropriate level of independence and mix of competencies to carry out the required verification activities. Detailed guidance will be provided on the basis of approval at 7.1.8.2 "While approval of ICBs is not

*required in all jurisdictions, it is considered prudent and level of independence and competence required. **Verification against a standard is not considered appropriate due to the goal-setting nature of the Framework.***

It is clear from the Oireachtas debates that these concerns were also shared by many public representatives.

*Petroleum (Exploration and Extraction) Safety Bill 2010: Committee Stage.
Thursday, 4 February 2010
Seanad Éireann Debate
Vol. 200 No. 8*

*Senator Jim Walsh: "... **there is a need to be as prescriptive as possible in the safety framework. The more discretion we allow to overshoot deadlines and guidelines the greater the risk factor.**"*

It must be noted that the proposal by CER in the Draft Decision Paper to have almost entirely a reliance on asking petroleum undertakings to limit their Safety Case design to ALARP principles rather than setting very clear standards and regulations through tough prescriptive Safety Case Guidelines is an abdication of their duty to protect public safety. It is in fact a concession to the petroleum undertakings at the expense of the safety and welfare of the community and environment.

2. 'Risks' are not confined to Major Accident Hazards (MAHs)

Talamh and many other respondents have pointed out to CER that 'Risks' must not be confined to Major Accident Hazards (MAH) as many of the proposed operations by petroleum undertakings pose major immediate and long term health risks from the industrial processes used. These are inherent dangers to the local and national community and do not arise from accidents.

*PEES Act 2010: Safety framework. 13I.—(1) In exercising its function under section 13H(2)(a), the Commission shall, subject to subsection (5) and after consultation with such of the persons specified in subsection (2) as the Commission considers appropriate, establish and implement a **risk-based petroleum safety framework** (in this Part referred to as a 'safety framework') in relation to the carrying on of designated petroleum activities.*

The reference to "risk" is intended to include all risks and this is confirmed by Section 13M of the PEES Act.

PEES Act 2010: "Safety case. 13M Safety case.

*(4) A safety case shall contain such particulars as are specified in the safety case guidelines that relate to the designated petroleum activity or activities in respect of which the safety case is being prepared and shall include sufficient particulars to demonstrate to the Commission that— (a) the petroleum undertaking is complying with its duty under section 13K, (b) the petroleum undertaking has the ability to properly assess and effectively control risks which may arise from the carrying on of the designated petroleum activity or activities to a level that is as low as is reasonably practicable, (c) **having identified all hazards and assessed the risks presented by those hazards, the petroleum undertaking has taken such measures as are adequate to ensure that its safety management system is capable of reducing the risks to a level that is as low as is reasonably practicable,** "*

In their Consultation Response Paper CER have created uncertainty as to who would be responsible in certain situations of risk whereas the legislation is specific. The CER are NOT ENTITLED, as they claim in their Response document, and also have recently stated to the Joint Oireachtas Committee, to restrict their role to MAHs.

"3.1.3.2 CER Response The CER has no remit under the Act to regulate risks to the environment except where they have an impact on safety. Further details on the scope of the Framework are provided in section 2.3. The CER's function under the Act is to promote safety as respects the carrying on of designated petroleum activities. Given this function the CER will be required to consider environmental issues, which could present a risk to safety. This would include health effects arising from emissions from petroleum activities, including that of hydraulic fracturing."

Yet in the extract from the Draft Decision Paper below, CER limit their responsibility to actual accidents only and fail to make any direct reference to their broader responsibilities in relation

to the immediate and long term health issues on the affected communities, arising from petroleum activities.

"In the Draft Decision Paper, the CER has amended the proposed definition of major accident to clarify this remit and is this definition now more closely aligned with the definition of a major accident hazard contained in the COMAH Regulations. It is proposed to define a major accident hazard as: 'An event, such as a major emission, fire, explosion, impact or structural failure of petroleum infrastructure, resulting from uncontrolled developments in the course of designated petroleum activities, which could lead to a serious danger to human health whether immediate or delayed. Serious danger implies events which could impact multiple personnel, including members of the public and/or the workforce."

This contradiction is now further compounded by the answers given by CER in response to a question in relation to this by Deputy Ó Cuív, as a member of the Joint Oireachtas Committee on Communications, Natural Resources and Agriculture, where Dr Paul McGowan retreated back to the position where he claims CER are primarily concerned with MAHs.

Transcript of session, "Current Work Priorities: Discussion with Commission for Energy Regulation" Thursday, 15 March 2012

Deputy Éamon Ó Cuív: *A safety regulation is being drawn up in respect of gas and oil exploration. One of the very positive decisions we made when we were in government was to transfer responsibility in this regard to an independent agency and ensure that it would not remain with the Department involved in promoting exploration for oil and gas. If I understand matters correctly, the commission is reaching the end of a very long process in the context of drawing up an approach to safety in the oil and gas exploration market. Do I understand that the safety to which our guests (CER) refer is that which relates to the actual safety of an operation in the event of nothing untoward happening? Does it involve an analysis of the risks with regard to what might go wrong, what might happen if something did go wrong and what would be the scale of the catastrophe that would follow such an eventuality? Am I correct in stating that the commission's role in respect of this matter is quite limited and relates merely to issues of pure physical safety. The Environmental Protection Agency, EPA, has responsibility for environmental issues. **Do wider issues of safety such as those relating to, for example, fracking, the use of chemicals, etc., and the long-term effects these might have, come under the commission's remit? Perhaps our guests might clarify the position regarding the wider safety issues as opposed to commenting further on those which relate to the narrow aspects of this matter.***

Dr. Paul McGowan: *Our primary role in respect of petroleum safety relates, as the Deputy stated, on the direct consequences of major accident hazards. Our focus is on ensuring that accidents be prevented through the systems and processes which operators have in place. We must also ensure that operators have mitigation measures in place to deal with the outcome of accidents, should they occur. In the context of our vision, we focus on protecting human life. **This includes protecting the health of humans, with a focus on the direct impact of accident hazards. There***

is a clear crossover between what we do and what other agencies do. After all, something which has an environmental impact could ultimately have an impact on humans. We very much see our role as co-operating with the Environmental Protection Agency and the Health and Safety Authority. Many of the issues around petroleum extraction can relate to the environment. We would very much leave the function in this regard to the Environmental Protection Agency but we would co-operate and communicate with the agency on a regular basis. This allows us to focus on what would be the direct impact if a major accident hazard occurred and the effect such an event could have on humans, either those who comprise the workforce at or those who live in the vicinity of the particular facility involved.

Not only are CER contradicting themselves, they have now created a situation where they would be responsible for “delayed” health issues from accidents and EPA are responsible for delayed health issues from other causes.

How will anyone be certain of the cause of a health problem five or ten years later?

3. ALARP is not contained in the legislative framework.

CER are advising everyone that they are obliged to apply the Safety Case permissioning system using the ALARP principle which **they** define on page 123 of the Consultation document under Appendix I: Glossary of Terms and Abbreviations as

"As Low As Reasonably Practicable"

whereas the PEES Act 2010 (after being amended) states the principle is

*"As Low as **IS** Reasonably Practicable"*

There are many problems associated with this change in wording and they stem from the significant difference in meaning, both quantitative and qualitative, in the two phrases. It is generally understood that the phrase "as low as reasonably practicable" is aspirational and is an objective test towards attaining the ideal.

The phrase that was originally used in the Bill gave the legislators a sense of confidence that the highest tests possible will be applied before any operations can take place.

Internationally ALARP is given the meaning, "as low as reasonably practicable" and it is of concern that this has been amended in Ireland.

The amended phrase "as low as **IS** reasonably practicable" means something else. It implies that the test that is being applied is not an objective test as it does not refer to external sources for comparison. It means the best that the individual can achieve in the circumstances they find themselves in. It is in fact a flexible condition that is achieved by a petroleum undertaking (an oil company) just by claiming to be trying to do their best.

See Appendix for details of legislative changes.

4. We reiterate CER do not have a mandate to determine Societal Risk

Societal risk can only be determined by full democratic consultation and debate following a government-authorised accounting process of the potential costs and benefits in the wider socio-economic-environmental sphere so that the people can evaluate the situation using an evidence-based cost/benefit analysis and a political decision can be made to provide what Ireland's public policy will be on Unconventional Gas.

From the Consultation Response Paper it is clear that CER claim societal risks will be decided not on Irish values but on other countries' values, like the UK, a country that permits Nuclear Power.

5.1.3.2 CER Response

It is proposed to address societal risk explicitly within the Framework and to propose risk tolerability requirements for societal risk which will be expressed in terms of fatal risks and will take account of immediate and long term fatalities arising from major accident hazards. This will include consideration of major accident hazards presented by hydraulic fracturing. The approach for addressing societal risk will be consistent with current practices in Ireland or those adopted internationally.

5. Abdication of responsibility to control petroleum activities.

The CER Consultation Response Paper CER/12/016 states at page 15:

"The CER confirm that the safety of petroleum activities associated with hydraulic fracturing /unconventional extraction will be regulated under the Framework should petroleum authorisations for such activities be granted in Ireland."

"The role of the CER is not to determine who receives a petroleum authorisation or what form such authorisation takes, but rather to regulate the safety of the activity as authorised"

In these statements and throughout the Response Paper the CER confuse and interchange the terms "AUTHORISATION" and "ACTIVITY". It is clearly intended by the legislation that the Minister will issue the relevant Authorisation where it is proper to do so and the CER will regulate the Activities that are carried out under that Authorisation. However, the CER is stating that the Minister "authorises activities" and that they have no power in the control of "authorised activities". This is not correct. Even where the Minister has issued an authorisation, the CER have the power to refuse to permit a petroleum activity if it is too dangerous and does not meet the level of public safety required by the Safety Case Guidelines which they, the CER, after appropriate consultation, have responsibility for laying down.

From this it can be seen that the decision as to the type of extraction processes used in any given operation is going to be taken BEFORE it reaches the safety regulator; on page 17 of the Response Paper it states that the CER "does not have a role in licensing activities within the State." (see also pages 9, 22, 35/36, 39)

These statements capture the fundamental abdication of responsibility by CER and represent an usurpation of the control of petroleum processes ("activities") by DCENR.

The POMD ACT 1960 gave powers to the then Minister for Trade and Industry to grant licences and leases for petroleum exploration and extraction. The definition of petroleum in the act uses the words "ordinary" and "normal". The act presumes that all activities will be "conventional" in nature, there being no "unconventional" activities in existence at that time. Licences and leases are attached to specific areas of land and deal with financial matters; they are not intended to licence or to specify certain processes they. In fact exploration and prospecting licences under the Act operate to permit the licensee to employ whatever processes they believe are appropriate and there appears to be no power vested in the minister to control their decisions by restricting those activities to any particular process.

During the debates that led to passing the PEES Act 2010, Senator Paschal Donohoe said "one of the reports which led to this legislation acknowledges that we had a system in which a government body or department was charged with marketing and expanding petroleum exploration and extraction, but we could have ended up with the same body - or the company which gets the contract for the activity- becoming the regulator for that activity and its safety. We now know that is not the right way to operate, this appears to be one of the major lessons of the controversy over the Corrib gas field."

This is a key to the issue. Prior to the PEES Act, the safety of petroleum activities was the responsibility of the Minister DCENR. The Minister now no longer has the same powers to make decisions "in the public interest". The public safety of petroleum activities is now the responsibility of CER. Any decision taken by DCENR "in the public interest" is now conditional in nature and can only be made of full effect by CER approving a Safety Case application from a petroleum undertaking that complies with the Safety Case Guidelines.

These Safety Case Guidelines are supposed to contain Codes and Standards as laid down by CER in liaison with National Standards Authority of Ireland, (see Bill as introduced to

parliament). If a Safety Case complies with the IRISH Codes and Standards then further tests must be applied by CER including whether or not the proposed case would reduce risks to a level that is as low as is reasonably practicable (ALARP).

In all their documents the CER make minimal reference to the Guidelines and importantly have NOT CONSULTED with the public on this matter.

Instead they have elevated the ALARP principle to be their paramount consideration and subordinated prescription to an advisory level. Page 9 for example states, "...the safety case can only be approved with (sic) the CER is satisfied the petroleum undertakings has demonstrated that any risk to safety arising from all petroleum activities will be reduced to a level that is ALARP"

CER repeatedly state they have no power to ban any activity:

page 7: "...the CER is not the authority which grants authorisations, it cannot ban a specified petroleum activity or process...."

page 9: "The CER has no remit to ban the use of chemicals under the Framework."

In contrast to these statements the statutory authority vested in CER by the PEES Act empowers CER, for example, if the use of a specified chemical or chemicals is considered too much of a risk to public safety, to proscribe the chemical by way of a Code or Standard and therefore refuse to permit any activity whose Safety Case employs it.

APPENDIX

This is a serious occurrence as legislators were told (by way of the Bill shown below) that petroleum undertakings would be required to reduce the risks to safety to a level that is AS LOW AS REASONABLY PRACTICABLE.

General duties of petroleum undertakings. 13K.—(1) A petroleum undertaking shall ensure, in so far as is reasonably practicable, that—
*25 (a) any petroleum activity is carried on in such a manner as to **reduce any risk to safety to a level that is as low as reasonably practicable**, and (b) any petroleum infrastructure is designed, constructed, installed, maintained, modified, operated and decommissioned in such a manner as **to reduce any risk to safety to a level that is as low as reasonably practicable**.*

However when the Act was finalised, through a very questionable amending process, where the actual context of the amending phrase was not made transparent, it was not admitted how it would dramatically affect the interpretation of the legislation. The amendment introduced the word “is” into the phrase “required to reduce the risks to safety to a level that is AS LOW AS REASONABLY PRACTICABLE”, making it read “required to reduce the risks to safety to a level that is AS LOW AS **IS** REASONABLY PRACTICABLE”

The Act now reads: *General duties of petroleum undertakings. 13K.—*
(1) A petroleum undertaking shall ensure, in so far as is reasonably practicable, that— 25 (a) any petroleum activity is carried on in such a manner as to **reduce any risk to safety to a level that is as low as IS reasonably practicable**, and (b) any petroleum infrastructure is designed, constructed, installed, maintained, modified, operated and decommissioned in such a manner as **to reduce any risk to safety to a level that is as low as IS reasonably practicable**.