

Safety (Petroleum Exploration and Extraction) Bill, 2007

Screening Regulatory Impact Analysis

Proposal

When enacted, the Safety (Petroleum Exploration and Extraction) Bill 2007 will confer statutory responsibility on the Commission for Energy Regulation (CER) for upstream, or unprocessed, petroleum safety. "Petroleum" is defined for this purpose as including both oil and gas.

Overall Policy Context of this Proposal

The Department of Communications, Energy and Natural Resources holds overall responsibility for the regulation of petroleum Exploration and Production (E &P) activity off the Irish coast. Regulatory mechanisms for the various aspects of E & P activity are kept under constant review by the Department.

The Health and Safety Authority (HSA) has responsibility for enforcing occupational safety and health laws in all Irish workplaces including offshore oil / gas installations where workers process oil and gas. As the paramount importance of public safety is becoming increasingly recognised, the need has arisen for a state body with the appropriate expertise and powers to regulate overall public safety in the sector, notwithstanding the structures already in place covering occupational safety.

To date, upstream public safety has been the responsibility of the Department, in partnership with the private sector. Following the safety studies carried out in relation to the Corrib onshore pipeline, the Department's responsibilities in this regard are currently augmented by a special Technical Advisory Group (TAG) within the Department. The safety studies recommended a new safety regime for pipelines, which is being implemented by the current proposal.

The Energy (Miscellaneous Provisions) Act 2006 conferred responsibility on the Commission for Energy Regulation (CER) for the public safety of downstream, or processed, gas activity. This was done in the context of market liberalisation and upstream, or unprocessed gas, was not covered. The legislation now proposed will extend CER's responsibility to the safety of upstream petroleum (oil and gas), resulting in a less fragmented regulatory framework. TAG will, in effect, be replaced by CER.

In practical terms, under existing arrangements, any new development option being pursued by a developer must be agreed and signed off by the Minister for Communications, Energy and Natural Resources in the form of a Plan of Development, which includes safety considerations. The regulation of the safety of employees on board any offshore vessel or rig is the responsibility of the Health and Safety Authority. The Department is currently responsible for regulating the safety of pipelines to the onshore processing facility. From that point on, the supervision of safety of the downstream pipelines and associated facilities is the responsibility of CER.

Under the new arrangement now proposed, CER will have responsibility for the safety of the pipeline in its entirety, as well as the associated infrastructure.

Policy Context - Pipeline Safety

Exploration and Production activity utilises a range of infrastructure including drilling wells, processing terminals and pipelines, both onshore and offshore. The question of pipeline safety has in particular become increasingly topical, particularly in relation to the Corrib Gas Field.

The current policy context in relation to pipeline safety is that, until recently Bord Gais Eireann (BGE) was responsible for practically all pipeline construction in this State, including the interconnector with Scotland. Consequently, BGE had a number of functions granted it by the state to facilitate this work. These included the ability to seek wayleaves (and/or Compulsory Aquisition Orders) and the responsibility for the safety of all such pipelines, both during construction and while in use. BGE has evolved a comprehensive and thorough monitoring system to ensure that this requirement is met and which reflects current international best practice.

There are, however, a number of short sections of pipeline that fall outside of BGE's remit. These relate to the sub-sea infrastructure and the short 'on land' section of the pipeline complex related to the Kinsale, Seven Heads and Ballycotton fields on the Cork coast and the Corrib Pipeline. These "upstream" or unprocessed elements have primarily been the responsibility of the private sector, which carries out its own inspection procedures and report to the Department on this basis. In relation to occupational safety, the Health and Safety Authority has responsibility for safety at installations, including on offshore rigs. The Kinsale field is also being used for storing imported gas , with the result that it will fall under the auspices of the energy regulator, CER as regards safety.

In the context of the liberalisation of the gas market in Ireland however, there were a number of institutional and legal problems that arose with a Semi State Company, such as BGE, having some statutory powers that cannot be granted to a private company (such as self regulation as regards safety).

Accordingly, the Energy Miscellaneous Provisions) Act 2006 transferred many of these powers to CER. Under the 2006 Act CER will now be responsible for the safety of downstream, pipelines (i.e. those carrying processed gas) in the state, regardless of who owns or operates them. CER has begun working up a safety programme for these pipelines.

Policy Objective

Having regard to the policy context outlined above, the objective of the legislation now proposed is to (i) ensure that petroleum exploration and production is safe to the maximum extent possible (ii) assign responsibility for the safety of petroleum exploration and production to a permanent body with appropriate legislative authority and skills (iii) achieve a more unified regulatory structure in relation to gas safety, both processed and unprocessed.

Policy Options

The policy options in relation to assigning responsibility for upstream safety are as follows:

1. Assign responsibility for public safety of upstream petroleum to the Health and Safety Authority (HSA).

The HSA is responsible for the safety of employees, rather than the public at large. There is an argument for allocating the responsibility for upstream safety in its entirety to the HSA, however this would take a significant period of time to negotiate and organise administratively. In addition, the HSA have no experience in this field. The task of building up a working knowledge of pipeline safety, including recruiting technical staff would take a considerable amount of time. The question would remain as to the logic behind having two separate safety regulators for upstream and downstream gas activity.

2. No policy change.

This would entail a continuation of TAG's current role on a permanent basis. TAG, however, is a group comprised of individual experts within the Department and does not have any legislative authority or legal powers of enforcement. The upstream/ downstream fragmentation of responsibility would continue under this scenario.

3. Create a new body to take responsibility for upstream safety.

While this proposal has some merit, there is already in existence a recognised body (CER) which has begun working up a programme for downstream gas safety and is therefore better placed to assume the upstream safety function.

4. Allocate responsibility for upstream safety to the existing body which holds responsibility for downstream safety.

This is the policy option chosen. Conferring of the function on CER will provide a unified safety authority for both upstream and downstream gas activity, to be implemented by an established state body.

Under the Energy (Miscellaneous Provisions) Act 2006 CER will become responsible for the Safety of downstream (processed) gas activity in the state. CER has begun working up a safety programme for this. It is intended that CER will now further develop this expertise in relation to upstream. Economies of scale and the pooling of professional knowledge, including access to services, make this the most viable option in the long term.

International Experience

The special Technical Advisory Group (TAG) referred to above was established by the Minister for Communications, Marine and Natural resources in August 2005 to manage the Independent Safety Review of the onshore, upstream section of the Corrib gas pipeline between landfall and the terminal site, and to design and implement a new inspection and monitoring regime for the project. TAG has examined the inspection and monitoring regimes in a number of jurisdictions, and has studied relevant national and international standards and codes of practice. It also had regard to BGE's policy and practices for both onshore high pressure gas transmission pipelines and the sub-sea interconnectors with Britain.

In keeping with the international nature of the industry, TAG has reviewed the various policy options for pipeline safety having particular regard to international practice, summarised as follows.

In the United States, pipeline safety is governed by the Office of Pipeline Safety, part of the U. S. Department of Transportation, Pipeline and Hazardous Materials Safety Administration. It is the primary federal regulatory agency "responsible for ensuring the safe, reliable, and environmentally sound operation of America's energy pipelines". It is responsible for the development and implementation of pipeline safety regulations at the federal level, and shares regulatory responsibility with the states, with whom the OPS oversees more than two million miles of pipelines. (by comparison, Ireland has under 7,000 miles of pipeline).

The OPS is responsible for the safety of all pipelines within the United States, including those at sea, regardless of any distinction between upstream or downstream.

In the United Kingdom, pipeline safety management is governed by the Pipelines Safety Regulations 1996 (PSR) and carried out by the Health and Safety Executive (HSE). These Regulations encompass a risk-based approach to safety and require pipeline operators to design, build and operate pipelines to ensure that they are safe, so far as is reasonably practicable (SFAIRP). Pipeline operators, known as duty holders, are required under law to be responsible for the safety of installations under their control. The Health and Safety Executive's Hazardous Installations Directorate (HID) is responsible for enforcing PSR.

In Australia, pipeline safety is handled in part by the National Offshore Petroleum Safety Authority (NOPSA), which administers offshore and upstream petroleum safety legislation.

In Denmark, Energy Policy as a whole is directed and administered by a governmental agency, the Danish Energy Authority. Accordingly, it "administrates [sic] and supervises the recovery of oil and gas". Moreover, it is also responsible for the 'supervision' of a number of other Acts, including the Offshore Installations Act, the Pipelines Act and the Act on the Continental Shelf. Collectively, these Acts deal with occupational safety, health and the working environment in connection with offshore oil and gas activities and the utilisation of onshore pipelines from the oil and gas fields in the North Sea. The Authority also draws up proposals for rules and regulations within this area.

In Norway, all pipeline safety issues are dealt with by the Petroleum Safety Authority, or PSA (Petroleumstilsynet). Like the Australian situation, this is a relatively new development, with the PSA only coming into being in January 2004, when it was split from its parent Norwegian Petroleum Directorate.

From the examples outlined above, it is clear that there are a number of common approaches available to dealing with the allocation of responsibility for pipeline safety. The UK has chosen to empower the general employment health and safety authority (HSE) with specific powers in relation to pipeline safety. The USA, Norway and Australia each have a dedicated organisation to handle at least one aspect of the petroleum industry, the first two having bodies established specifically to deal with the safety of the petroleum industry, including pipelines. Denmark has taken an individual route, using its Energy Authority to regulate all aspects of the energy sector within its territory.

In ways, the current proposal is analogous to that in Denmark. However, the international comparison that lies closest to the nascent Irish one is that of Australia. In that case, there is an independent body charged with the policing of Health and Safety of the entire of the upstream element of projects.

Consultation

The new safety regime will have direct implications for CER, will involve a close working liaison between CER and HSA and will constitute an additional regulatory requirement for the petroleum industry. Bearing this in mind, the Department has been in a process of consultation with CER, the HSA and the industry concerning this proposal in recent months.

As stated earlier, the HSA has responsibility for enforcing occupational safety and health laws in all Irish workplaces including offshore oil/gas installations and no amendments are proposed to Health and Safety legislation already in force and administered by the HSA.

The most central concern throughout the discussions voiced by all of the players was the need for a clear distinction of CER/HSA roles. In these circumstances the Department considered the best way forward was to provide in the legislation for a requirement for consultation by CER with HSA as part of the development of its safety framework. This will allow CER the opportunity to discuss and clarify the HSA areas of responsibility in establishing its framework. CER, the HSA and the industry generally welcomed the opportunity afforded by the discussions to be briefed on the impacts of the proposal.

Costs, Benefits and Impacts

Ensuring maximum public safety is the fundamental objective of this proposal and this is the overriding benefit.

Specifically, the proposal will impact on CER, the industry and the HSA.

For CER, it will involve acceptance of a new public safety function for which it must prepare administratively and financially.

The HSA's responsibility for occupational safety will not be affected. A working liaison between HSA and CER will however be required.

In relation to funding, the legislation will enable CER to recover its costs from the industry. A distinction can be drawn between ongoing costs incurred by CER in the granting of safety certificates, which will be financed by means of application fees, and initial start-up funding (i.e. for legal advice, engagement of consultants, preparation of safety framework), which will be significant and may have to be borne by the Exchequer at the outset. Assuming an "operator pays" principle, these latter costs will be recovered by CER over a number of years by means of application fees paid by operators. This will, in effect, require the current industry players to fund CER's start-up costs. This approach is considered valid in view of the scale of expenditure in the petroleum industry.

Enforcement and compliance

The new safety regime for upstream safety is designed to strengthen public safety and is in compliance with the recommendations of the recent safety studies carried out into the Corrib Gas Field.

CER's Safety Framework will include a system for the certification by CER of the safety of petroleum exploration and production which will encompass all stages of the process and will include provision for the revocation by CER, in the interest of public safety, of safety certificates granted by it; a system of inspection and testing of all petroleum exploration and production equipment, structures and processes, to an extent and at a frequency specified in the framework; procedures for the investigation of any incidents involving petroleum exploration and production which in the opinion of the Commission warrant such investigation and a system of enforcement to ensure compliance with the framework.

The new legislation will also enable CER to bring summary proceedings for breaches of safety.

CER will recoup its operational costs from the industry and will also recover from the industry its initial start-up costs advanced by the Exchequer.

CER will also require sufficient time to procure the necessary expertise for this new function.

Review and Conclusion

The regulatory regime covering the safety of petroleum exploration and production is somewhat fragmented. Responsible authorities include the Department of Communications, Energy and Natural Resources, the industry, the HSA, and currently a special Technical Advisory Group within the DCENR.

Studies carried out into the safety of the Corrib onshore pipeline have recommended that safety responsibility for the Corrib be transferred to the energy regulator, CER, which has recently been given responsibility for downstream gas activity.

Taking this recommendation on board, and having reviewed the policy options as well as noting the various models of safety regulation in the international context, it can be concluded that the public safety imperative can best be met

in the Irish situation by means of a single state body, the CER, taking responsibility for the safety of gas and oil activity, processed and unprocessed. Economies of scale and the pooling of professional knowledge, including access to services, make this the most viable option in the long term.