Submission to Australian Government Productivity Commission

Resources Sector Regulation

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1 Introduction

The Productivity Commission Issues Paper of September 2019 (IP) refers to the scope of the study (IP iii) being aimed at identifying best practice regulation, with a particular view to improving the efficient and effective approval of resource projects and reducing the burden on industry. The IP (IP 6-11) also refers to identifying best practice regulation. This submission is broken down into the following sections:

Section 2 Best practice regulation and objectives
Section 3 Lessons from Norway and the United Kingdom (UK) in relation to oil and gas

2 Best practice regulation and objectives

2.1 Introduction

The IP makes the point that the regulatory framework should 'deliver the greatest possible net benefits to the community' (IP 7). In Table 1 on page 9 it sets out assessment criteria for best-practice regulation including 'objectives of regulation are clearly defined and across different regulations'. These matters are dealt with in the following sub-sections.

The key point here is that before best-practice regulatory practices can be identified the overall goal of the framework needs to be clearly identified and appropriate objectives set. While not trying to draft it, clearly that goal should involve the delivery of the maximum possible net benefits to the Australian people, present and future.

The subject of intergenerational equity is becoming increasingly important in community expectations. Australia has had a policy on ecological sustainable development since 1992 but its implementation has been inconsistent and fragmented. Improving those things and some of the principles of ESD offer a potential solution to a number of objectives of this review. Another important idea that has been little developed is that of 'stewardship'. The role of government in relation to the nation's resources should be to ensure that operations are carried out to high standard and that the community receives its appropriate share of the net benefits, which should be the maximum possible.[1] One of the important criteria of stewardship is the measures taken to safeguard the benefits being produced and the underlying assets.[2]

It should be noted that there are no constitutional provisions in Australia dealing with the environment or natural resources other than fisheries. By way of comparison the Norwegian Constitution, Article 112, says that "Every person has the right to an environment that is conducive to health and to a natural environment whose productivity and diversity are maintained. Natural resources shall be managed on the basis of comprehensive long-term considerations which will safeguard this right for future generations as well…."

The Norwegian Petroleum Act 1996 (NPA) contains several important principles: NPA Section 1-2 says that 'resource management of petroleum resources shall be carried out in a long-term perspective for the benefit of the Norwegian society as a whole….". NPA Section 4-1 says that… 'the production shall take place in accordance with prudent technical and sound economic principles and in such manner that waste of petroleum or reservoir energy is avoided'

2.2 Minerals are a national asset

[1] For state stewardship criteria see John A.P Chandler *Petroleum Resource Management How Governments Manage Their Offshore Petroleum Resources* (Edward Elgar 2018) (https://www.e-elgar.com/shop/petroleum-resource-management) 222 [7.065].
[2] Ibid.

As will be discussed shortly, minerals (including petroleum) are a national asset and the current systems of resource exploitation involve the disposal of public property. The Henry Tax Review puts this on the basis that 'providing private businesses with the right to exploit the community's non-renewable resources is akin to selling a public asset'.[3] The direct return of Australia from the disposal is tax and royalty, with the States and Commonwealth deriving these differently because of our federal constitution.

With respect, past reports, including those of the Commission do not appear to have fully grasped the significance of this. What it means is that the calculation of net benefits should involve a line of sight to the tax recovery from producing projects. Yet this calculation is not generally done, and is often not done at the project approval stage. An example is that the current rules do not require the regulator to evaluate the economics of a project or the tax payable when approving a petroleum development in Commonwealth waters, or to report on the benefits produced and action taken in relation to them.[4] Potentially, this can produce the seemingly absurd situation of a project paying very little or no tax- in essence the state is receiving no direct return for the disposal of its property.[5]

This is not assisted by Australia economic policy objectives for its natural resources like petroleum being cast in broad terms such as 'increasing national prosperity', or 'giving an appropriate return to the community'. The lack of precision in these expressions and the lack of objectives in the system have been subject to criticism going back to at least 2000 and reports of ACIL Consulting and the Submerged

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[3] Commonwealth of Australia (2009) (Henry Tax Review) <Https://taxreview.treasury.gov.au/content/downloads/final_report_part_2/AFTS_Final_Report_Part_2_Vol_1_Consolidated.pdf> 219.

[4] Reg. 4.07 of the Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2012 (Cth), reg 4.07 sets out a detailed list of matters to be included in a field development that does not include project economics.

[5] Given its high carry forward expenditure Dr Kraal questions whether the Gorgon project will ever pay any PRRT. Diane Kraal, 'Review of Australia's petroleum resource rent tax: Implications from a case study of the Gorgon Gas Project', 45 Federal law Review (2017) 316, 338. Presumably some of this expenditure is likely to reduce income tax payable as well.

Lands Review Committee.[6] ACIL pointed out that an expression like 'national wealth' is ambiguous.[7] The Regulatory Burden Review of 2009 by the Commission in relation to Upstream Oil and Gas criticised the lack of clear objectives.[8] This review focused on the impact of the regulatory framework on the international competitiveness and economic performance of Australia's petroleum sector and the performance of the economy as a whole. Its major criticism was that 'the overall policy intent of governments in the petroleum resource management area has never been clearly articulated'.[9]

Alternative rationales for the Australian system put to the Commission include two of particular interest: first, that upstream petroleum resources 'should be extracted and taxed in a way that maximises net returns to the community and to future generations';[10] and second, that 'extraction methods should maximise the overall recovery of the total resource discovered, in a manner consistent with principles of intergenerational equity but such that the investor concerned will still make a commercial return'.[11] In relation to the second, it was recognised that 'maximising overall recovery may involve additional capital, and may extend the time taken to extract the resource. Both of these factors may reduce the economic returns to the company concerned'.[12]

Onshore resources are generally owned by the relevant Australian state or territory because statutes vested that ownership in them.[13] From the time that petroleum

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[6] Submerged Lands Review Committee, *Review of the Petroleum (Submerged Lands) Legislation against Competition Policy Principles* (Final Report to the Australian and New Zealand Minerals and Energy Council, Department of Industry, Science and Resources 2000) and ACIL Consulting's report to the Committee.
[7] ACIL (n 4) 20.
[8] Australian Productivity Commission, *Review of Regulatory Burden on the Upstream (Oil and Gas) Sector* (Research Report, April 2009) (Regulatory Burden Review) <http://www.pc.gov.au/inquiries/completed/upstream-petroleum> .
[9] Regulatory Burden Review,85.
[10] Ibid.
[11] Ibid.
[12] Ibid.
[13] Examples of current statutes comprehensively vesting minerals in the Crown are Mineral Resources Act 1989 (Qld) s 8(3), Mineral Resources Development Act 1990 (Vic) s 9, Mining Act 1971 (SA) s 16 and Mining Act 1978 (WA) s9. Those which are selective include Coal Acquisition Act 1981 (NSW) s 5(1) and Mineral Resources

gained economic significance in the early part of the twentieth century, specific petroleum legislation in each state has vested onshore petroleum in the Crown in right of the relevant state.[14] Offshore the position is more complicated with the Commonwealth exercising control from three nautical miles from the baselines of the territorial states (generally the low-water mark) and the states and relevant territories up to that point. The Commonwealth petroleum legislation is the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (OPGGSA).

The model used for resource exploitation in Australia is based on what was called a concession, but is now called various names, depending on the resource being exploited and the legislation. For petroleum the producing tenement is generally called a petroleum production licence and, for minerals, a mining lease. This model dates from Roman times and appeals to companies and private individuals to extract resources by granting them exclusive rights over a licence area mapped on the earth's surface. The important rights of the licensee are to explore, produce and keep any resource produced in the licence area. In return, it will bear the associated costs and liabilities and pay taxes. The key issue is that, except in the rare instances of disposal for an up-front cash payment, the state's direct return, which is predominantly tax, will depend on the licensee's activities over time. Hence, if it wishes to protect net benefits, the state has to take steps assure that the licensee is planning and conducting development and production to an appropriate standard. The reason why it is beyond doubt that the model involves a disposal of public property is that the licensee obtains title to what it produces.[15] Another important point is that the model has an inbuilt conflict of interest that is particularly relevant in a petroleum context, but also has a bearing on minerals like iron ore that have significant infrastructure. The licensee's interest is in maximising profits from its

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Development Ac 1995 (Tas) s 5(1). Also over time the practice grew of reserving minerals from the grant of title to land.

[14] The current statutes are: *Petroleum (Onshore) Act 1991 (NSW), s 6 (1), Petroleum Act 1923* (Qld) s 9 and *Petroleum and Gas (Production and Safety) Act 2004* (Qld) s 26, *Petroleum Act (1998) (Vic*), *Mineral Resources Development Act* 1995 (Tas), s 6, *Petroleum and Geothermal Energy Resources Act 1967* (WA) s 9.

[15] For example OPGGSA s 285.

exclusive licence area. The interest of the country should be in maximising profits from a region. This is one of a number of important national interests that the regulatory system should protect.

The statutes regulating mining and petroleum have tended to contain very limited objectives. They fall into three groups. What emerges is a lack of consistency and clarity about the state securing net benefits. The first group, of which OPGGSA, the Mining Act 1978 (WA) and the Mining Act 1971 (SA) are examples, do not contain an objects clause,[16] although in some cases they may be in the applicable regulations.[17] The South Australian Act has been subject to an extensive review that gave rise to the Mineral Resources Bill 2018. However, this Bill does not insert an objects clause into the Mining Act, despite that being raised in the initial discussion paper.

The second group, of which the Mineral Resources Act 1989 (Qld) is an example, contains fairly broad objectives. Section 2(e) refers to ensuring an appropriate financial return to the State from mining. What should be noted here is the dissonance produced by the Australian federal system. States can levy royalties, so their interest is generally in achieving production and not on the economic quality of production. The Commonwealth levies income tax and resource rent taxes and so is interested in profitable production (or should be). Yet it does not control state resources and does not appear to incentivise Australian states and territories to improve the profitability of production.

The third group, of which the Mining Act 1992 (NSW), the Petroleum Onshore Act 1991 (NSW), the Petroleum and Gas (Production and Safety) Act 2004 (Qld) and the Mineral Resources (Sustainable Development) Act 1990 (Vic) are examples, refer to sustainable development.

2.3 Ecologically sustainable development

[16] This is true also of the Petroleum and Geothermal Energy Resources Act 1967 (WA) and some state legislation for petroleum in state offshore waters such as the Petroleum (Submerged Lands) Act 1982 (WA).
[17] For example the Petroleum and Geothermal Energy Resources (Environment) Regulations 2012 WA) reg 3.

Australia has signed or ratified over 100 treaties containing international obligations.[18] An early result was the development of Australia's National Strategy on Ecologically Sustainable Development (National ESD Strategy) that was endorsed by the Council of Australian Governments in December 1992.[19] ESD principles were incorporated into Commonwealth legislation such as the Environmental Protection and Biodiversity Conservation Act 1999 (Com) (EPBC Act) and state environmental legislation. ESD in Australia includes the precautionary principle. What should be noticed here is that the provisions applying ESD to resource projects in the form of reviews and approvals are generally in environmental legislation rather than the resources legislation.[20] This means that the interface between them can be highly relevant and that there is a separation of responsibility between those responsible for licensing and those responsible for environmental protection.

By way of illustration, section 6(1)(a) of the *Protection of the Environment Administration Act 1991* (NSW) sets out the first objective of the Environment Protection Authority as being 'to protect, restore and enhance the quality of the environment in New South Wales, having regard to the need to maintain ecologically sustainable development.' Section 6(2) then says that:

'For the purposes of subsection (1) (a), ecologically sustainable development requires the effective integration of economic and environmental considerations in decision-making processes. Ecologically sustainable development can be achieved

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[18] A search of the Department and Foreign Affairs Database of treaties on 23 October 2019 using the word 'environment' produced 180 treaties. Database is at < https://info.dfat.gov.au/Info/Treaties/>.

[19] Available at <http://www.environment.gov.au/about-us/esd/publications/national-esd-strategy>. See also Gerry Bates, *An Expert Paper on ESD prepared by Dr Gerry Bates for the Commissioner for Sustainability and the Environment* (2013) (Bates ESD) < http://www.environmentcommissioner.act.gov.au/__data/assets/pdf_file/0004/661720/An-Expert-Paper-on-ESD-by-Gerry-Bates-for-Commissioner-May-2014.pdf>.

[20] In *Walker v Minister for Planning* [2007] NSWLEC 741 at [69] Biscoe J noted that New South Wales alone had 55 Acts and Regulations referring to ESD and the Commonwealth had 19. The range covered is very broad extending through coastal protection, fisheries, local government, national parks, transport, water and waste.

through the implementation of the following principles and programs….' These include the precautionary principle.

ESD has enormous potential to ensure that development is sustainable, profitable for the licensee and Australia and reduce regulatory burden in a way that satisfies the community. An example of the kind of evaluation that can be conducted is found in *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7. This is one of the few instances you will see of a review of whether a project produces more benefits than costs. It is suggested that if the costs will exceed the benefits and the project will not produce an appropriate amount of tax, it should not proceed.

Another reason for project review of this kind is distributive justice. This is explained by Justice Preston in the following way in relation to the environment, but distributive justice also concerns economic benefits and burdens:

'Distributive justice concerns the just distribution of environmental benefits and environmental burdens of economic activity. Distributive justice is promoted by giving substantive rights to members of the community of justice to share in environmental benefits (such as clean air, water and land, a quiet acoustic environment, scenic landscapes and a healthy ecology) and to prevent, mitigate, remediate or be compensated for environmental burdens (such as air, water, land and noise pollution and loss of amenity, scenic landscapes, biological diversity or ecological integrity). Issues of distributive justice not only apply within generations (intra-generational equity) but also extend across generations (inter-generational equity).'[21]

Clearly it is not desirable that projects end up in lengthy and expensive litigation to have these questions determined. A process needs to be designed for their consideration at an appropriate stage.

2.4 Incorporating ESD in project approval- the Offshore Project Approval model

How ESD is incorporated in project approval is the subject of a current research project of this Centre. As a first point it needs to be noted that there are what the

[21] *Gloucester Resources Limited v Minister for Planning* [2019] NSWLEC 7, 88 [398].

Brundtland Report describes as two great institutional flaws. The first is the narrow mandates and closed decision processes of most government departments and institutions.[22] The second institutional flaw is an approach to environmental policy that focuses on effects rather than concentrating on the sources of those effects.[23] As the report points out

> 'the ability to anticipate and prevent environmental damage requires that the ecological dimensions of policy be considered at the same time as the economic trade, energy, agricultural, and other dimensions. They should be considered on the same agendas and in the same national and international institutions.'[24]

I suspect that this has not changed significantly since 1987. The fact that government is created in silos of different ministries is a major factor that has contributed to the failure to reduce the approval burden identified in a number of reviews going back over that time.

An example that it is suggested is worth exploring for wider use is that of offshore project approval under Part 1A of the Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009 that is required to have environmental performance outcomes consistent with ecological sustainable development. An advantage of this approval is that it comes in at a much earlier stage than approval of a field development plan, mining plan or development application, which are normally the major checkpoints. It can therefore enable a project proponent to advance its project and make the required investment with a greater degree of confidence that it will be approved. However, it is suggested that this process currently has a number of defects, almost certainly going back to its origins in streamlining offshore federal environmental approvals. Because of those origins it seems to be focused on an environmental appraisal whereas the principles of ESD require a wider consideration of costs and benefits. Secondly, it is conducted by

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[22] World Commission on Environment and Development, *Our Common Future* (Oxford University Press, 1987 *(Brundtland Report)* Chapter 12 paras 43, 58.
[23] Ibid para 34, Chapter 12 para 12.
[24] Ibid 'Overview' para 38.

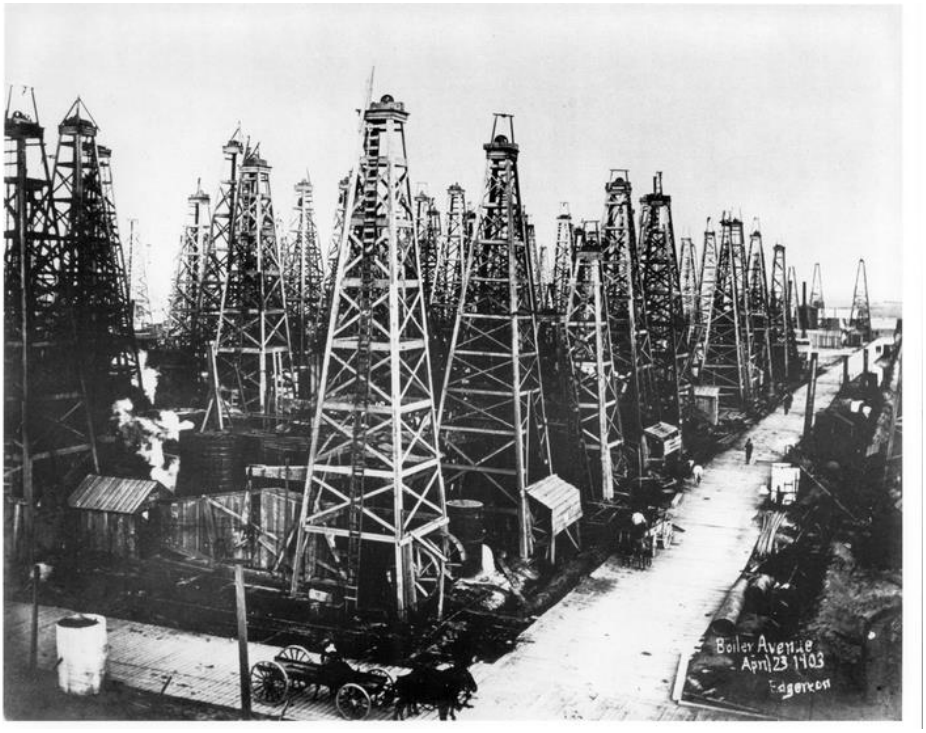
NOPSEMA rather than by NOPSEMA and NOPTA with Treasury and other appropriate government departments who can take a holistic view of the project.

Offshore oil and gas projects tend to be large and expensive, whereas mining projects cover a much bigger expenditure range. So if this kind of approach was taken in relation to mining, cut offs in terms of timing and size would need to be considered.

Section 3 Lessons from Norway and the UK in relation to oil and gas

3.1 Introduction- why oil and gas are different from minerals

In my book on Petroleum Resource Management I compare in detail the different processes used in offshore petroleum by regulators in Australia, Norway and the UK.

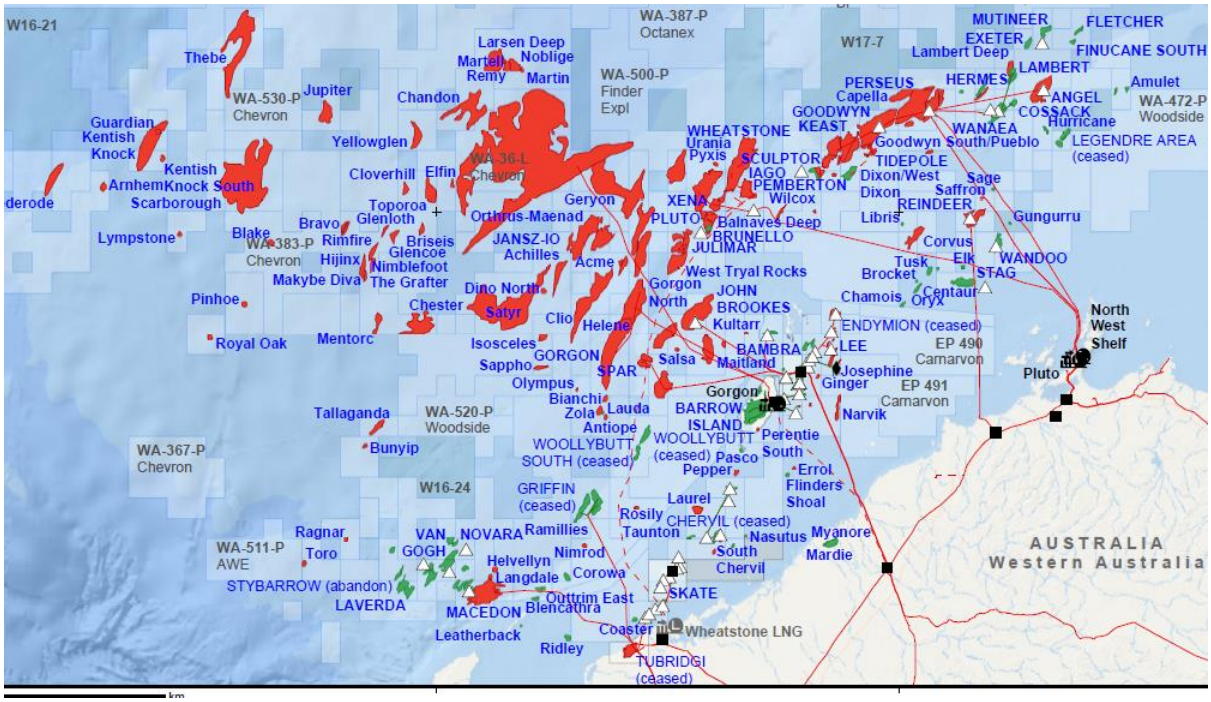


Oil and gas are different from most mining operations, although sharing with iron ore and bulk minerals the need for extensive infrastructure. The reason is graphically illustrated by a picture of the Spindletop development in Texas in 1903: hundreds of small leases, many just big enough for an oil derrick and some equipment. All of these wells were drilling into the same reservoir. This intensity and the lack of shared

facilities result in excessive capital and operating costs. But, importantly, production would not make the best use of the reservoir because the owners of these rigs pumped oil as fast as they could go rather than producing in the most effective way for the reservoir; as a result a significant amount of oil was left behind. Any gas produced was just flared.

Although operations today offshore look very different and one won't find this level of intensity, one will find many of the same issues such as competition for reservoirs, building excess infrastructure and excessive operating costs.

Carnarvon Basin



To illustrate what we face, here is a map of the Carnarvon Basin. The red is gas- and we have a lot of it compared with oil, which is green. Because of the limited size of the domestic gas market monetising this has traditionally involved liquefying it and shipping it overseas.

The 1960's situation of geographically well separated developments is now changing- so there is constant discussion in the press about owners of gas being able to get access to existing pipelines and LNG facilities. Surprisingly one sees practically no discussion about how sharing infrastructure will increase company profits and the tax take of Australia, or of decommissioning cost. Bear in mind that every new platform or plant will have to be decommissioned and the cost of that is

tax deductible. This is an increasingly strong imperative to make the most use of existing infrastructure. The UK only really addressed these issues when it suffered a massive decline in tax revenue from petroleum in the early part of this decade. This caused the UK to get the founder of the Wood Group, Sir Ian Wood, to review the regime.[25]

Sir Ian introduced his 2014 report by saying that in the early days when large fields were found by major operators the free market model worked well. But now with a significant increase in the number of fields, new discoveries being much smaller, fields being marginal and in both cases reliant on access to ageing infrastructure, there was a need for change. Typically this happens to all basins as they mature- and this is what Australia is facing. But we have not changed our regime since the 1960s or significantly strengthened our regulator, as Norway and the UK have done. The UK made a radical change which was to require all licensees to maximise economic recovery of UK petroleum. This is called MERUK. The other main change was the introduction of a new independent regulator the Oil and Gas Authority, which is very well resourced.

3.2. The OGA and streamlining and benchmarking

The OGA have taken a number of steps to streamline particular processes and improve their assurance of projects. There are many factors that a licensee cannot control in what is a very challenging endeavour. But factors that it can control in many situations, and therefore should manage, include delay, cost overruns and engineering and planning mistakes. These occur quite frequently.[26] Countries generally do not deal with their effects by providing for compensation or other adjustments to the terms of the bargain. Their approach is to decrease risk by verifying the plans and capabilities of licensees. There is follow up through reporting

[25] The Wood Review can be found at https://www.ogauthority.co.uk/about-us/what-we-do/the-wood-review/.
[26] See OGA, *Lessons learned from UKCS Oil and Gas Projects 2011-2016* (2017) ('Lessons Learned') <https://www.ogauthority.co.uk/news-publications/publications/2017/lessons-learned-from-ukcs-oil-and-gas-projects-2011-2016/>.

and enforcement of regulations.[27] This can be described as a verification or assurance approach, which is also applied offshore to safety and environmental protection through safety case and environmental plan approval. In the licensing context the main plans are exploration programmes and field development plans.

The checkpoint of field development plan (FDP) approval is designed to review viability of projects. At the most basic level, this is concerned with broad tests like good oilfield practice used in Australia and the UK. At the more advanced level seen in Norway and the UK, it will review the economic viability of the project, including the use of infrastructure. In Norway this extends to joint operations. The FDP approval process works as assurance of the soundness of the development plan. In the Norwegian regime efforts are also made to assure the soundness of the licensee group. Assurance of an FDP can involve the production and review of a significant amount of information. The UK has streamlined its approach by focusing on areas of divergence with the national interest and agreeing with the licensee how they should be dealt with.

The OGA is taking benchmarking company performance to a new level. It publishes anonymised league tables for things like recovery, efficiency and operating cost which they then follow-up in stewardship reviews. This is both an extremely strong incentive for companies to improve performance, but also a means for them to improve. Most countries require licensees to produce significant amounts of data in annual and other reports. But often the data does not focus on improvement. The OGA has reduced the amount of data it collects but also made it more useful. This is one of the reasons why licensees were prepared to accept the OGA's changed approach. That approach also means that its stewardship reviews are more targeted and less burdensome.

The OGA has also moved to assure the quality of project execution based on its review of projects between 2011-2016 that revealed failures by licensees in areas like planning and ordering of long-lead items. This caused the OGA to introduce guidance on robust project delivery, require a project execution plan as part of its

[27] For example, AOPPGGSA s 574A; NPA s 10-3.

approval of the FDP and attend major project review meetings.[28] Norway did a similar review. Australia has not done one.

3.3 Infrastructure Access

In my book I review the different approaches of Australia, Norway and the UK to granting access to existing upstream infrastructure.[29] Currently upstream infrastructure is excluded from any access regime in Australia.

The classic argument here is that companies will negotiate these arrangements if it is commercially sensible, but as Sir Ian Wood convincingly explained- they just do not do it. Norway and the UK have what you need as a minimum- that is a system for providing information about capacity and allowing for a potential user to request the commencement of negotiations with an owner and for the petroleum regulator to monitor those negotiations. Their approaches illustrate that you can achieve better infrastructure access with a fairly simple and non-legalistic regime. It is my strong view that these arrangements should come within NOPTA's responsibilities and not be subject to Part IIIA of the Competition and Consumer Act 2010 (Cth) which has produced lengthy and expensive litigation.

[28] Lessons Learned (n 24) 16.
[29] Chandler (n1) Chapter 12.