



31 October 2019



Resources Sector Regulation Study

Submission from the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA)



1. Introduction and structure of submission

This submission has been prepared by the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) in response to the Productivity Commission study to examine regulation affecting the sources sector.

The submission is structured to provide information about the role, history and functions of NOPSEMA to support responses to the scope of key issues set out in the Productivity Commission's Issues Paper 'Resources Sector Regulation – September 2019'.

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2. Executive summary

- 1. The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) is the national regulator for health and safety, well integrity and environmental management for offshore petroleum activities in Commonwealth waters and in coastal waters where regulatory powers and functions have been conferred. The conferral of powers for offshore petroleum safety has already occurred in Victorian waters and is under consideration by other jurisdictions in Australia.
- 2. Establishment of NOPSA¹ in 2005 and then NOPSEMA in 2012, recognised the benefits of having a single national, independent, expert regulator that applies a consistent approach to the regulation of offshore petroleum activities in Australia.
- 3. The value in establishing NOPSEMA became increasingly important as the offshore industry has grown to the point where Australia has assumed the mantle of global leadership for liquefied natural gas (LNG) exports, while continuing to provide an important source of domestic oil and gas from deeper water via increasingly complex facilities.
- 4. Since NOPSEMA's establishment the performance of the offshore petroleum industry has improved, with no fatalities² since 2012 and no major accident events. NOPSEMA has fostered, and continues to grow, a mature risk culture within industry and promotes best practice for oil spill preparedness. The regime administered by NOPSEMA is comparable to the performance of other leading international jurisdictions and compares favourably to industries such as onshore mining, agriculture and maritime. Australia's Chief Scientist, Dr Alan Finkel, was appointed to undertake an independent audit of NOPSEMA's consideration of exploration in the Great Australian Bight, and found NOPSEMA to be a highly skilled, professional and competent regulator.
- 5. Various government reviews and inquiries have recognised the benefit of conferral of powers to NOPSA/NOPSEMA for the regulation of oil and gas activities in the coastal waters of the state and the Northern Territory. Conferral of powers offers a significant opportunity to further reduce regulatory burden and increase industry efficiencies.
- 6. Under a conferred arrangement, further streamlining between state, territory and Commonwealth laws could occur, similar to the arrangement in Commonwealth waters for environmental approvals. There is an opportunity to further reduce the requirement for duplicative approvals processes, remove inconsistencies between jurisdictions, and reduce unnecessary costs to Governments and industry, associated with the preparation and assessment of multiple documents for a single project.
- 7. In 2005, Victoria conferred powers to NOPSA for offshore petroleum safety. Those arrangements have continued to work well through NOPSEMA, although states and the Northern Territory are yet to follow through on their support for conferral since the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act) was introduced.
- 8. In 2014, environmental management authorisation processes for offshore oil and gas were streamlined under the EPBC Act. This streamlining reduced costs to industry in the order of \$120 million³ a year. These arrangements continue to work well and could be extended to other functions.
- 9. Ultimately, the key determinant for government on relevant policy and legislative changes should be the potential for improving safety and environmental outcomes. While some changes may assist in achieving these outcomes, the single most significant potential change remains the rationale for establishing NOPSEMA. That change involves the integration of all offshore petroleum health and safety, well integrity and environmental management regulatory responsibilities in a single, national, independent, expert regulator staffed with suitably qualified technical experts. The reduction in regulatory burden and cost to industry is a resultant benefit.



¹ National Offshore Petroleum Safety Authority (NOPSA).

² Fatality of two offshore workers on the Stena Clyde mobile offshore drilling unit in the Bass Strait on 27 August 2012. This case was prosecuted in September 2015; the Magistrates' Court of Victoria imposed a criminal penalty of \$330,000 on Stena Drilling (Australia).

³ Strategic Assessment Review Taskforce, 'Single Stage Regulation Impact Statement', Office of Best Practice Regulation Reference 16191 (2014) p 25.



3. About NOPSEMA

- 10. In 2012, NOPSEMA was established with the support of the federal, state and Northern Territory governments as an independent statutory authority under the OPGGS Act. A single agency brings efficiencies through economies of scale, uniform procedures and greater consistency in the interpretation and application of regulations and guidelines, and reduction in regulatory burden on industry.
- 11. NOPSEMA administers the OPGGS Act and its associated regulations. The legislation represents the Government's national policies and strategies on the safety, well integrity and environmental management of offshore petroleum activities.
- 12. NOPSEMA's regulatory approach is to influence, oversee and enforce, to assure the protection of lives and the environment. It does not extend to policy development, resource promotion or the regulation of economic factors like the issuing of exploration, acreage, petroleum resource management, taxation or royalties. These responsibilities rest with other government agencies to provide a level of independence and to avoid the potential for a conflict of interest.
- 13. The offshore environment in Australia is characterised by its remote facilities and their linkage to the production of LNG. The associated challenges and risks are similar to offshore facilities in countries such as Norway, the UK, and the USA, evidenced by recent proposals to drill in areas such as the Great Australian Bight. The offshore environment differs from onshore industries in Australia given its unique geographical and operational nature and how that environment impacts the management of high hazard risks.
- 14. Some of the world's most advanced and largest subsea and offshore facilities have NOPSEMA's oversight, and include the established offshore facilities of Wheatstone, Prelude, Ichthys and the Gorgon and Jansz-lo offshore developments. These projects represent an investment of US\$138 billion⁴ and position Australia to be a global leader and the world's largest LNG exporter.⁵
- 15. NOPSEMA regulates more than 160 offshore facilities and approximately 900 offshore wells, including a number of the highest producing gas wells globally. During 2018, there was a heightened level of industry activity, reflected by an unprecedented 16.9 million hours worked offshore, a notable 31% increase on hours worked in 2017 and the highest number of hours worked since the recording of offshore data commenced in 2005.
- 16. NOPSEMA maintains a critical mass of expertise of more than 70 highly trained specialists with extensive qualifications and practical experience in the offshore petroleum industry, covering OHS, engineering, well integrity and environmental management. This staffing unit is the largest concentration of offshore petroleum expertise in Australia for regulating offshore oil and gas. The specialists are supported by a further 30 professionals⁶ dedicated to legal services, stakeholder education and communications, independent investigations, and data analysis and reporting. This expertise is also supplemented with specialist consultants and advisors as necessary.
- 17. NOPSEMA has a legislated function under section 646 of the OPGGS Act to promote and advise on OHS, well integrity and environmental management matters. NOPSEMA is a global player in the International Regulators Forum (IRF) and the International Offshore Petroleum Environmental Regulators (IOPER) group and proactively seeks within Australia to engage with stakeholders through liaison meetings, hosting workshops and information sessions, presentations and participating in industry conferences and forums.
- 18. A world scale industry requires an international standard regulator and NOPSEMA has established itself in this light. In addition to international exchange programs and regular international engagement, NOPSEMA has chaired the IRF and continues to be elected as one of only four countries on the IRF Management Committee and it is having a demonstrable impact on international standards and practices. Other offshore

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⁴ Equivalent to approximately AU\$200 billion based on conversion rates at the time of this submission.

⁵ Department of Industry, Innovation and Science, Submission to the Inquiry into WHS of workers in the offshore petroleum industry, March 2018 p 7.

 $^{^{6}}$ This figure excludes administrative support staff. The total staffing unit is 129 as at 30 June 2019.



- petroleum regulators in Australia lack the size and jurisdiction of NOPSEMA to shape international best practice and are precluded from applying for membership of these international bodies.
- 19. Where appropriate, NOPSEMA pursues enforcement action through the application of a diverse range of graduated enforcement tools including improvement and prohibition notices, directions, requesting a revision or withdrawing acceptance of a permissioning document⁷ and prosecution. The enforcement tool is aligned to factors such as the severity of the breach, the actions required and the necessary timeframe to respond. In all cases, parties are required to take action to operate in accordance with the law.
- 20. Since 2012, NOPSEMA has averaged per annum over 700 stakeholder meetings with industry, government and other stakeholders and has also undertaken during this period approximately 1,100 inspections, issued more than 10,800 inspection recommendations and undertaken more than 320 enforcement actions. A number of these enforcement actions prohibited hydrocarbon production operations at facilities until corrective actions were implemented to NOPSEMA's satisfaction.
- 21. The governance arrangements for NOPSEMA are comprehensive with measures including those applicable to standard government agencies together with federal, state and territorial ministerial oversight, the NOPSEMA Advisory Board, statutory operational reviews, Senate Estimates hearings, and appearances before parliamentary inquiries for federal, state and territory governments.
- 22. Since 2009, the Hawke review of the EPBC Act 2009, the Productivity Commission Review of Regulatory Burden 2009, the WA government Varanus Island report 2009 and the Montara Commission of Inquiry report 2010, all recommended streamlining of regulation and conferral of powers to NOPSEMA. In 2014, the Australian National Audit Office confirmed that NOPSEMA administers a sound framework for the regulation of the offshore petroleum industry and is also a cost effective and technically competent regulator.
- 23. The two most recent independent statutory reviews of NOPSEMA were completed in 2015 and found NOPSEMA to be a robust, rigorous and competent regulator. These reviews were preceded by two triennial operational reviews in 2008 and 2011 on NOPSA's performance, on the effectiveness of the offshore petroleum safety regime. Those reviews also found NOPSA to be a respected and competent offshore petroleum safety regulator.
- 24. The 2017 Senate Red Tape Inquiry on the Effect of Red Tape on Environmental Assessment and Approvals, confirmed that state and Northern Territory conferral of powers to NOPSEMA would achieve reduction in red tape and associated cost, for offshore petroleum projects.
- 25. The 2018 House of Representatives Inquiry into Impediments to Business Investment advocated in its Report for single national regulators and noted that APPEA supports conferral and streamlining of environmental approvals to NOPSEMA and more broadly the Mineral Council of Australia identified the need to streamline environment regulation processes, including in relation to the EPBC Act.
- 26. The 2019 independent audit of NOPSEMA's consideration of exploration in the Great Australian Bight, undertaken by Australia's Chief Scientist, found NOPSEMA to be a highly skilled, professional and competent regulator.

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⁷ For example a safety case, environment plan or well operations management plan as applicable.



4. Streamlining of functions in Commonwealth waters

Productivity Commission Scope [Issue 3]: Identify leading environmental management and compliance arrangements that have resulted in the removal of unnecessary costs for business while ensuring robust protections for the environment are maintained.

Productivity Commission Scope [Issue 4]: Identify best-practice examples of government involvement in the resources approvals process – taking into account the context of each development – to expedite project approvals without compromising community or environmental standards, based on sound risk-management approaches.

- 27. The formation of NOPSEMA in 2012 not only standardised the approach to regulation of environmental management and well integrity of the offshore petroleum industry in Australia, it reduced the potential for inconsistency and associated regulatory burden. Previously, these functions were regulated in Commonwealth waters by the states and the Northern Territory.
- 28. Prior to 2014, duplication existed for offshore petroleum environmental approvals in Australia. Specifically in the development, assessment, approval, and compliance monitoring, for reporting and enforcement of the environmental impacts of offshore petroleum activities in Commonwealth waters. This duplication resulted as there were two separate and overlapping schemes that applied:
 - If a proponent sought to undertake an offshore petroleum and greenhouse gas activity, they had to prepare an Environment Plan for assessment and authorisation under the OPGGS Act and the OPGGS(E) Regulations
 - In addition, an onus on proponents to ensure that their activities were not in breach of the provisions of the *Environmental Protection and Biodiversity Conservation Act 1999* (EPBC Act). If an activity was likely to have a significant impact on matters of national environmental significance or another EPBC Act protected matter (e.g. Commonwealth Land), the proponent must 'refer' the activity to the Federal Department of the Environment and Energy (DEE) for a decision as to whether it is a controlled action and, if it is, approval from the Minister for the Environment under the EPBC Act. This requires a separate referral and assessment process.
 - The nature of activities included, but not limited to, seismic surveys, exploration and production drilling, facility construction and operation (i.e. for petroleum extraction), and decommissioning.⁸
- 29. From February 2014, NOPSEMA received endorsement for its environmental management authorisation process under the EPBC Act. The endorsement provided that petroleum activities in Commonwealth waters with potential impacts on matters of national environmental significance are assessed through NOPSEMA and do not require separate referral to the DEE.
- 30. The streamlined arrangement not only reduces cost and burden at the approvals stage but also throughout the life of projects through reductions in overlapping compliance monitoring and reporting burden.
- 31. Government estimated that the streamlined arrangement would reduce costs to industry in the order of \$120 million a year. ⁹ Since the endorsed arrangements came into effect NOPSEMA has accepted 218 environment plans for offshore activities, many of which would otherwise have required consideration for referral and duplicative assessment under the EPBC Act.

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⁸ Strategic Assessment Review Taskforce, 'Single Stage Regulation Impact Statement', Office of Best Practice Regulation Reference 16191 (2014) p 5.

⁹ Ibid, p 25.



- 32. Since 2015 NOPSEMA is actively working with other agencies to explore further opportunities to reduce regulatory overlap in approvals requirements in Commonwealth waters. 10 NOPSEMA has also identified potential scope for reducing regulatory burden through streamlining in areas such as sea dumping, offshore renewables and offshore minerals, with discussions underway with the relevant government agencies.
- 33. Nonetheless different arrangements continue to apply in state and Northern Territory waters which typically comprise the first 3 nautical miles from shore (Commonwealth waters extend from the 3 nautical mile limit of state or Northern Territory waters to 200 nautical miles offshore).

¹⁰ Examples include working with the Department of Agriculture and Water Resources on biosecurity compliance monitoring and the development of national standards; and working with the DEE on reducing overlap in permissions required for decommissioning infrastructure.



5. Conferral to NOPSEMA

Productivity Commission Scope [Issue 1]: Assess best–practice project approval processes across Australia and internationally and identify any broader impediments to the timing, nature and extent of business investment in the Australian resources sector.

Productivity Commission Scope [Issue 2]: Identify regulatory practices that have achieved evidence-based goals without imposing additional costs or regulatory burdens on industry, as well identifying jurisdictions' successful efforts to streamline or augment processes to reduce complexity and duplication and improve transparency for current and future investors.

- 34. While NOPSEMA is now the sole regulator for offshore petroleum activities in Commonwealth waters, NOPSEMA continues to receive feedback from offshore oil and gas companies that inconsistencies in requirements, and resultant burden, still exists for those projects that cross from the Commonwealth jurisdiction into state or Northern Territory waters.
- 35. For example, an offshore petroleum project with wells in both state and Commonwealth waters, connected by a pipeline to an onshore processing facility will often involve four environmental regulators for the offshore component of the project, such as the:
 - State Department of Mines or Primary Industries
 - State Environmental Protection Authority
 - Commonwealth Department of Environment and Energy
 - NOPSEMA.
- 36. Each of the regulatory processes administered by these agencies is mandated through separate pieces of legislation with subordinate regulations and requirements for submission of documents. While processes and requirements between regulators will vary, each is essentially looking to achieve the same outcome appropriate management of impacts and risks.
- 37. Under a conferred arrangement, NOPSEMA could be the sole regulator for the offshore component of all aspects of an offshore petroleum project.
- 38. Numerous inquiries and reports have recommended streamlining of regulation and conferral of powers to NOPSEMA as an effective approach to streamlining regulation and potentially reducing delays to major project approvals.
- 39. NOPSEMA sees further opportunities to reduce red tape for the sector through the conferral of powers for regulation in coastal waters from the states and Northern Territory to NOPSEMA. Under this arrangement NOPSEMA could perform functions under state and Northern Territory laws and report to state and Northern Territory Ministers.
- 40. In 2017, NOPSEMA gave testimony at the Perth hearings of the Senate Red Tape Inquiry into the Effect of Red Tape on Environmental Assessment and Approvals. One of the key items of discussion at the hearing was opportunities for streamlining through conferral. The committee report on the effect of red tape on environmental approvals contained the following key findings relevant to NOPSEMA:
 - "The committee accepts that state/territory governments could achieve red tape reductions for offshore petroleum projects with a conferral of power on NOPSEMA. In this regard, the committee notes that NOPSEMA would effectively become an agent of the state/territory, subject to the usual rules of agency."
- 41. The committee also noted that the Council of Australian Governments (COAG) previously agreed to examine the benefits of consolidating regulatory functions, including through the amalgamation of regulators. However, since 2014 the COAG Energy Council does not appear to have given much attention to environmental regulation of offshore petroleum projects.



42. In 2018, NOPSEMA gave testimony at the Melbourne hearings of the Inquiry into Impediments to Business Investment. The committee noted in its report released in October 2018, that NOPSEMA is an example of a national regulator with streamlined requirements and offered the following finding relevant to NOPSEMA:

"The committee notes that NOPSEMA is an example of where cross-jurisdictional regulation can be streamlined into a national regulatory body to the benefit of industry and government." ¹¹

- 43. Reducing inconsistencies between jurisdictions has also been highlighted by industry as an opportunity to reduce costs and burden for industry while also increasing efficiencies overall. Cross jurisdictional projects are particularly affected by this unnecessary burden in meeting the requirements of different regulators and potentially conflicting requirements for different aspects of the same offshore petroleum activity.
- 44. Potential benefits of moving to a single national regulator for the offshore oil and gas sector through conferral are:
 - a consistent objective-based regulatory framework leading to improved occupational health and safety, integrity and environmental outcomes
 - increased efficiencies for industry and Government resulting from a reduction in the overall number of approvals required for a single project
 - increased clarity, certainty and consistency in decision-making processes for industry
 - assurance to the community regarding consistent regulatory outcomes for offshore petroleum activities regardless of their location
 - increased benefits for the Australian economy by increasing petroleum industry competitiveness and encouraging future investment
 - expanded access to world leading practices and a critical mass of regulatory experts.
- 45. In addition, there are direct benefits for the states and the Northern Territory of conferring regulatory functions on NOPSEMA in designated coastal waters, including:
 - reduced economic burden on states and Northern Territory governments, who no longer require resources to assess, enforce and monitor compliance of safety cases, well operations management plans and environment plans
 - reduced reputational, economic and other risks in the event of another significant petroleum related incident such as the Montara incident
 - states and the Northern Territory governments continue to have full control over the location of exploration and development activities, and collect associated royalties, without carrying the burden of regulatory compliance and enforcement.
- 46. The graduated conferral of powers on NOPSEMA has proven to be successful as evidenced by the continuing improvement in industry performance and findings established by independent reviews and inquiries. The critical mass of NOPSEMA expertise and capacity to regulate complex and large numbers of facilities cannot, for practical and resource reasons, be paralleled by other state and territory regulators.
- 47. There is also scope for Government to consider further streamlining through allocating functions covering sea dumping, offshore renewables and offshore minerals and further collaborating in areas such as marine biosecurity.
- 48. NOPSEMA's experience with the streamlining of the EPBC Act is that further streamlining of measures are likely to reduce future costs in the hundreds and millions of dollars. Since streamlining under the EPBC Act, the removal of duplication of 134 permissioning documents has significantly contributed to the reduction of burden to industry and government.

¹¹ House of Representatives Standing Committee on Economics, 'Report on the Inquiry into Impediments to Business Investment', p 48.



5.1. Transparency and relationship management

Productivity Commission Scope [Issue 5]: Examine regulatory and non-regulatory examples of effective community engagement and benefit—sharing practices, and establish best—practice examples of where mutually-agreeable relationships were successfully developed between the resources sector and the communities in which they operate, including with Indigenous communities.

- 49. NOPSEMA is an advocate for greater transparency and welcomed the Minister for Resources and Northern Australia's announcement in April 2019 that all environment plans for offshore oil and gas activities will be published, and that draft environment plans for offshore seismic and exploratory drilling activities will be open for public comment under changes to the Environment Regulations. From 25 April 2019 draft environment plans submitted to NOPSEMA are published prior to regulatory assessment, and a 30 day public comment period applies to environment plans for seismic surveys and exploratory drilling.
- 50. These amendments to the regulations are part of a suite of changes to improve consultation and increase transparency of offshore oil and gas activities. NOPSEMA believes transparency in decision making and effective community engagement, provides added benefits such as lifting industry performance through facilitating the sharing of knowledge, assisting with community acceptance and building a better understanding of petroleum activities offshore.

5.2. Best practice approach to regulation

5.2.1. Objective based regulation

- 51. The objective based approach to regulation is supported internationally by regulatory authorities, risk management professionals and academics as being the most appropriate regulatory framework for major hazard industries. For example, Hopkins¹² describes the four basic features of a successful regulatory regime for oil and gas as being;
 - a risk management framework
 - a requirement to "make a case" to the regulator
 - a competent and independent regulator
 - a general duty of care being placed on the operator (the OPGGS Act also extends this duty to titleholders for well integrity and environmental management).
- 52. It sets high level requirements that must be achieved and ensure that those who create the risks are responsible for identifying and managing the risks. Objective based regulation:
 - is adaptable, flexible and is scalable to the particular circumstances of individual activities and the environments in which they take place
 - provides the opportunity for the oil and gas industry to adopt advances in technology and apply control measures that are best suited to the individual circumstances of the activity
 - encourages adoption of best practice management systems and continuous improvement in all aspects of performance.
- 53. The regulatory regime under which NOPSEMA operates provides all of these features. Applying this framework to offshore petroleum activities in all jurisdictions will achieve leading best practice.

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¹²Hopkins, Andrew, "Disastrous Decisions, The Human and Organisational Causes of the Gulf of Mexico Blowout" (2012).



5.2.2. Preventing Major Accident Events

- 54. NOPSEMA administers the OPGGS Act and associated regulations that ensures all jurisdictions, demonstrate multiple barriers and control measures covering procedures, people, equipment, processes and systems, are effective to keep hydrocarbons in the pipes, to ensure people and the environment are safe.
- 55. NOPSEMA challenges industry in all jurisdictions on safety and environmental management performance on a continuous basis and is responsive to complacency wherever it is identified.

5.2.3. Assessment timeframes

56. Through streamlined arrangements the assessment timeframes involve careful consideration of the information provided, and over time the median time (days) for assessment are decreasing. The other added benefit is a single approval is being sought.

Document	Statutory days	Median time to assess (days)	Notes
Environment plan	30 (new)	97 (new)	58 days with regulator 42 days with titleholder Since 2015 median time decreasing
Safety Case	90 (new) 30 (revised)	82 (new)	Since 2015 median time consistent for a large majority of safety cases
WOMPs	30	39 (new)	Since 2015 median time slightly increased in response to regulation changes in 2016 and the need for better quality WOMPs.



6. Glossary of terms

Acronym	Full name
ALARP	As Low as Reasonably Practicable
АРРЕА	Australian Petroleum Production and Exploration Association
ANAO	Australian National Audit Office
COAG	Council of Australian Governments
EPBC Act	Environment Protection and Biodiversity Conservation Act 1999
HSE	Health, safety and environment
HSR	Health and safety representative
IOPER	International Offshore Petroleum Environmental Regulators
IRF	International Regulators Forum
LNG	Liquefied Natural Gas
MAE	Major accident event
MODUs	Mobile offshore drilling units
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
NOPSA	National Offshore Petroleum Safety Authority (now NOPSEMA)
OECD	Organisation for Economic Co-operation and Development
OPGGS Act	Offshore Petroleum and Greenhouse Gas Storage Act 2006
The Department	Department of Industry, Innovation and Science