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Performance Audit

Establishment and Administration of the National Offshore Petroleum Safety and Environmental Management Authority

National Offshore Petroleum Safety and Environmental Management Authority

Australian National Audit Office

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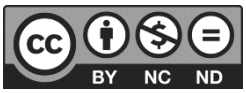

Australian National
Audit Office

Canberra ACT
12 June 2014

Dear Mr President
Dear Madam Speaker

The Australian National Audit Office has undertaken an independent performance audit in the National Offshore Petroleum Safety and Environmental Management Authority titled *Establishment and Administration of the National Offshore Petroleum Safety and Environmental Management Authority.* The audit was conducted in accordance with the authority contained in the *Auditor-General Act 1997*. Pursuant to Senate Standing Order 166 relating to the presentation of documents when the Senate is not sitting, I present the report of this audit to the Parliament.

Following its presentation and receipt, the report will be placed on the Australian National Audit Office's website—http://www.anao.gov.au.

Yours sincerely

Ian McPhee
Auditor-General

The Honourable the President of the Senate
The Honourable the Speaker of the House of Representatives
Parliament House
Canberra ACT

AUDITING FOR AUSTRALIA

The Auditor-General is head of the Australian National Audit Office (ANAO). The ANAO assists the Auditor-General to carry out his duties under the *Auditor-General Act 1997* to undertake performance audits, financial statement audits and assurance reviews of Commonwealth public sector bodies and to provide independent reports and advice for the Parliament, the Australian Government and the community. The aim is to improve Commonwealth public sector administration and accountability.

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Abbreviations

ALARP	As Low As Reasonably Practicable
AMSA	Australian Maritime Safety Authority
ANAO	Australian National Audit Office
AOP	Annual Operating Plan
APPEA	Australian Petroleum Production and Exploration Association
APS	Australian Public Service
CDPP	Commonwealth Director of Public Prosecutions
CEO	Chief Executive Officer
DA	Designated Authority
EMM	Enforcement Management Model
EP	Environment Plan
EPBC Act	*Environment Protection and Biodiversity Conservation Act 1999*
HSR	Health and Safety Representative
KPI	Key Performance Indicator
NOPSA	National Offshore Petroleum Safety Authority
NOPSEMA	National Offshore Petroleum Safety and Environmental Management Authority
NOPTA	National Offshore Petroleum Titles Administrator
NT	Northern Territory

OHS	Occupational Health and Safety
OPGGS Act	*Offshore Petroleum and Greenhouse Gas Storage Act 2006*
PBS	Portfolio Budget Statements
QMS	Quality Management System
RET	Department of Resources, Energy and Tourism
RMS	Regulatory Management System
SCER	Standing Council on Energy and Resources
WA	Western Australia

Glossary

Activity	Operations or works in an offshore area carried out in compliance with the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* or the regulations. The operations include the exploration, recovery, processing, storage, offloading or piped conveyance of petroleum in Commonwealth waters and related diving operations.
As Low As Reasonably Practicable (ALARP)	The management of risks to as low as reasonably practicable demonstrates, through reasoned and supported arguments, that there are no other practical measures that could reasonably be taken to reduce risks further.
Environment Plan (EP)	A permissioning document that details and evaluates the impacts and risks to the environment as a result of petroleum activities, specifies the control measures that will be used to reduce these impacts and risks and demonstrates that they are reduced to ALARP.
Facility	A vessel or structure used for the recovery, processing, storage and offloading of petroleum. Facilities include: pipelines; platforms; floating production; storage and offloading vessels; and mobile offshore drilling units.
Incident	An accident (death or serious injury), dangerous occurrence (occurrence that could have caused an accident) or environmental incident (activity that has caused or has the potential to cause significant environment damage).
Inspection	A planned visit to an offshore facility or an operator's onshore premises to assess compliance with legislation and permissioning documents.

Investigation	The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* permits OHS inspectors to conduct inspections into accidents or dangerous occurrences. An investigation is a focused inspection into the cause of an incident. The conduct of an investigation must comply with the Australian Government Investigation Standard.
Objective regime	NOPSEMA administers an objective regulatory regime that sets principles and outcomes for industry (such as ALARP and ecologically sustainable development). An objective regime may be contrasted against a prescriptive regime that specifies standards against which industry is to adhere.
Operator	The person (individual or body corporate) who has day-to-day management and control of a facility and its operations. An operator may change during a facility's life cycle, such as having a drilling operator and an operator for production.
Permissioning document	A key petroleum activity plan such as a safety case, or an environment plan, which govern how the petroleum activity is to be conducted, including incident mitigation and response. It is an offence under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* to undertake petroleum activities without, or in contravention of, a permissioning document accepted by NOPSEMA.
Petroleum	Any naturally occurring hydrocarbon, whether in a gas, liquid or solid state and includes crude oil, condensate and liquefied petroleum gas.
Safety case	A permissioning document produced by the operator of a facility that identifies hazards and risks, describes how the risks are to be controlled, and the safety management system in place to ensure the controls are effectively and consistently applied.

Summary and Recommendations

Summary

Introduction

1. The supply of energy is a major contributor to continuing global economic growth, with a key measure of energy supply being the availability of petroleum in the form of oil and gas. The process of extracting petroleum from under water or land involves exploration, drilling, construction, production and decommissioning phases. Petroleum projects are often undertaken in remote and challenging environments, in deep water involving high pressure and high temperature conditions. These projects are high cost and involve considerable commercial risks for petroleum companies, as well as risks to the safety of employees and the natural environment. Recent disasters in the world's petroleum fields, such as the Montara and Macondo incidents, emphasise the need for effective regulatory oversight.[1]

2. Australia has a comparatively small petroleum industry, contributing half a per cent of the world's total production of crude oil in 2012. The industry is nonetheless significant in domestic terms. The Australian petroleum industry was estimated to have made a direct and indirect economic contribution of $28.3 billion in 2011, or about two per cent of total market value of all goods and services produced in Australia.[2]

3. While acknowledging the economic returns from the petroleum industry, governments have also recognised the importance of an effective regulatory system to support safe and environmentally responsible activity. Key issues for the regulation of the offshore petroleum industry arise from the age of facilities, maturity of operators, use of new technologies, and workforce

1 On 21 August 2009, the Montara Wellhead Platform in the Timor Sea experienced an uncontrolled release that continued until 3 November 2009. The affected area was estimated to be up to 90 000 square kilometres. This was considered to be Australia's most significant offshore petroleum incident. On 20 April 2010, the Deepwater Horizon drilling rig located in the Gulf of Mexico experienced an uncontrolled release following drilling of the Macondo well. The release triggered an explosion and fire causing 11 fatalities and spilling an estimated 4.9 million barrels of oil. Over one-third of US federal waters in the Gulf were closed to fishing during the incident. The release was contained on 15 July 2010. More recently, on 27 August 2012 two workers were fatally injured on the Stena Clyde mobile offshore drilling facility located in the Otway Basin off the Victorian coast.

2 *Deloitte Access Economics, Advancing Australia: Harnessing our comparative energy advantage*, Australian Petroleum Production and Exploration Association Limited, June 2012, p.i.

competency within a rapidly changing industry, all of which contribute to varying types and levels of risk.

Australian regulatory framework

4. Offshore petroleum industry regulation in Australia has evolved over time, largely in response to reviews of major incidents in Australia and overseas. Historically, regulatory functions were undertaken by the state and Northern Territory Government authorities.[3] In January 2005, responsibility for offshore occupational health and safety (OHS) regulation was consolidated into the National Offshore Petroleum Safety Authority (NOPSA), established by amendments to the *Petroleum (Submerged Lands) Act 1967*.

5. Following the release of two offshore petroleum reports[4], in August 2009, the then Minister for Resources and Energy announced an intention to expand the regulator's responsibilities to include well integrity. The *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act) was amended in November 2010 to give NOPSA responsibility for non-OHS structural integrity of facilities (including pipelines), wells and well-related equipment.

6. The Montara Commission of Inquiry (the Inquiry) provided the stimulus for further reforms to offshore petroleum regulation. The report of the Inquiry contained 100 findings and 105 recommendations.[5] A key recommendation related to the establishment of a single, independent regulatory body responsible for safety, well integrity and environmental management and to consolidate functions of the state and Northern Territory authorities.

7. On 24 November 2010, the then Minister for Resources and Energy tabled the Report of the Montara Commission of Inquiry and the draft Government response, and announced the Government's intention to establish the National

3 Regulatory activity was previously undertaken by Designated Authorities, which were departments of the states and the Northern Territory designated as being responsible for the regulation of offshore petroleum facilities in state waters and, prior to 2005, in Commonwealth waters.

4 Those reports were: Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation Better Practice and the Effectiveness of the National Offshore Petroleum Safety Authority*, Department of Resources, Energy and Tourism, June 2009; and Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation: Marine Issues*, Department of Resources, Energy and Tourism, 2009.

5 Commissioner Borthwick AO PSM, *Report of the Montara Commission of Inquiry*, Commonwealth of Australia, 2010.

Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) as the national regulator for safety, well integrity and environmental management.[6] The establishment of NOPSEMA was legislated following amendments to the OPGGS Act, which were passed by the Parliament on 15 September 2011. The new legislative framework provided for the:

- regulation of petroleum exploration and extraction activities by NOPSEMA;
- oversight of NOPSEMA by an Advisory Board;
- granting of titles to the rights for petroleum exploration in Commonwealth waters to a Joint Authority[7]; and
- petroleum titles administration by the National Offshore Petroleum Titles Administrator (NOPTA).

National Offshore Petroleum Safety and Environmental Management Authority

8. NOPSEMA's mission is to 'independently and professionally regulate offshore safety, well integrity and environmental management', in pursuit of its vision of 'safe and environmentally responsible Australian offshore petroleum and greenhouse gas storage industries'.[8] In 2013, NOPSEMA was responsible for regulating 29 operators of 149 facilities[9], 28 titleholders of 121 wells and 42 environmental management activity operators of 129 activities.[10]

9. NOPSEMA's regulatory functions relating to safety, integrity and environmental management activities include:

6 Commonwealth, *Parliamentary Debates*, House of Representatives, 24 November 2010, M Ferguson, Minister for Resources, Energy and Tourism.

7 The Joint Authority comprises the responsible Commonwealth Minister and the responsible state or Northern Territory Ministers, and may delegate any or all of its functions and powers to the respective Commonwealth, state or Northern Territory departments.

8 NOPSEMA, *Corporate Plan 2012–15*, 2012.

9 Facilities include platforms, floating production storage and offloading vessels, floating storage vessels, and mobile offshore drilling units and pipelines.

10 Petroleum activities include drilling, seismic surveys, operation of a petroleum pipeline, operation of a facility, and construction and installation of a facility. NOPSEMA, *Annual offshore performance report: Regulatory information about the Australian offshore petroleum industry to 31 December 2013*, 2014, p. 9.

- developing and implementing effective monitoring and enforcement strategies to secure compliance with obligations under the Act and the regulations;
- investigating accidents, occurrences and circumstances in offshore petroleum operations;
- reporting, as appropriate, to the responsible Commonwealth Minister, and to state and Northern Territory Petroleum Ministers on those investigations;
- advising persons, either on its own initiative or on request, on matters relating to offshore petroleum operations; and
- cooperating with NOPTA, other Commonwealth agencies or authorities having functions relating to regulated operations, and state and Northern Territory agencies having functions relating to regulated operations.

10. The safety, integrity and environmental management regulatory activities undertaken by NOPSEMA in 2013 are summarised in Table S 1.

Table S 1: Summary of NOPSEMA regulatory activities 2013

Activity	Safety	Integrity	Environment	Total
Assessments	160	119	120	399
Inspections	100	5	23	128
Incidents	371	-	206	577
Investigations	11	-	-	11
Enforcements	34	2	43	79
Total	**676**	**126**	**392**	**1194**

Source: NOPSEMA.

11. NOPSEMA administers an objective regulatory regime, which sets principles and outcomes for industry rather than standards. The onus is on the operator to identify and evaluate their risks and demonstrate safe, effective and fit-for-purpose practices, that reduce those risks to as low as reasonably practicable (ALARP).[11] This approach has applied to operators in

11 A risk is considered as being ALARP if the cost of any reduction in that risk is grossly disproportionate to the benefit obtained from the reduction.

Commonwealth waters since 1996. Australia adopted an objective regime for offshore petroleum regulation following the findings of Lord Cullen's public inquiry into the Piper Alpha disaster of 1988 in the North Sea, which was commissioned by the British Government. The principles or goals-based objective regulatory regime can be contrasted against prescriptive regimes that prescribe requirements and standards for regulated entities to meet.

12. Under the regulatory regime, NOPSEMA is required to provide advice and guidance to operators in relation to regulatory requirements[12], assess whether the measures proposed by the operator are appropriate in its permissioning documents[13] and, where accepted, monitor and enforce the operator's compliance with those measures. In delivering its regulatory functions, NOPSEMA must balance the risks posed to safety and the environment with the regulatory burden placed on petroleum operators.

13. NOPSEMA's petroleum industry stakeholders include Australian Government departments, State and Northern Territory regulators, industry representative bodies and workforce representative groups. The Department of Industry is the primary Australian Government department with oversight of policy and legislation on the exploration and development of petroleum resources.[14] Australian Government regulators include the Australian Maritime Safety Authority (AMSA) and the Department of the Environment.

Administrative arrangements

14. NOPSEMA's head office is in Perth in close proximity to the majority of regulated petroleum activity adjacent to the coast of Western Australia. Of the 112 total staff employed by NOPSEMA in December 2013, 106 staff were based in Perth. The remaining six staff were based in Melbourne in proximity to the regulated entities located on the Otway and Gippsland Basins in Victoria.

12 The Authority undertakes planned inspections and produces a range of guidance material such as Guidance Notes, Safety Alerts and Compliance Policies and conducts workshops with industry to encourage voluntary compliance.

13 Permissioning documents are key petroleum activity plans such as safety cases, or environment plans which govern how the petroleum activities are to be conducted, including incident mitigation and responses. It is an offence under the OPGGS Act to undertake petroleum activities without, or in contravention of, a permissioning document that has been accepted by NOPSEMA.

14 The Department of Industry is also the Australian Government delegate of the Joint Authority. NOPTA, which is administered by the Department of Industry, is a technical adviser to the Joint Authority.

15. NOPSEMA is funded by industry on a cost recovery basis under the *Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Act 2003*. The system of levies covers regulatory activities, including the assessment of safety cases, well operations management plans and environment plans, and the conduct of investigations. In the 2012–13 financial year, $24.5 million in levies was received by NOPSEMA. Total revenue, including revenue from government to fund capital and operating costs arising from the establishment of NOPSEMA, was $28.6 million.[15]

16. As required by the OPGGS Act, a NOPSEMA Advisory Board has been established to provide advice and strategic guidance to the Chief Executive Officer, the responsible Commonwealth Minister (currently the Minister for Industry) and state and Northern Territory Petroleum Ministers who are members of the Standing Council on Energy and Resources (SCER).[16] NOPSEMA is also required to report, as appropriate, to the responsible Commonwealth Minister and members of SCER on investigations.

Audit objective, criteria and scope

17. The objective of the audit was to assess the establishment of the National Offshore Petroleum Safety and Environmental Management Authority and the effectiveness of its regulatory function.

18. To form a conclusion against this audit objective, the ANAO adopted the following high-level criteria:

- an appropriate governance framework to support effective regulation was established;
- compliance risk was adequately assessed;
- a compliance program to effectively communicate regulatory requirements to the petroleum industry and to monitor compliance with regulatory obligations was implemented; and
- arrangements to effectively manage non-compliance were in place.

15 NOPSEMA, *Annual Report 2012–13*, p. 53.

16 SCER, which was established by the Council of Australian Governments is responsible for nationally significant issues and key reform related to the energy and resource sectors. Its membership comprises Commonwealth, state, territory and New Zealand Ministers with responsibility for energy and resource matters. SCER replaced the former Ministerial Council on Energy and the Ministerial Council on Mineral and Petroleum Resources in 2011.

19. The audit focuses on NOPSEMA's administration of regulation within the legislative framework in place to mid-2013. It is intended that this audit complements, rather than duplicates, the statutory triennial reviews of the operational effectiveness of NOPSEMA.[17] The audit did not assess the operation of NOPSA, NOPSEMA's administration of the most recent series of legislative amendments,[18] and the processes for the setting of levies.

Overall conclusion

20. The National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA) was established in January 2012 as part of the Australian Government's response to Australia's most significant offshore petroleum incident, the Montara wellhead blowout in the Timor Sea in 2009. The new regulator continued the existing offshore safety role of its predecessor, the National Offshore Petroleum Safety Authority (NOPSA), consolidated the oversight of well integrity and incorporated the new function of environmental management, previously regulated by the states and the Northern Territory.

21. NOPSEMA's regulatory activities include providing advice and guidance to operators in relation to regulatory requirements, assessing whether the measures proposed by operators in their permissioning documents[19] are appropriate and, monitoring and enforcing operators' compliance with the measures outlined in the permissioning documents after they have been accepted by the Authority. The Authority has regulatory

17 Under s. 695 of the OPGGS Act, the Minister is required to initiate operational reviews of the effectiveness of NOPSEMA (and its predecessor NOPSA) in bringing about improvements in offshore safety, structural integrity and environmental management.

18 On 28 February 2013, the Australian Parliament passed the *Offshore Petroleum and Green House Gas Storage Amendment (Compliance Measures) Act 2013*, to increase criminal penalties for certain safety and environmental offences. On 16 May 2013, the *Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013* was passed. This Act introduced alternative enforcement mechanisms, including application of the 'polluter pays' principle. Most of these amendments come into force on the commencement of the Regulatory Powers (Standard Provisions) Bill, introduced into the House of Representatives on 20 March 2014. On 28 February 2014, amendments to the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* took effect, introducing requirements for offshore project proposal submissions and removing separate approval requirements under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) for certain petroleum activities.

19 Permissioning documents are key petroleum activity plans such as safety cases, or environment plans, which govern how the petroleum activities are to be conducted, including incident mitigation and responses. It is an offence under the OPGGS Act to undertake petroleum activities without, or in contravention of, a permissioning document that has been accepted by NOPSEMA.

responsibility for around 400 facilities, wells and petroleum activities and in 2013, it conducted a total of 399 assessments, 128 inspections, 14 investigations and completed 79 enforcement actions across its functions of safety, well integrity and environmental management.

22. Overall, NOPSEMA has appropriately integrated administrative arrangements for the new function of environmental management and has established a sound framework for the regulation of the offshore petroleum industry. There are, however, elements of NOPSEMA's governance arrangements and aspects of its administration of its regulatory functions that require further strengthening.

23. In relation to governance arrangements, NOPSEMA's identification and management of business risks is still maturing and would be enhanced by more clearly defining its business risks, better aligning the mitigation strategies designed to address these risks, and developing mitigating strategies for all identified risks. There is also scope for NOPSEMA to improve its performance monitoring and reporting arrangements. The Authority does not currently report against the key performance indicators (KPIs) included in its Portfolio Budget Statements to internal and external stakeholders, while supplementary performance information published by the Authority provides limited insights into the extent to which its objectives are being achieved. The current KPIs are predominantly focused on activities and legislative compliance rather than regulatory performance. Reporting against relevant, reliable and complete KPIs would enable NOPSEMA to better demonstrate the extent to which it is achieving its regulatory objectives.

24. In undertaking its regulatory functions, NOPSEMA's planning of well integrity and environmental inspections appropriately takes into account the compliance risks posed by individual wells and activities. This approach supports a targeted allocation of regulatory effort to the areas of greatest compliance risk. In contrast, the Authority's planning of safety inspections is not underpinned by a similar assessment of the safety record and risks posed by each facility. Rather, the frequency of safety inspections is guided by a

policy of inspecting each normally attended facility twice each year.[20] The planning of its safety inspection program having regard to the risk profile of individual facilities would enable NOPSEMA to prioritise its regulatory activities and more effectively deploy its compliance resources. An assessment of relevant risk factors, including but not limited to past performance and previous incidents as well as future risk exposure, would help to direct greater regulatory coverage towards operators posing the most significant risks and potentially reduce the regulatory burden and costs on compliant operators.

25. Monitoring and compliance activities are delivered through NOPSEMA's program of planned inspections which are generally implemented in line with core policies and procedures. At each inspection the Authority makes recommendations to operators to encourage better practice or as a preliminary step towards enforcement action. While operators are not compelled to implement the recommendations arising from inspection activities, NOPSEMA reviews the status of previous recommendations at subsequent inspections. Given the regulatory effort required to monitor the implementation of over 1400 recommendations made each year, there would be merit in NOPSEMA focusing its inspection recommendations on matters related to compliance and prioritising those recommendations for operators. Aspects of better practice can be separately communicated to operators in each inspection report. Consideration should also be given to taking enforcement action where compliance related recommendations are not implemented within agreed timeframes. Such an approach would send a clear message to operators on the priority matters for attention and enable the Authority to better manage non-compliance, while potentially reducing the regulatory burden on compliant operators.

20 Normally attended facilities include platforms, floating production storage and offloading vessels, floating storage vessels, and mobile offshore drilling units on which the offshore workforce is continually present. Other facilities include unattended facilities such as pipelines and seasonally attended facilities, which are inspected once every two or four years.

26. The ANAO has made three recommendations directed at further strengthening NOPSEMA's performance of its regulatory activities, focusing on: enhancing aspects of existing governance arrangements; developing risk profiles to inform safety inspection planning; and focusing inspection recommendations on matters related to compliance while addressing better practice aspects in inspection reports.

Key findings by chapter

Establishing and governing NOPSEMA (Chapter 2)

27. NOPSEMA commenced operations in January 2012, building on NOPSA's existing governance framework. This framework included executive management oversight arrangements for the Authority, including the establishment of the executive leadership team, and an advisory board to provide advice to both the Chief Executive Officer (CEO) of the Authority and the Commonwealth Minister. The Authority did, however, operate without the independent oversight of an Audit Committee until December 2013, as required by the *Financial Management and Accountability Act 1997*.[21]

28. The Authority implemented appropriate arrangements to incorporate the new function of environmental management, which was previously regulated by the states and the Northern Territory Designated Authorities (DAs), into its governance arrangements within a limited timeframe (between September and December 2011). This new responsibility was in addition to the 'non-OHS structural integrity' function that was legislated in late 2010 and assigned to the Authority in April 2011, replacing DAs with the Authority as the regulator of well integrity in Commonwealth waters. NOPSEMA recognises that further work is required to promote a common approach to regulation across its three regulatory functions.

21 NOPSEMA is a prescribed agency under the *Financial Management and Accountability Act 1997*. Section 46 of this Act provides that a Chief Executive must establish and maintain an audit committee with functions that include: helping the agency to comply with obligations under this Act, the regulations and Finance Minister's Orders; and providing a forum for communication between the Chief Executive, the senior managers of the agency and the internal and external auditors of the Agency; and that the committee must be constituted in accordance with the regulations (if any).

29. In the early months of implementing environmental management regulation, an expectation gap emerged between NOPSEMA and industry in relation to the regulatory requirements for environment plans (EPs). NOPSEMA considered that most of the new EPs did not meet the acceptance criteria as specified in the OPGGSA (Environmental) Regulations 2009.[22] Operators concerns included a lack of clarity of regulatory requirements, that approval of EPs was withheld on trivial grounds and that the Authority had been inconsistent in its assessments. In response, NOPSEMA has directed additional effort towards communicating the regulatory requirements and its assessment procedures for environmental management.

30. NOPSEMA has in place an appropriate system of executive management oversight to support the administration of corporate and regulatory activities. However, its identification and management of business risks, while maturing, requires further attention. There is scope for NOPSEMA to more clearly define and link identified business risks with appropriate mitigation strategies and for these to be regularly monitored. Key areas of risk exposure include the management of conflicts of interest and fraud. Although NOPSEMA considered the risk of fraud to be integrated within risk management processes, evidence of integration was limited and was not underpinned with a current fraud control plan or fraud awareness training for new staff. Similarly, although NOPSEMA requires staff to declare real or potential conflicts of interest, these declarations were not retained for all staff and did not include other relevant information, such as family or other relationships that may pose a conflict of interest.

31. Whilst acknowledging the challenges in setting performance indicators for the regulation of the offshore petroleum industry, there is scope for NOPSEMA to improve its performance monitoring and reporting arrangements. The Authority does not currently report against the KPIs included in its Portfolio Budget Statements to internal and external stakeholders. Other published performance information, such as the *Annual offshore performance report*, provides limited insights into the extent to

22 The regulations require that, if NOPSEMA is not reasonably satisfied that an EP meets the acceptance criteria when first submitted, it cannot accept the plan and must give the titleholder a reasonable opportunity to modify and resubmit the plan. If, after the titleholder has had a reasonable opportunity to modify and resubmit the EP, NOPSEMA is still not reasonably satisfied that the plan meets the acceptance criteria of the OPGGS(E) Regulations, NOPSEMA must refuse to accept the plan.

which NOPSEMA is achieving its regulatory objectives. The current KPIs are predominantly focused on activities and legislative compliance rather than regulatory performance.

Assessing compliance risk (Chapter 3)

32. NOPSEMA uses regulatory intelligence to assess compliance risk and plan individual compliance activities. Its analysis of the performance of operators, the inherent risks associated with activities and other factors, is principally based on the information held within its regulatory management system (RMS). NOPSEMA's intelligence capability could be strengthened by refining its guidance to staff on the collection of regulatory information and enhancing the mechanisms used to store and share intelligence collected by the Authority.

33. The regulatory risks posed by individual wells and environmental activities are appropriately assessed, which supports a targeted allocation of regulatory effort. In contrast, NOPSEMA currently inspects normally attended facilities twice a year and unattended facilities once every two or four years. There would be merit in NOPSEMA adopting a risk-based approach (similar to well integrity and environmental management) to determine its safety inspection program for normally attended facilities to help ensure that regulatory effort is directed towards those facilities with highest regulatory risk. The reduced regulatory impact of fewer inspections may serve as an incentive for compliant operators, as well as enabling greater resources to be directed towards areas of most significant risk, while maintaining a minimum frequency of inspections.

Monitoring compliance (Chapter 4)

34. NOPSEMA encourages voluntary compliance through its inspection program and by publishing a broad range of guidance material. Workshops are also conducted with industry participants to communicate regulatory requirements. This ongoing, as well as, targeted engagement with industry assists NOPSEMA to ensure that its guidance material remains relevant.

35. NOPSEMA assesses permissioning documents to determine whether the operator has considered all practicable risk reduction measures for the particular facility, activity or well under consideration.[23] Generally, the assessment activities undertaken by NOPSEMA were appropriately documented. Assessment processes did, however, result in a number of requests for further information or resubmissions from operators. Of the 113 assessments sampled by the ANAO, NOPSEMA requested further information or resubmissions for 51 per cent of safety assessments, 42 per cent of well integrity assessments and 88 per cent of environmental plan assessments. As any delays in assessments can impose significant costs on operators, it is important to clearly communicate requirements to operators during the assessment process. The duration of the environmental management assessment process was a particular concern of operators, along with lack of clarity in communicating regulatory requirements. The number of resubmissions and the feedback received indicates scope for refining the guidance provided in relation to the environmental management function.

36. NOPSEMA conducts inspections to monitor and promote compliance with regulatory requirements. The inspections are generally implemented in line with the established compliance program and procedures, with inspections including engagement with the offshore workforce employed by operators where possible. There is, however, scope to review target timeframes for inspection milestones, such as the finalisation of inspection reports. Of the 25 safety inspections sampled by the ANAO, inspection reports were issued, on average 43 days following the inspections, more than double the 20-day target.

37. In 2013, NOPSEMA conducted a total of 128 inspections, of 152 facilities, wells and environmental activities and made a total of 1537 recommendations to promote compliance, outline good practice and as a preliminary step towards enforcement. Although operators are not compelled to implement these recommendations, NOPSEMA reviews the implementation of previous recommendations at subsequent inspections. Given the effort required to monitor the implementation of over 1400 recommendations made each year, there would be merit in NOPSEMA focusing its recommendations

23 The number of permissioning documents assessed has increased from 200 safety assessments in 2010 to over 400 safety, well integrity and environmental management assessments in 2013.

on matters related to compliance with regulatory requirements, while continuing to promote good practice within the industry.[24] This approach would enable NOPSEMA to focus its recommendations on the matters of greatest priority that may warrant the consideration of enforcement action if not implemented within the agreed timeframe.

Responding to incidents (Chapter 5)

38. Operators are required to notify NOPSEMA of accidents, dangerous occurrences and environmental incidents as soon as practicable after the event. To enable the Authority to monitor the implementation of remedial measures, operators are also required to provide an initial report within three days and, for safety incidents, a root cause report within 30 days. While NOPSEMA has established appropriate procedures for the consideration of incident notifications, there is scope to improve the administration of those procedures through more timely consideration of environmental incident notifications.

39. Once an incident notification and report has been considered, NOPSEMA may initiate an investigation depending on the severity of the incident or the adequacy of the operator's proposed response. The Authority has established over 30 policies, standard operating procedures, work instructions, forms and templates to guide the conduct of its investigations. NOPSEMA's policies and procedures require the preparation of an investigation plan, the use of a running sheet to manage the investigation and the completion of a lessons learnt review. Of the 13 sampled investigations, eight included an investigation plan, 11 were managed using running sheets and none undertook a lessons learnt review.

40. Where an offence has been identified and prosecution is determined as the appropriate form of enforcement action, NOPSEMA is required to prepare a brief of evidence for consideration by the Commonwealth Director of Public Prosecutions (CDPP). Of the seven finalised briefs prepared between 2005 and 2013, two have resulted in successful prosecutions. The most recent finalised brief of evidence was for the prosecution of PTTEP Australia Pty Ltd in

24 The inclusion of good practice suggestions in inspection reports would help ensure that opportunities for improvement are brought to the attention of operators, while allowing recommendations to focus on more significant compliance related matters.

relation to the Montara wellhead blowout.[25] However, more than four years after the incident, NOPSEMA has not concluded its review of the investigation and agreed on a consolidated set of revised procedures. NOPSEMA has, nonetheless, advised the ANAO of improvements to its investigation processes following the Montara investigation.

Enforcing compliance (Chapter 6)

41. NOPSEMA has adopted a graduated enforcement model, with actions including improvement notices directing an operator to take certain action, and prohibition notices requiring immediate cessation of an activity. The Authority has procedures in place to help ensure that the enforcement action in relation to safety regulations is graduated in line with risk. NOPSEMA informed the ANAO that its guidance in response to safety non-compliance is used to inform the consideration of enforcement action relating to well integrity and environmental management functions. NOPSEMA decided not to update its guidance material on enforcement to take account of these functions until proposed legislated changes are enacted giving the Authority expanded enforcement powers.

42. The ANAO's analysis of the 58 sampled enforcement cases found that the rationale for enforcement decisions was recorded in relevant supporting documentation. Furthermore, NOPSEMA's implementation of enforcement actions has been proportionate and timely. However, there is scope for NOPSEMA to review its procedures for ensuring that operators return to compliance in a timely manner. Of the 26 safety improvement notices sampled, seven operators were granted extensions and, in 10 cases, the required action was implemented after the original or extended timeframe.

25 On 21 August 2009, the Montara Wellhead Platform in the Timor Sea experienced an uncontrolled release that continued until 3 November 2009. The affected area was estimated to be up to 90 000 square kilometres. This was considered to be Australia's most significant offshore petroleum incident.

Summary of agency response

43. NOPSEMA's summary response to the proposed report is provided below, with the full response at Appendix 1.

> NOPSEMA welcomes the conclusion of the ANAO's Performance Audit that had the objective 'to assess the establishment of the National Offshore Petroleum Safety and Environmental Management Authority and the effectiveness of its regulatory function'.[26]
>
> As noted in the Report, this Audit was executed in addition to the legislated operational effectiveness reviews of NOPSEMA which are conducted every 3 years.[27] These Triennial Reviews are conducted by panels of experts with petroleum, industry or regulatory, backgrounds. The audit officers from the ANAO did not have such experience and may have found it challenging to comprehend the nature of regulation required in a performance based regulatory regime for the high hazard offshore petroleum industry.
>
> Nevertheless, the audit has been extensive. Over a period exceeding 12 months, the Audit has been informed by approximately 190 requests for information, the review of nearly 4000 of NOPSEMA's regulatory records and an examination of NOPSEMA's personnel files. It has consumed substantial resources from both the ANAO and NOPSEMA.
>
> While the Report does not directly provide an overall conclusion in line with the above audit objective, NOPSEMA notes the Report's summary statement 'Overall, NOPSEMA has appropriately integrated administrative arrangements for the new function of environmental management and has established a sound framework for the regulation of the offshore petroleum industry'.
>
> This summary statement is similar to that made in the Report of the *Second Triennial Review of the Operational Effectiveness of the National Offshore Petroleum Safety Authority* in November 2011 which stated as follows. "The period since the 2008 operational review of NOPSA has been one of consolidation, interspersed with ongoing legislative change, significant reviews and inquiries requiring resource intensive operational and policy responses. This year, NOPSA has had to plan and prepare for significant structural change with the passage of legislation to create NOPSEMA, which is to commence at the start of 2012. We have concluded that, notwithstanding these significant events and

26 ANAO, Designation Letter to NOPSEMA, 18 April 2013.

27 Section 695 of the *Offshore Petroleum and Greenhouse Gas Storage Act 2006*.

some recommendations for further improvement in our Report, NOPSA has firmly established itself as a respected and competent safety regulator among stakeholders and peers in both the domestic and international offshore petroleum and gas industry".

The ANAO's Performance Audit (conducted during the calendar years 2013 and 2014) immediately precedes the next Triennial Review which is scheduled to commence in 2014.

The ANAO Report points to a number of potential improvement areas which have either been addressed or will be considered as part of NOPSEMA's ongoing reviews of its policies and procedures.

As feedback on the conduct of the Performance Audit, it is suggested that the ANAO consider raising emerging issues or concerns during the progression of the audit rather than waiting until the last weeks of the audit. Such an approach would provide an opportunity to correct misunderstandings or errors of fact prior to the production of the ANAO's Issues Papers and might facilitate better learning opportunities for the audited agency.

A detailed response to the 3 Recommendations made in the Report are provided in Appendix 1.

ANAO comment

44. Over many years, the ANAO has developed and refined its knowledge of better practice regulatory approaches, as well as drawing from the experience of various reports in Australia and overseas.[28] For this audit, the ANAO applied considerable resources to developing a sound understanding of the regulatory framework applying to the offshore petroleum industry as administered by NOPSEMA. The fieldwork undertaken during the audit included the review of governance and regulatory documentation, consultation with NOPSEMA's stakeholders, a detailed analysis of 334 sampled regulatory actions and direct observations of the conduct of regulatory activities.

45. The audit conclusion, set out at paragraphs 20–26 of the report, appropriately addresses the audit's objective. In particular, the conclusion comments on the establishment of NOPSEMA and the arrangements it has

28 A revised and updated edition of the ANAO's *Administering Regulation* Better Practice Guide was issued in June 2014.

established to deliver its regulatory functions. The audit identified that there was scope to strengthen the Authority's management of business risks and performance measures. Further, the audit identified several areas for enhancing the effectiveness of NOPSEMA's regulatory activities, including taking into account the risk profile of individual facilities when developing its planned safety inspection program.

46. The ANAO's performance audits are intended to stimulate improved administration by public sector entities. The audit has highlighted that there is scope for NOPSEMA to improve its performance and achieve better outcomes consistent with its statutory objectives by strengthening elements of its governance arrangements and aspects of its regulatory functions. The recommendations in this report are directed to that end.

Recommendations

Recommendation No 1

Paragraph 2.73

To support the effective management of regulatory activities, the ANAO recommends that NOPSEMA strengthen its governance arrangements by:

- actively managing mitigation strategies for key business risks;
- developing relevant, reliable and complete key performance indicators and targets; and
- analysing and reporting against those indicators on the extent to which its objectives are being achieved.

NOPSEMA's response: *First part agreed and complete.*

Parts two and three are agreed in part.

Recommendation No 2

Paragraph 3.43

To help ensure that compliance activities are targeted to the areas of highest regulatory risk, the ANAO recommends that NOPSEMA develop its planned safety inspection program having regard to the risk profile of individual facilities.

NOPSEMA's response: *Agreed in part.*

Recommendation No 3

Paragraph 4.53

To better target the management of compliance, the ANAO recommends that NOPSEMA focus and prioritise its recommendations arising from inspections towards compliance related matters, while continuing to identify and monitor opportunities for better practice in its inspection reports.

NOPSEMA's response: *Agreed in part.*

Audit Findings

1. Introduction

This chapter outlines the legislative framework for Australian offshore petroleum industry regulation and the role of the National Offshore Petroleum Safety and Environmental Management Authority (NOPSEMA). The audit approach is also outlined.

Petroleum production

Global production

1.1 The supply of energy is a major contributor to continuing global economic growth. A key measure of energy supply is the availability of petroleum in the form of oil and gas. In 2012, world oil reserves were estimated to be 1.5 trillion barrels[29], with 86 million barrels of oil produced per day, an increase of 2.2 per cent from 2011.[30]

1.2 The process of extracting petroleum from under water or land involves exploration, drilling, construction, production and decommissioning phases. Petroleum projects are often undertaken in remote and challenging environments, in deep water involving high pressure and high temperature conditions. These projects are high cost and involve considerable commercial risks for petroleum companies, as well as risks to the safety of employees and the natural environment. Recent disasters in the world's petroleum fields, such as the Montara and Macondo incidents, emphasise the need for effective regulatory oversight.[31]

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29 Organization of the Petroleum Exporting Countries Share of World Crude Oil Reserves 2012. Available from <http://www.opec.org/opec_web/en/data_graphs/330.htm > [accessed 4 June 2014].

30 BP Statistical Review of World Energy 2013. Available from <http://www.bp.com/en/global/corporate/about-bp/statistical-review-of-world-energy-2013.html > [accessed 4 June 2014].

31 On 21 August 2009, the Montara Wellhead Platform in the Timor Sea experienced an uncontrolled release which continued until 3 November 2009. The affected area was estimated to be up to 90 000 square kilometres. This was considered to be Australia's most significant offshore petroleum incident. On 20 April 2010, the Deepwater Horizon drilling rig located in the Gulf of Mexico experienced an uncontrolled release following drilling of the Macondo well. The release triggered an explosion and fire causing 11 fatalities and spilling an estimated 4.9 million barrels of oil. Over one-third of US federal waters in the Gulf were closed to fishing during the incident. The release was contained on 15 July 2010. More recently, on 27 August 2012 two workers were fatally injured on the Stena Clyde mobile offshore drilling facility located in the Otway Basin off the Victorian coast.

Australian petroleum industry

1.3 Australia has a comparatively small petroleum industry, contributing half a per cent of the world's total production of crude oil in 2012. The industry is nonetheless significant in domestic terms and was estimated to have made a direct and indirect economic contribution of $28.3 billion in 2011 (about two per cent of the total market value of all goods and services produced).[32]

1.4 Approximately three-quarters of domestic petroleum production is sourced from Commonwealth waters adjacent to Western Australia (WA) in the Bonaparte and Carnarvon Basins. The Gippsland and Otway Basins off the Victorian coast accounts for the majority of the remaining production. In 2013, there were 149 facilities including 121 wells under Commonwealth regulation.[33]

1.5 Although domestic oil production has declined by 40 per cent since its peak in 2000, there has been rapid growth in gas production and major gas related offshore investments, particularly in liquefied natural gas (LNG) projects. These investments include the world's first floating LNG facility that is scheduled to commence operation in 2018 at a capital cost of $8.9 billion.[34] As projects reach full production, Australia is projected to become the world's second largest exporter of LNG behind Qatar. The economic contribution from the expansion of the LNG industry, driven by onshore and offshore gas projects, is estimated to reach $66 billion in 2020, representing about 3.5 per cent of the national economy.[35]

1.6 While acknowledging the economic returns from the petroleum industry, governments have also recognised the importance of an effective regulatory system to support safe and environmentally responsible activity. Key issues for the regulation of the offshore petroleum industry arise from the age of facilities, maturity of operators, use of new technologies, and workforce

32 Deloitte Access Economics, *Advancing Australia: Harnessing our comparative energy advantage*, Australian Petroleum Production and Exploration Association Limited, June 2012, p. i.

33 NOPSEMA, *Annual Offshore Performance Report: Regulatory information about the Australian offshore petroleum industry to 31 December 2013*, 2014, p. 9.

34 Deloitte Access Economics, *Advancing Australia: Harnessing our comparative energy advantage*, Australian Petroleum Production and Exploration Association Limited, June 2012, pps. 11 and 50.

35 ibid, p. i.

competency within a rapidly changing industry, all of which contribute to varying types and levels of risk.

Australian regulatory framework

1.7 Offshore petroleum industry regulation in Australia has evolved over time, largely in response to reviews of major incidents in Australia and overseas. Historically, regulatory functions were undertaken by state and the Northern Territory authorities.[36] In January 2005, responsibility for offshore occupational health and safety (OHS) regulation was consolidated into the National Offshore Petroleum Safety Authority (NOPSA), established by amendments to the *Petroleum (Submerged Lands) Act 1967*.

1.8 In August 2009, and following the release of two offshore petroleum reports[37], the then Minister for Resources and Energy announced an intention to expand the regulator's responsibilities to include well integrity. As a consequence, the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (OPGGS Act) was amended to give NOPSA responsibility for non-OHS structural integrity of facilities (including pipelines), wells and well-related equipment, effective from April 2011.

1.9 The Montara Commission of Inquiry (the Inquiry) in 2010 provided the stimulus for further reforms to offshore petroleum regulation. The Report of the Inquiry contained 100 findings and 105 recommendations.[38] A key recommendation related to the establishment of a single, independent regulatory body responsible for safety, well integrity and environmental management and to assume the functions of the state and Northern Territory authorities. The Australian Government's response to the inquiry provided the basis for regulatory reform, primarily legislated as a series of amendments to the OPGGS Act and Regulations.

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36 Regulatory activity was previously undertaken by Designated Authorities, which were departments of the states and the Northern Territory designated as responsible for the regulation of offshore petroleum facilities in state waters and, prior to 2005, in Commonwealth waters.

37 Those reports were: Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation Better Practice and the Effectiveness of the National Offshore Petroleum Safety Authority*, Department of Resources, Energy and Tourism, June 2009; and Bills, K and Agostini, D., *Offshore Petroleum Safety Regulation: Marine Issues*, Department of Resources, Energy and Tourism, 2009.

38 Commissioner Borthwick AO PSM, *Report of the Montara Commission of Inquiry*, Commonwealth of Australia, 2010.

1.10 On 24 November 2010, the then Minister for Resources and Energy tabled the Report of the Inquiry and the draft Government response, and announced the Government's intention to establish NOPSEMA as the national regulator for safety, well integrity and environmental management.[39] The establishment of NOPSEMA was legislated following amendments to the OPGGS Act, which were passed by the Parliament on 15 September 2011. The new legislative framework provided for the:

- regulation of petroleum exploration and extraction activities by NOPSEMA;
- oversight of NOPSEMA by an Advisory Board;
- granting of titles for petroleum exploration in Commonwealth waters to a Joint Authority[40]; and
- petroleum titles administration by the National Offshore Petroleum Titles Administrator (NOPTA).

National Offshore Petroleum Safety and Environmental Management Authority

1.11 NOPSEMA's mission is to 'independently and professionally regulate offshore safety, well integrity and environmental management', in pursuit of its vision of 'safe and environmentally responsible Australian offshore petroleum and greenhouse gas storage industries'.[41]

1.12 NOPSEMA's core functions relating to safety, integrity and environmental management activities include:

- developing and implementing effective monitoring and enforcement strategies to secure compliance with obligations under the Act and the regulations;
- investigating accidents, occurrences and circumstances in offshore petroleum operations;

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39 Commonwealth, *Parliamentary Debates*, House of Representatives, 24 November 2010, M Ferguson, Minister for Resources, Energy and Tourism.

40 The Joint Authority comprises the responsible Commonwealth Minister and the responsible state or Northern Territory Ministers, and may delegate any or all of its functions and powers to the respective Commonwealth, state or Northern Territory departments.

41 NOPSEMA, *Corporate Plan 2012–15*, 2012.

- reporting to the responsible Commonwealth Minister, and to state and Northern Territory Petroleum Ministers on those investigations;
- advising persons, either on its own initiative or on request, on matters relating to offshore petroleum operations; and
- cooperating with NOPTA, other Commonwealth agencies and state and Northern Territory authorities in relation to regulated operations.[42]

1.13 As required by the OPGGS Act, a NOPSEMA Advisory Board has been established to provide advice and strategic guidance to the CEO, the responsible Commonwealth Minister (currently the Minister for Industry) and state and Northern Territory Petroleum Ministers who are members of the Standing Council on Energy and Resources (SCER).[43] NOPSEMA is also required to report to the Commonwealth Minister and members of SCER on investigations.

1.14 NOPSEMA's executive management, corporate and the majority of its regulatory functions operate from its head office in Perth, which is in proximity to the majority of regulated petroleum activity adjacent to the coast of WA. Of the 112 total staff employed by NOPSEMA in December 2013, 106 staff were based in Perth. The remaining six staff were based in Melbourne in proximity to the regulated entities located on the Otway and Gippsland Basins in Victoria.

1.15 NOPSEMA is funded by industry on a cost recovery basis under the *Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Act 2003*. The system of levies covers regulatory activities, including the assessment of safety cases, well operations management plans and environment plans, and the conduct of investigations. In the 2012–13 financial year, $24.5 million in levies was received by NOPSEMA. Total revenue, including revenue from

42 In addition to these functions, NOPSEMA became: the administrator of petroleum safety zones; was provided the power to issue directions (and manage any existing directions given by the DAs); and was required to address certain other 'day to day operations' including the provision of inspectorial services for NOPTA.

43 SCER, which was established by the Council of Australian Governments (COAG), is responsible for nationally significant issues and key reforms related to the energy and resource sectors. Its membership comprises Commonwealth, state, territory and New Zealand Ministers with responsibility for energy and resource matters. SCER replaced the former Ministerial Council on Energy and the Ministerial Council on Mineral and Petroleum Resources in 2011.

government to fund capital and operating costs arising from the establishment of NOPSEMA, was $28.6 million.[44]

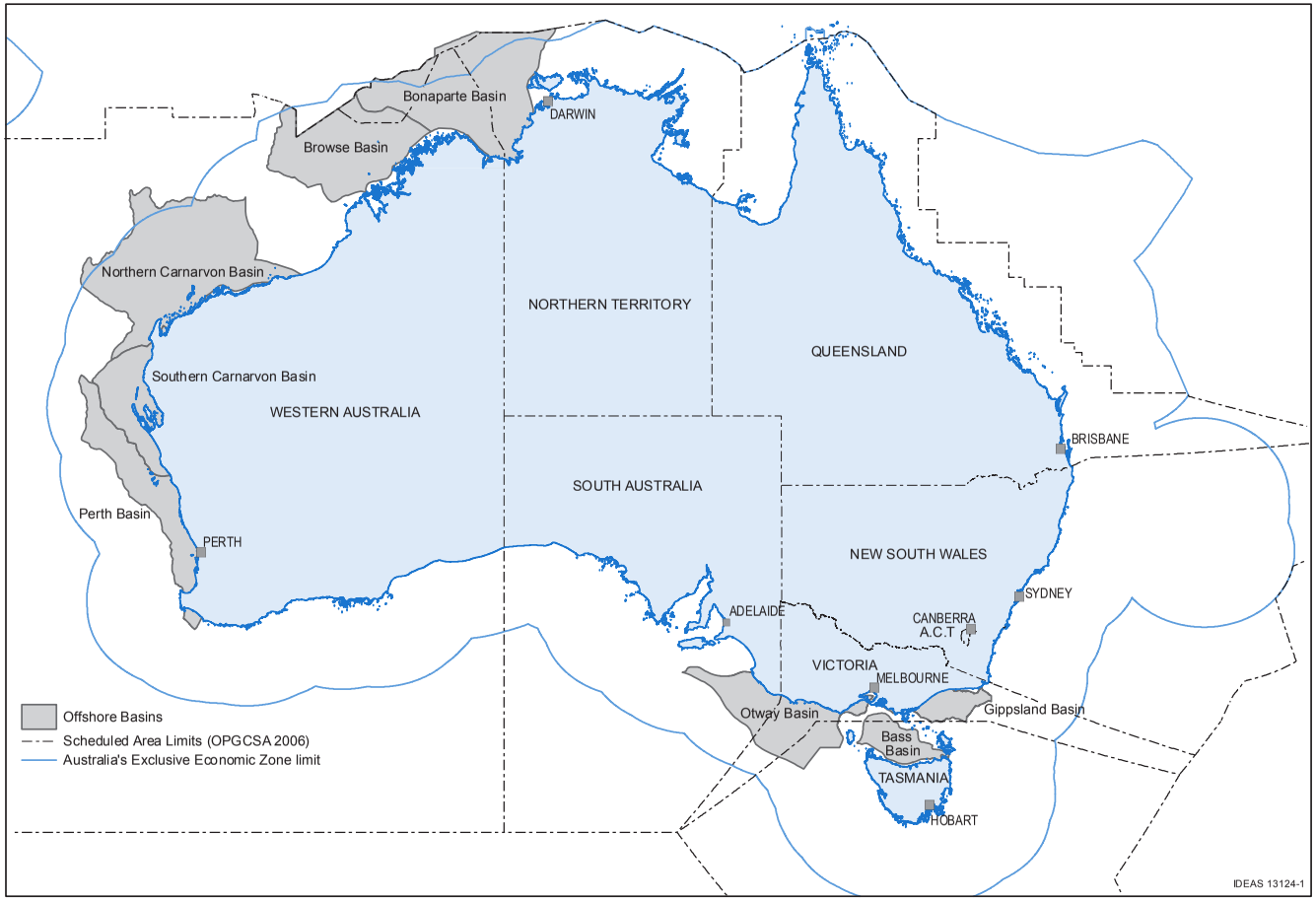
Jurisdictional coverage

1.16 NOPSEMA's jurisdiction covers Commonwealth waters extending from the three nautical mile limit of designated coastal waters to the 200 nautical mile limit of the Australian Exclusive Economic Zone (see Figure 1.1). Under the OPGGS Act, NOPSEMA's jurisdiction may also include designated coastal waters where a state or the Northern Territory Government has conferred regulatory functions. At 1 January 2013, the previous conferrals for OHS by the states and Northern Territory lapsed and by 2014, only Victoria had conferred its OHS and well integrity functions within designated coastal waters to NOPSEMA.[45]

44 NOPSEMA, *Annual Report 2012–13*, p. 53.

45 NOPSEMA's jurisdiction does not cover the petroleum operations in WA, NT and Tasmanian designated coastal waters. In 2013, there were no petroleum operations in Queensland, New South Wales and South Australian waters.

Figure 1.1: NOPSEMA's jurisdictional coverage



Source: Geoscience Australia.

Key areas of regulatory responsibility

1.17 NOPSEMA is responsible for regulating various duty holders[46] under the OPGGS Act, including: petroleum facility operators for safety regulation; well titleholders for well integrity regulation; operators of petroleum activities for environmental management and, to a lesser extent, operators of greenhouse gas storage activities.[47] The Authority's primary regulatory responsibilities focus on occupational health and safety, well integrity and environmental management.

Occupational health and safety

1.18 NOPSEMA's occupational health and safety responsibilities are designed to secure compliance by the operators of petroleum facilities to: reduce health and safety risks to acceptable levels; work towards improved health and safety outcomes; encourage an effective safety culture; and engage the workforce.[48] These compliance activities also include assessing the operator's safety management system and the management of its safety critical equipment.

Well integrity

1.19 Well integrity responsibilities include securing the compliance of well titleholders to maintain the structural integrity of facilities, wells, well related equipment and pipelines. These responsibilities also include the safety of well related activities, for example drilling, completion, re-completion, operation, testing, abandonment or suspension of a well.

Environmental management

1.20 The Authority's environmental management responsibilities are designed to ensure that operators of petroleum activities manage

46 Unless otherwise specified, the generic term 'operators' is used to denote duty holders in this report.

47 NOPSEMA is also responsible for the regulation of OHS matters, and the investigation of environmental incidents, in relation to greenhouse gas storage operations in Commonwealth waters. NOPSEMA is required to advise persons on request and assist the Minister with information and advice in relation to offshore greenhouse gas storage environmental management. As at April 2014, NOPSEMA has not performed functions in relation to greenhouse gas storage. The Environment Regulations stipulate the Commonwealth Minister as the environmental management regulator for greenhouse gas storage. Following amendments to the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* taking effect on 28 February 2014, 'titleholders' are responsible for compliance with Environment Regulations.

48 Facilities are categorised as pipelines, platforms, floating production storage and offloading vessels, floating storage vessels, and mobile offshore drilling units.

environmental risks consistent with the principles of ecologically sustainable development. Under the OPGGS Act, offshore petroleum environmental management includes planning for the remediation of environmental impacts by preparing oil spill response plans tailored to the particular petroleum activity being undertaken. Petroleum activities subject to environmental management regulation include drilling, seismic surveys, operation of petroleum pipelines, and construction, installation and operation of facilities.

1.21 NOPSEMA's safety, integrity and environmental management regulatory activities for 2013 are summarised in Table 1.1.

Table 1.1: Summary of NOPSEMA regulatory activities 2013

Activity	Safety	Integrity	Environment	Total
Assessments	160	119	120	399
Inspections	100	5	23	128
Incidents	371	-	206	577
Investigations	11	-	-	11
Enforcements	34	2	43	79
Total	**676**	**126**	**392**	**1194**

Source: NOPSEMA.

Approach to regulation

1.22 Australia adopted an objective regulatory regime for offshore petroleum regulation following the findings of Lord Cullen's public inquiry into the 1988 Piper Alpha disaster in the North Sea commissioned by the British Government. This approach to regulation defines requirements for industry in terms of principles or outcomes.[49] The onus is on the operator to identify and evaluate their risks and to demonstrate safe, effective and fit-for-purpose practices, that reduce those risks to as low as reasonably

49 The principles or goals-based objective regulatory regime can be contrasted against prescriptive regimes that prescribe requirements or standards for regulated entities to meet. The objective approach is also used to regulate the offshore petroleum industries in the United Kingdom, and also in Norway. A prescriptive regulatory regime is used to regulate the offshore petroleum industry in the United States.

practicable (ALARP).[50] The objective regime has applied to operators in Commonwealth waters since 1996.

1.23 NOPSEMA assesses whether the measures proposed by the operator are appropriate, and where accepted, monitors and enforces the operator's compliance with the agreed measures. Operators retain responsibility for ensuring that risks are reduced to ALARP. The Australian and United Kingdom Governments consider that the objective regime encourages flexibility and continuous improvement in operators' management of the risks arising from petroleum activities. This approach to regulation drives the particular compliance policies and activities of NOPSEMA.

Regulatory activities

1.24 NOPSEMA's regulatory activities commence with guidance to industry in relation to safety, well integrity and environmental management obligations. Guidance includes the publication of various NOPSEMA policies, guidelines and safety alerts, conducting workshops with industry and holding individual operator liaison meetings. Guidance is particularly important in an objective regime where detailed standards are not prescribed.

1.25 NOPSEMA subsequently undertakes assessments of key petroleum activity plans or 'permissioning documents' as outlined in Table 1.2. An approved permissioning document governs how the petroleum activities are to be conducted. It is an offence under the OPGGS Act to conduct petroleum activities without a permissioning document, or in contravention of a permissioning document, that has been accepted by NOPSEMA.[51]

50 A risk is considered as being ALARP if the cost of any reduction in that risk is grossly disproportionate to the benefit obtained from the reduction.

51 The requirement to have a current safety case to operate a facility is covered by ss 2.44 and 2.45 of the *Offshore Petroleum and Greenhouse Gas Storage (Safety) Regulations 2009*. The requirement to have a well operations management plan is covered by s 5.04 of the *Offshore Petroleum and Greenhouse Gas Storage (Resource Management and Administration) Regulations 2011*, while the requirement to have an environment plan is covered by s 6 of the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009*.

Table 1.2: Summary of functions, dutyholders and permissioning documents

Aspect	Safety	Integrity	Environment
Scope	People at facilities	Well integrity	Petroleum activities
Dutyholder[1]	Operator of facility	Titleholder	Operator[2] of petroleum activity
Permissioning documents	Safety case	Well operations management plan	Environment plan (including an oil spill contingency plan)

Source: NOPSEMA.

Note 1: The term 'operator' is used throughout this report to refer to the various dutyholders subject to regulations under the OPGGS Act.

Note 2: Following amendments to the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* taking effect on 28 February 2014, 'titleholders' are responsible for compliance with Environment Regulations.

1.26 NOPSEMA undertakes inspections of offshore facilities and onshore regulated premises to assess compliance with the accepted permissioning document, including general obligations under the Act and relevant Regulations. Safety and well integrity inspections are undertaken by OHS inspectors, while environmental management inspections are undertaken by petroleum project inspectors. Inspectors focus on the specific undertakings identified by operators in the permissioning document and make recommendations on areas for improvement.

1.27 Operators are required to immediately notify NOPSEMA of incidents at or near a facility that cause death or serious injury, as well as dangerous occurrences, such as fires, explosions, collisions of vessels, uncontrolled releases of petroleum and damage to safety-critical equipment.

1.28 NOPSEMA conducts investigations of serious incidents, such as death or serious injury, abandonment of a facility, dangerous occurrences that could have led to death or serious injury, and where there is suspicion of a significant lack of compliance with legislative requirements. Enforcement action may follow where non-compliance is identified. Enforcement action includes the issuing of improvement notices, prohibition notices, recommendations for prosecution and the withdrawal of permissioning documents.

Legislative coverage

1.29 The OPGGS Act intersects with other legislated regulatory regimes covering certain coastal water and onshore petroleum operations, non-petroleum related environmental management, maritime safety and onshore workplace health and safety. For example, state regulation of offshore petroleum activities exists alongside Commonwealth regulation and cover state waters where regulation has not been conferred on NOPSEMA under state law. To promote consistency in regulatory practice across jurisdictions, SCER has endorsed a Statement of Principles and a work plan to improve regulatory cooperation between Commonwealth, state and Northern Territory authorities.

1.30 Petroleum operators may be subject to dual approval processes in relation to environmental management. In addition to requiring environment plans in accordance with the OPGGS Act, operators require approval under the *Environmental Protections and Biodiversity Conservation Act 1999* (EPBC Act) for petroleum activities likely to have significant impact on areas of national environmental significance. On 28 February 2014, NOPSEMA was endorsed by the Minister for the Environment as the sole assessor for petroleum activities in Commonwealth waters under the EPBC Act. However, certain activities, such as those involving the Great Barrier Reef Marine Park, are excluded from this arrangement. In addition, some offshore petroleum activities may also require approval under the *Environment Protection (Sea Dumping) Act 1981*, the *Protection of the Sea (Prevention of Pollution from Ships) Act 1983* or other legislation.

1.31 The OPGGS Act also intersects with Commonwealth maritime law, principally the *Navigation Act 1912* and the *Occupational Health and Safety (Maritime Industry) Act 1993*. The point at which a floating petroleum facility transitions between the two regulatory regimes has been identified as an area for further clarification.[52] NOPSEMA, the Departments of Industry, and Infrastructure and Regional Development, and the Australian Maritime Safety Authority (AMSA) are working towards a legislative response to this issue.

52 Department of Resources, Energy and Tourism, *Final Government Response to the Report of the Montara Commission of Inquiry*, Commonwealth of Australia, 2011, p.11.

1.32 The nationally developed model for OHS legislation, the *Work Health and Safety Act 2011* and relevant Regulations, excludes petroleum facilities subject to the OPGGS Act. In 2009, the Workplace Relations Ministerial Council developed a framework for the harmonisation of OHS legislation, recognising that separate legislation may be warranted in certain circumstances.

Industry stakeholders

1.33 NOPSEMA has a number of formal and informal arrangements with various offshore petroleum industry stakeholders, including Australian Government departments, regulated entities, co-regulators, industry representative bodies and workforce representative groups. The Department of Industry is the primary Australian Government department with oversight of policy and legislation on the exploration and development of petroleum resources.[53] Australian Government co-regulators include AMSA and the Department of the Environment.

1.34 State and Northern Territory authorities were formally identified in legislation as the Designated Authorities of state waters. These include the Western Australian Department of Mines and Petroleum, the Northern Territory Department of Primary Industries, Fisheries and Mines, and the Victorian Department of State Development, Business and Innovation.

1.35 NOPSEMA also engages with overseas regulators through various international forums, including the International Regulators Forum, International Offshore Petroleum Environmental Regulators Forum, and the Australasian Environmental Law Enforcement and Regulators Network.

Recent developments

1.36 The offshore petroleum regulatory framework has been subject to a number of reviews in recent years, including two triennial reviews of the effectiveness of NOPSA and the Report of the Montara Commission of Inquiry. The findings from these reviews have informed the substantial program of legislative reform that has taken place since 2008 and the establishment of

53 The Department of Industry is also the Australian Government delegate of the Joint Authority. NOPTA, which is administered by the Department of Industry, is a technical adviser to the Joint Authority.

NOPSEMA. In addition to performing its regulatory functions, much of NOPSA and NOPSEMA's work has been focused on developing, implementing and consolidating change in accordance with the evolving legislative framework.

Operational reviews

1.37 Under s 695 of the OPGGS Act, the Minister is required to initiate operational reviews of the effectiveness of NOPSEMA (and its predecessor NOPSA) in bringing about improvements in offshore safety, structural integrity and environmental management. The first two reviews of NOPSA, were conducted on a triennial basis in 2008[54] and in 2011, during the time of NOPSA's transition to NOPSEMA.[55] The next review is scheduled to commence in 2014, after which future reviews will be conducted every five years.

1.38 The panel of the second triennial review concluded that 'NOPSA had firmly established itself as a respected and competent safety regulator' and made three findings and nine recommendations. Key recommendations related to the: identification of priority risks and causes; consistency in application of regulatory legislation and policies; and constructive engagement with industry and the offshore workforce. The Government accepted or accepted in-principle all recommendations.

Additional reviews

1.39 There have also been a number of additional reviews that have shaped the regulatory framework of the offshore petroleum industry, including:

- *Review of Regulatory Burden on the Upstream Petroleum (Oil and Gas) Sector*, 2009;
- *Offshore Petroleum Safety Regulation Varanus Island, Incident Investigation*, 2009;

54 Ognedal, M., Griffiths, D. and Lake, B., *Review of the National Offshore Petroleum Safety Authority Operational Activities; Report of the Independent Review Team*, Commonwealth of Australia, 2008.

55 Raper, C., Kantsler, A. and Stewart-Crompton, R., *Second Triennial Review of the Operational Effectiveness of the National Offshore Petroleum* Safety *Authority Report*, Commonwealth of Australia, November 2011.

- *Offshore Petroleum Safety Regulation Better Practice and the Effectiveness of the National Offshore Petroleum Safety Authority*, 2009;
- *Offshore Petroleum Safety Regulation: Marine Issues* 2009; and
- *Draft Strategic Assessment Report: Streamlining Offshore Petroleum Environmental Approvals*, November 2013.

1.40 As part of the implementation of the Australian Government's response to the Report of the Montara Commission of Inquiry in 2011, the then Department of Resources, Energy and Tourism (RET) conducted a review of legislation to strengthen aspects of the OPGGS Act. This review led to the legislative amendments discussed below.

Legislative amendments

1.41 Offshore petroleum regulation continues to be subject to legislative reform. On 28 February 2013, the Australian Parliament passed the *Offshore Petroleum and Green House Gas Storage Amendment (Compliance Measures) Act 2013*. This Act includes measures to:

- increase criminal penalties for certain safety and environmental offences;
- introduce a civil penalty regime into the OPGGS Act;
- streamline certain inspectorate functions and powers; and
- specifically enable offshore petroleum regulators and other relevant agencies to share regulatory information.

1.42 On 16 May 2013, the *Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013* was passed by Parliament. This Act provides for alternative enforcement mechanisms, including the application of the 'polluter pays' principle in the offshore petroleum regulatory regime.[56]

56 Most of the amendments to the two Acts come into force on the commencement of the Regulatory Powers (Standard Provisions) Bill, which was introduced into the House of Representatives on 20 March 2014.

1.43 On 28 February 2014, amendments to the *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* took effect, introducing requirements for offshore project proposal submissions and removing separate approval requirements under the EPBC Act for certain petroleum activities (as noted in paragraph 1.29).

Audit objective, criteria, scope and methodology

Objective

1.44 The objective of the audit was to assess the establishment of the National Offshore Petroleum Safety and Environmental Management Authority and the effectiveness of its regulatory function.

Criteria

1.45 To form a conclusion against this audit objective, the ANAO adopted the following high-level criteria:

- an appropriate governance framework to support effective regulation was established;
- compliance risk was adequately assessed;
- a compliance program to effectively communicate regulatory requirements to the petroleum industry and to monitor compliance with regulatory obligations was implemented; and
- arrangements to effectively manage non-compliance were in place.

Scope

1.46 The audit focuses on NOPSEMA's administration of regulation within the legislative framework in place to mid-2013. It is intended that this audit complements, rather than duplicates, the statutory triennial reviews of the operational effectiveness of NOPSEMA. The audit does not assess the operation of NOPSA, NOPSEMA's administration of the most recent series of legislative amendments, or the processes for the setting of levies.

Methodology

1.47 In undertaking the audit, the ANAO reviewed NOPSEMA documentation, including a sample of 334 compliance monitoring and enforcement actions during the Authority's first 15 months of operation.[57] NOPSEMA staff and relevant stakeholders, including co-regulators, and industry unions, were interviewed. Written feedback on NOPSEMA's approach to regulation was provided to the ANAO by 32 petroleum operators. The audit team also observed NOPSEMA officers undertake offshore and onshore compliance inspections.

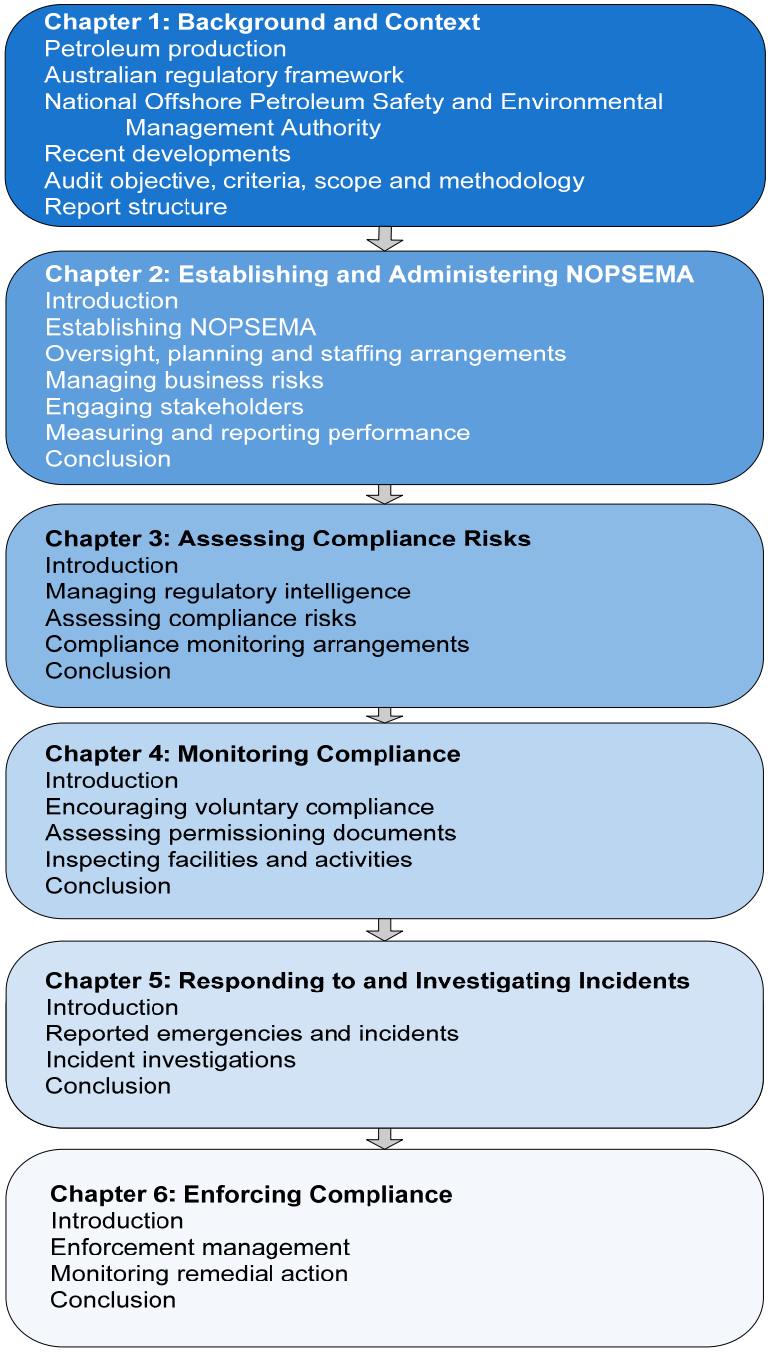
1.48 The audit has been conducted in accordance with the ANAO's Auditing Standards at a cost to the ANAO of $636 000.

Report structure

1.49 The structure of the report is outlined Figure 1.2.

57 The random stratified sample comprised of 20 per cent of NOPSEMA's assessments, inspections, and operator notifications of incidents, all completed investigations and 50 per cent of enforcement action between 1 January 2012 and 31 March 2013. A total of 358 cases were sampled of which 334 were reviewed. Of the selected sample, 24 cases were excluded from further analysis for various reasons, including developments in the cases after the sample was determined.

Figure 1.2: Report structure



2. Establishing and Administering NOPSEMA

This chapter examines the establishment of NOPSEMA and the governance arrangements in place to support the effective management of its regulatory responsibilities.

Introduction

2.1 The administration of regulation in a high risk, high cost and dynamic sector, such as the offshore petroleum industry, requires appropriate governance arrangements and practices that position the regulator to effectively manage the delivery of specialised regulatory activities. The ANAO examined the establishment of NOPSEMA, the integration of the new environmental management functions and the governance arrangements in place, including:

- oversight, planning and staffing;
- business risk management;
- stakeholder engagement; and
- performance measurement and reporting.

Establishing NOPSEMA

2.2 The legislation to establish NOPSEMA was introduced into Parliament on 25 May 2011 and was passed on 15 September 2011. Three and a half months later, NOPSEMA formally commenced operations. This was a challenging timeframe in which to establish the new regulator. NOPSEMA was established based on the existing governance framework that was in place for NOPSA, which was amended to include the well integrity function in November 2011. The establishment of NOPSEMA primarily focused on extending NOPSA's existing functions to include offshore petroleum environmental management.

Integration of environmental management

2.3 A primary objective of the establishment of NOPSEMA was the seamless transition of environmental management of offshore petroleum activities and day-to-day operations from the state and Northern Territory Designated Authorities (DAs) to the new national regulator. NOPSEMA informed the ANAO that its focus was on ensuring that there would be no regulatory vacuum during this transition period.

2.4 To help facilitate the transition to NOPSEMA, the former Ministerial Council on Mineral and Petroleum Resources agreed in February 2011 to set up a Working Group on Transition to New Offshore Petroleum Regulatory Arrangements. The Working Group, which comprised representatives from the then Department of Resources, Energy and Tourism (RET), DAs, NOPSA and Geoscience Australia, met on four occasions between March and July 2011.

2.5 The Working Group developed a cross-agency *Transition Framework* that included a schedule of tasks, a human resources strategy and process integration arrangements. It also reviewed the future roles of NOPSEMA, the National Offshore Petroleum Titles Administrator (NOPTA) and the Joint Authorities, the progress of the amendment bills, and the transfer of data. While acknowledging the establishment of the Working Group, NOPSEMA informed the ANAO that the Group did little to prepare the Authority for the expectations of industry and the poor standard of existing environment plans (EPs).

2.6 NOPSA prioritised integration activities into a transition phase which ended on 1 January 2012. Implementation, review and improvement phases were considered to be ongoing. The key tasks undertaken by NOPSA to establish the new organisation and implement environmental management included: clarifying the scope of new regulatory functions; recruitment of additional staff; updating systems, policies and procedures; and engaging with DAs and industry stakeholders. These tasks were outlined in the *Project Plan for Establishing Environmental Management Regulation within NOPSA* and included information on specific actions, priorities, responsibilities and milestones.

2.7 NOPSA's implementation of transition tasks was reviewed regularly at its internal management meetings, meetings between NOPSA and RET, and meetings of the Advisory Board. Overall, the strategies and approaches

implemented to integrate the environmental management function into the governance framework were appropriate.

Implementation of environmental management regulation

2.8 Implementing environmental management into NOPSEMA's core business required the Authority to build on the transition tasks and commence day-to-day environmental management regulation. On 1 January 2012, NOPSEMA received 123 EPs from the DAs, of which 55 were in force at that time.[58] By 24 February 2012, NOPSEMA had received 22 new EP submissions, including seven that were originally submitted to the DAs, but had not been assessed. While the regulator for environmental management had changed to NOPSEMA, the requirements of the regulations remained the same.

2.9 During the first few months of its operation of the new regulator, an expectation gap emerged between NOPSEMA and industry in relation to the manner in which environmental management would be regulated. Increasingly, operators encountered difficulties in preparing plans that met the regulator's requirements. Eighteen of the 22 EPs submitted to NOPSEMA for approval were deemed to contain insufficient information to be accepted and were returned to the operators to address deficiencies. In a number of cases, NOPSEMA issued a second request for further information. By mid-April 2012, NOPSEMA had refused to accept two EPs. The Authority's key concerns regarding EPs submitted at that time included:

- poor justification as to how operators would reduce risks to the environment to ALARP;
- poorly defined performance objectives and criteria as to how operators would meet the targets set in their EP; and
- insufficient consultation mechanisms for third parties, particularly in relation to oil spill contingency plans.

58 The 123 transferred EPs included 68 EPs for petroleum activities that had been completed by 1 January 2012, and 55 EPs for activities yet to commence or be completed. Under Part 5 of the Offshore Petroleum and Greenhouse Gas Act (Environment) Regulations 2009, EPs accepted by the DAs continue to remain in force under regulation by NOPSEMA. NOPSEMA's review of the inherited EPs is discussed in Chapter 4.

2.10 Operators provided feedback directly to NOPSEMA regarding the lack of clarity of regulatory requirements, in particular that the authority:

- rejected EPs for what operators considered relatively trivial and immaterial requirements;
- had 'raised the bar' and was insufficiently transparent in decision making;
- required an increasing range of activities to have an EP;
- had been inconsistent in its assessment of EPs; and
- had caused unreasonable delays in the commencement of projects due to the extended time taken for assessments.

2.11 Comments provided to the ANAO by operators as part of this audit reflected similar concerns. Most (27 of the 32 respondents) expressed concerns about an increase in the administrative burden, and that NOPSEMA was unable to provide clear advice on the intent of the regulations. Respondents considered that, under NOPSEMA, additional requirements for EP approvals had been established that necessitated providing additional information and resulted in numerous plan revisions. As a consequence, longer timeframes were required to gain approval, which incurred additional compliance costs. Similar concerns were raised about NOPSEMA's management of approvals for seismic surveys, in particular the perceived excessive requirements to gain approval, which did not appear to be commensurate with the scale of risk for the associated activity.

2.12 A period of adjustment by industry was to be expected, considering the inconsistent approach to regulation under the previous system of DA oversight, noted by the Montara Commission of Inquiry, and its specific criticism of 'minimalist' regulation.[59] NOPSA's discussions with DAs prior to the commencement of NOPSEMA indicated that, in general, EPs under the previous regulatory regime were not refused. In contrast, industry stakeholders were informed that NOPSEMA would be an active regulator, adhering to the legislative requirements for environmental management

59 Commissioner Borthwick AO PSM, *Report of the Montara Commission of Inquiry*, Commonwealth of Australia, 2010, pp. 6-20.

regulation, challenging operators in its assessment of EPs, and implementing a rigorous inspection program.

2.13 While recognising the need for a robust regulatory regime, there was scope for NOPSA, and its partner agencies that oversaw the transition process, to have better managed industry expectations. As the expectation gap in environmental management regulation became pronounced, NOPSEMA responded, principally through a more focused stakeholder engagement program (this program is examined at paragraph 2.47).

Integrating 'one' NOPSEMA

2.14 Although the Authority has been regulating environmental management for over two years, reviewed transitioned EPs (discussed further in Chapter 3), and incorporated the new function within its governance arrangements, it recognises that further work is required to promote a consistent approach to regulation across NOPSEMA's three functions. In December 2013, the Authority commenced a 'One NOPSEMA' project to promote a common approach to regulation, primarily in response to feedback from industry on the administration of the environmental management regulatory function.

2.15 As discussed in Chapter 6, the implementation of a common approach in relation to enforcement activity has been delayed pending legislative changes. Nevertheless, continued work towards a unified regulatory approach is an important part of building and maintaining a reputation as a consistent and effective regulator.

Oversight, planning and staffing arrangements

2.16 The effective discharge of NOPSEMA's regulatory responsibilities is reliant on appropriate oversight arrangements, including the Advisory Board and executive management, sound plans and guidance material, and a well-trained and suitably experienced workforce.

Authority oversight

Advisory Board

2.17 The NOPSEMA Advisory Board is responsible for advising the CEO, the relevant Commonwealth Minister, and members of the Standing Council on Energy and Resources (SCER) on offshore safety policy, strategy and

performance. The activities undertaken since the establishment of NOPSEMA indicate that the Advisory Board has performed its functions in accordance with its legislative mandate.

Executive management

2.18 The CEO is responsible for managing NOPSEMA and is required to inform, and consider the advice of, the Advisory Board, in relation to the operational policies and strategy. Three Senior Executive Service General Managers report directly to the CEO and are responsible for the Authority's core functions as heads of the Safety and Integrity Division, the Environmental Management Division, and the Investigation and Strategic Services Division. The organisation structure separates assessment and inspection activities from investigation and enforcement activities across the three main functions of safety, well integrity and environmental management. Managers with responsibility for corporate activities report directly to the CEO.

2.19 Executive management oversight is primarily delivered through the NOPSEMA Leadership Team, which meets fortnightly and comprises the CEO, General Managers, and the five corporate directors. Overall, NOPSEMA has in place an appropriate system of executive management oversight to support the administration of its corporate and regulatory activities.

Operational and governance committees

2.20 NOPSEMA's governance framework includes operational oversight committees subordinate to the leadership team, a series of internal policies and procedures, and a system of compliance assurance reviews. The internal management committees include the Safety and Integrity Division Team Managers, and the Environmental Leadership Team. These committees meet regularly and oversee much of the day-to-day regulatory activity.

Audit Committee

2.21 Audit Committees play an important role in an organisation's governance framework by providing independent assurance and advice to CEOs in relation to risk management, internal control, financial statements,

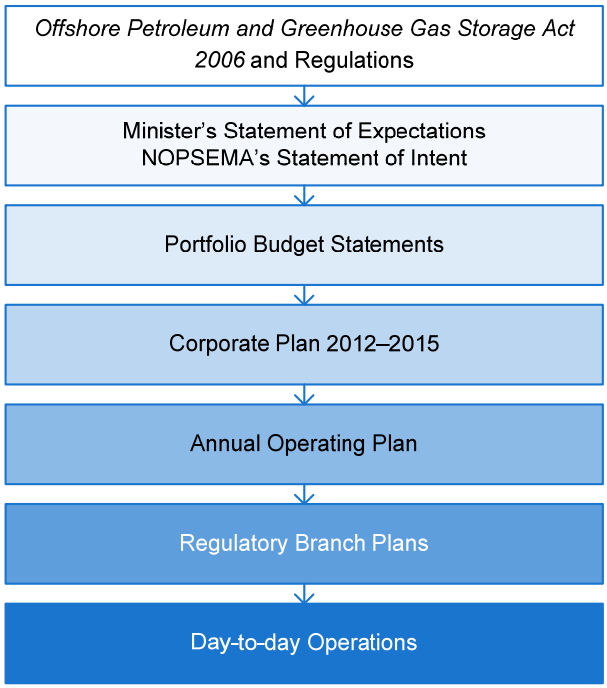
compliance requirements and internal and external audit.[60] The NOPSEMA Audit Committee did not meet in 2011–12 in accordance with its Charter. While a new Audit Committee was established in December 2013, the absence of a functioning committee over an extended period of time reduced the level of independent oversight of the Authority.

Planning and guidance materials

Strategic planning

2.22 NOPSEMA has developed strategic and operational planning documents to support the fulfilment of its mandate under the OPGGS Act. NOPSEMA's broad corporate planning framework is illustrated in Figure 2.1.

Figure 2.1: NOPSEMA's corporate planning framework



Source: ANAO analysis of NOPSEMA information.

60 NOPSEMA is a prescribed agency under the *Financial Management and Accountability Act 1997 (FMA Act)*. Section 46 of this Act provides that a Chief Executive must establish and maintain an audit committee with functions that include: helping the agency to comply with obligations under this Act, the regulations and Finance Minister's Orders; and providing a forum for communication between the Chief Executive, the senior managers of the agency and the internal and external auditors of the Agency; and that the committee must be constituted in accordance with the regulations (if any).

2.23 NOPSEMA has the following outcome which was outlined in the then Department of Resources, Energy and Tourism's 2013–14 Portfolio Budget Statements (PBS):

> Promote and enforce the effective management of risks to the workforce, the environment and the structural integrity of facilities, wells and well-related equipment of the Australian offshore petroleum and greenhouse gas storage industries through regulatory oversight.[61]

2.24 There is, however, limited alignment between the PBS outcome and the management objectives established in the Corporate Plan. The Plan covers the period 1 July 2012 to 30 June 2015 and is to be implemented through NOPSEMA's Annual Operating Plan for each financial year, and a series of sub-plans at the division level (discussed in Chapter 3). The Plan is aligned with the core legislated functions of NOPSEMA, the Minister's Statement of Expectations, and NOPSEMA's Statement of Intent.[62] The establishment and alignment of these plans helps to ensure that the separate areas within NOPSEMA are working in a coordinated manner towards its regulatory objectives. The regulatory elements of the corporate planning documents are not, however, directly aligned with NOPSEMA's regulatory outcome provided in the PBS. For example, there is a lack of alignment between the performance measures included in the Corporate Plan and those in the PBS relating to its regulatory activities.

Internal guidance materials

2.25 NOPSEMA's framework to manage and improve its operational policies and procedures is accredited as a Quality Management System (QMS) under AS/NZS ISO 9001:2008. The framework provides guidance on the key elements of a structured management system. NOPSEMA has over 390 internal documents, including policies, procedures, workflow diagrams, work instructions and forms.

2.26 As part of a QMS framework, a series of internal peer reviews are to be conducted in accordance with ISO 9001:2008 to confirm compliance with

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61 Department of Resources, Energy and Tourism, Portfolio Budget Statements 2013–14, p. 117.

62 The 2003 Review of the Corporate Governance of Statutory Authorities and Office Holders (Uhrig Review) recommended that Ministers issue Statements of Expectations to clearly articulate the Government's expectations, whilst respecting areas of independence of the Authority in accordance with legislation. The Authority is required to respond to the Minister with a Statement of Intent.

procedural requirements. The Chief Information Officer (CIO) is responsible for approving the annual schedule of reviews. Over the past two financial years, completed reviews have examined regulatory management documents relating to safety case assessments and inspections, and corporate management documents including aspects of human resources administration. Of the 111 recommendations arising from these reviews, as of January 2014, 52 had been closed. This includes four that were considered by NOPSEMA to be 'high risk' but were closed around 18 months after the recommendations were made.[63] There is scope for NOPSEMA to improve the timeliness of implementing the recommendations of these QMS reviews.

Staff capability

2.27 NOPSEMA inspectors often work in particularly challenging conditions having to negotiate a range of hazards on petroleum facilities while undertaking detailed and highly specialised regulatory work. Many regulatory staff have private sector oil and gas industry experience with qualifications in mechanical, chemical and marine engineering or environmental sciences.[64] In addition, inspectors are required to complete nationally recognised training to Certificate IV level in Statutory Compliance and Investigation. NOPSEMA maintains a Regulatory Competence Demonstration System to monitor the attainment and validity of requisite competencies.

2.28 Administering an objective regulatory regime requires a higher level of staff capability than a prescriptive regime, primarily because of the judgement to be exercised in assessing concepts such as ALARP under the legislation. In order to attract suitably qualified staff from Australia and overseas, NOPSEMA offers salaries and conditions that aim to be competitive with that offered by the petroleum industry. Each year NOPSEMA engages an external consultant to undertake a remuneration benchmarking exercise to help ensure that total salary packages offered are consistent with peer group organisations in the private sector. The 2013 benchmarking report analysed a matrix of roles

63 These recommendations related to the completion of administrative procedures for the receipt of submissions, the use of the RMS to capture regulatory intelligence, and procedures for tracking recommendations from inspections.

64 Requirements for working offshore include the completion of Basic Offshore Safety Induction and Emergency Training, Helicopter Underwater Escape Training, an aviation safety requirement for helicopter transit over water, and the attainment of a Maritime Security Card, as the facilities are classified as maritime security zones.

and disciplines to compare regulatory roles with frontline petroleum industry jobs. Salary levels are determined on the basis of the benchmarking analysis. Total remuneration packages for NOPSEMA regulatory staff are well above the Australian Public Service (APS) average.

2.29 Implementing industry competitive packages under the APS employment framework is challenging.[65] While NOPSEMA implements the APS Classification Rules in order to accommodate specialist requirements, key regulatory roles have been created to supplement APS classifications.[66] At 31 December 2013, 106 staff were engaged through Common Law Contracts, with 8 staff on Australian Workplace Agreements (excluding the CEO).

2.30 In 2012, NOPSEMA commenced a process to establish an Enterprise Agreement under the APS Bargaining Framework. However, the Authority was unable to demonstrate to the then Department of Finance and Deregulation (Finance) a business case for supporting a proposed package of remuneration and conditions outside government approved parameters. In assessing NOPSEMA's proposal, Finance noted that NOPSEMA is in direct competition with industry to attract skilled staff and that the Australian Public Service Commission may wish to consider the adequacy of the current bargaining framework for NOPSEMA and any agencies in a similar position.

Managing business risks

2.31 The importance of managing business risks is highlighted in the Minister's Statement of Expectations that requires the Authority to 'have in place a well-documented, systematic risk management framework to assist the identification, evaluation and mitigation of regulatory risks.

2.32 The aim of risk management is to inform organisational strategy and program implementation so that risks are dealt with to an acceptable degree of tolerance in the context of limited resources and a changing environment. The management of business risks that affect NOPSEMA's ability to effectively administer regulation is a key component of an effective governance

65 NOPSEMA does not have an Enterprise Agreement in place.

66 These include, Executive Level 1 Regulatory, Executive Level 1 Well Integrity, Executive Level 2 Lead, Executive Level 2 Regulatory Managers and Executive Level 2 Well Integrity.

framework. NOPSEMA's management of regulatory risks, those that decrease a regulated entity's ability or willingness to comply with regulatory requirements, are examined as part of the compliance monitoring strategy in Chapter 3.

2.33 NOPSEMA's risk management policy is based on ISO 31000:2009 (Risk Management). The associated risk management procedure details the activities NOPSEMA is to take to implement the policy and manage its risk exposure, including the establishment and maintenance of a risk register. The roles and responsibilities of NOPSEMA managers and risk owners include reviewing the risk register, policy and procedures.

2.34 The risk register is the Authority's principle tool for managing identified risks. As at May 2013, the register included 133 risks covering aspects of strategic, operational, business and regulatory activities. The register recorded risk mitigation strategies, the status of the implementation of controls and indicators to monitor controls. The general framework of the register is appropriate. There is scope, however, to more clearly define and link risks with regularly monitored mitigation strategies. As the register contains a mix of risk categories and individual risks, the links between NOPSEMA-wide and branch-specific risks are unclear. Of the 479 risk mitigation strategies listed, 366 were described as implemented, 98 partially implemented and 15 are to be determined. Some risk mitigating strategies are yet to be developed or are not monitored.

2.35 NOPSEMA's risk management procedures require staff to amend the entries in the register as risk profiles change and review the register on an annual basis. There was limited documentation to demonstrate that risks were reviewed on an annual basis. A QMS review of risk management was undertaken in May 2012. The report found that risks appeared to be considered extensively, but records of activity were 'insufficient to conclude that the activity is either regular or systematic'. Risks were subsequently reviewed by the Advisory Board in August 2012 and by NOPSEMA management in November 2013.

2.36 While an appropriate risk management framework has been established, the Authority's implementation of business risk management would benefit through active management of mitigation strategies for key business risks. This would better position NOPSEMA to appropriately identify and treat its key business risks and respond to the consequences of adverse

events. Probity risks, including conflicts of interest and fraud are examined below.

Managing probity

2.37 The management of probity is particularly important for NOPSEMA, given the number of regulatory decisions made and the potential for conflicts of interest through significant family and other relationships in the highly specialised petroleum industry. The management of conflicts of interest and the implementation of fraud control policies and procedures are key mechanisms for managing probity risks, including regulatory capture[67] and enhance credibility.

Conflicts of interest

2.38 NOPSEMA has established procedures to manage conflicts of interest and insider trading. All staff, on the commencement of employment and at the beginning of each financial year, are required to make a declaration relating to their personal circumstances. Completed declarations were retained in 59 of the 65 staff files reviewed by the ANAO.[68] NOPSEMA does not, however, track declarations on a register as required by its policy. There was also limited evidence to demonstrate that declarations were renewed on an annual basis.

2.39 NOPSEMA's procedures focus on financial considerations, such as the holding of shares or other financial products in resource companies and do not require significant family and other relationships to be considered as potential conflicts. There is scope for NOPSEMA to strengthen its management of conflicts of interest by: reviewing its procedures; actively monitoring declarations through the use of a register; broadening its coverage to include significant family or other relationships; and requiring declarations to be periodically updated. During the course of the audit, NOPSEMA informed the ANAO that that a new electronic process to renew declarations was introduced and the conflict of interest policy was updated in August 2013.

67 Regulatory capture occurs when an official inappropriately identifies with a regulated entity's interests rather than the public interest.

68 NOPSEMA did not retain a 'Declaration of no relevant interests' or a 'Declaration of Private Interests' for six staff members.

Fraud control

2.40 Fraud against the Commonwealth is defined in the Commonwealth Fraud Control Guidelines (Guidelines) as 'dishonestly obtaining a benefit, or causing a loss, by deception or other means'.[69] Actions required to mitigate fraud risk include regular fraud risk assessments, implementing a fraud control plan and providing fraud awareness guidance and training[70] to staff.

2.41 While NOPSEMA has not established a Fraud Control Plan, the Authority informed the ANAO that it sought to integrate fraud risk control into its business risk register.[71] However, risk management procedures make no reference to fraud, the risk register contains only one reference to an element of financial fraud, its review of fraud risk has not been documented and fraud awareness training is not provided. As such, the Authority's management of fraud risks does not clearly satisfy the mandatory requirements of the Commonwealth Fraud Control Guidelines. To improve its management of fraud risk, NOPSEMA has undertaken to conduct a review of its fraud control strategies.

2.42 Overall, NOPSEMA has developed a general framework for the management of business risks. However, these procedures, including the key elements of managing risks to probity and fraud, require further strengthening, to deliver effective and consistent oversight and treatment of business risks.

Engaging stakeholders

2.43 Stakeholder engagement that engenders trust while maintaining regulatory independence is a core feature of effective regulation, particularly in an objective regulatory regime that intersects with other jurisdictions.

69 All agencies and their employees subject to the *Financial Management and Accountability Act 1997* are required to comply with the Guidelines.

70 Fraud awareness guidance and training to include distribution of a fraud policy statement and conduct of fraud awareness training. Section 8 of the Commonwealth Fraud Control Guidelines 2011.

71 The establishment of a dedicated Fraud Control Plan is not a mandatory requirement.

Co-regulators

2.44 NOPSEMA is required to cooperate with other petroleum regulators, such as the NT Department of Regional Development, Primary Industry, Fisheries and Resources, as part of its statutory functions. The terms of cooperation are set out in a series of Memorandums of Understanding (MOUs) established by NOPSA with other regulators. The MOUs cover a range of matters, including arrangements for notifications, reporting, consultation, and summaries of operational functions under legislation.

2.45 An internal review of the MOUs in March 2013 found that many were redundant, required refreshing or should be subsumed into a general service charter. NOPSEMA is currently removing redundant MOUs and revising MOUs with those agencies that directly relate to its regulated functions.

2.46 NOPSEMA primarily engages with relevant regulators through ad hoc meetings with a range of agencies and regular meetings with the Department of Industry, the Australian Maritime Safety Authority and the WA Department of Mines and Petroleum to discuss aspects of offshore petroleum industry regulation.

Operator engagement

2.47 Operator engagement forms part of NOPSEMA's legislated function to promote the health and safety of personnel engaged in offshore petroleum operations and provide advice in relation to safety, integrity and environmental management. The principal means through which NOPSEMA engages with operators is through its program of planned inspections (discussed in Chapter 4). Other supporting engagement activities include industry workshops, presentations at conferences[72], operator liaison meetings, and publications, such as Safety Alerts and the *Regulator* bi-monthly newsletter.

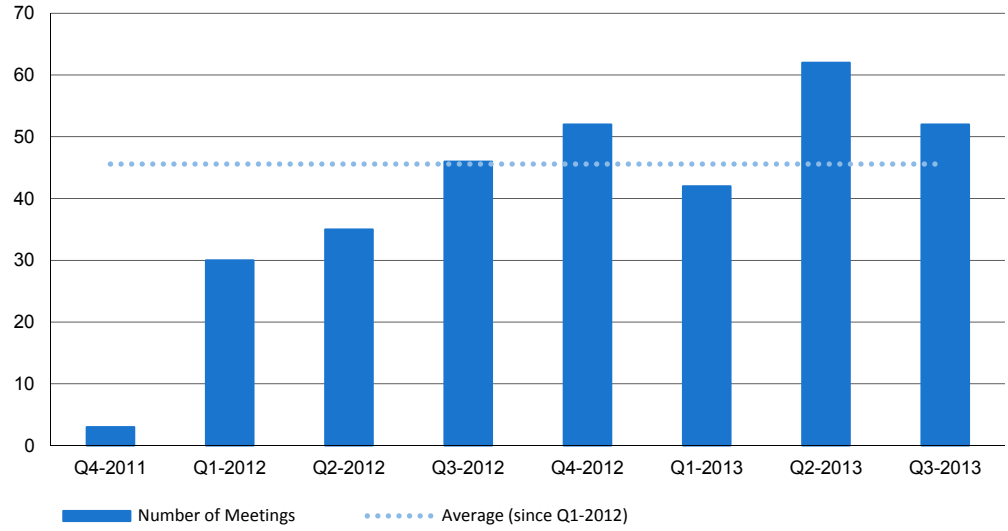
2.48 The majority of targeted face-to-face engagement with industry is undertaken through operator liaison meetings. These meetings are arranged by

72 Major forums attended by industry and regulators include the Australian Petroleum Production and Exploration Association Health Safety and Environment Conference, the International Regulators Forum, the International Offshore Petroleum Environment Regulators Forum and meetings of the International Association of Drilling Contractors, and the conference to mark the 25th anniversary of the Piper Alpha incident in the North Sea.

assessors and inspectors and cover aspects of regulation, including the outcomes of previous inspections, issues with submissions and the incident history of the operator. The Safety and Integrity Division has conducted over 200 liaison meetings each year over the past two years. The Environment Division conducts an average of around 180 liaison meetings each year.

2.49 In response to operator feedback on the environmental management regulation, NOPSEMA undertook to conduct an 'enhanced industry engagement and advisory program', through an increase in operator liaison meetings from early-2012 (see Figure 2.2). A key focus of these meetings related to the requirements for EPs.

Figure 2.2: Operator meetings—Environmental Management Division



Source: NOPSEMA.

2.50 Of the 32 operators that responded to the ANAO's request for comment on NOPSEMA's engagement with industry, 34 per cent (11 of 32 operators) positively commented on the clarity and usefulness of information communicated by the regulator. These respondents indicated that the guidance documents and information on NOPSEMA's website provided a useful explanation of the regulator's expectations. Some respondents expressed their appreciation for the positive and approachable nature of the Authority's personnel, especially when meeting in person or attending workshops. Other positive comments related to the value of liaison meetings and workshops in providing insights into the interpretation of regulations.

2.51 However, over 75 per cent of respondents (25 of 32 operators) indicated that feedback was not readily provided nor timely, it often lacked detail and that they were provided limited opportunities to seek further clarification. Operators considered that the perceived inconsistencies in advice and limited guidance from NOPSEMA has presented significant challenges for the industry and substantially increased their costs.

2.52 While NOPSEMA provides general advice on its interpretation of the regulations and discusses possible approaches, it does not endorse particular courses of action unless it is set out in detail in the context of a formal submission. Under the objective regime, it is the responsibility of operators to determine how they will manage their own particular risks to as low as reasonably practicable. NOPSEMA is cautious not to assume risk by suggesting or endorsing a course of action when providing advice to operators. While acknowledging the need to exercise care, there would, nonetheless, be merit in the Authority exploring further options to enhance the level of guidance it provides to industry regarding its requirements.

Measuring and reporting performance

2.53 A sound performance management framework facilitates internal management decision making as well as external accountability. Appropriate key performance indicators (KPIs) and reliable performance information form the basis of transparent and accountable management reporting.

Managing information

2.54 NOPSEMA maintains a custom built software application—Regulatory Management System (RMS)—to store, manage and report on its various regulatory activities. Information contained in RMS includes details of operators, facilities and titleholders, linked with information on specific regulatory activities conducted by NOPSEMA since 2005. The details of individual regulatory activities include relevant dates and details of current and previous assessments, inspections, incidents, investigations and enforcement action.

2.55 RMS is integrated with NOPSEMA's electronic documentation records management system—Objective—to enable users to electronically access key regulatory documents, such as inspection reports and operator incident notifications. The system also functions as a management tool to allocate work among staff and monitor progress against objectives.

2.56 The ANAO examined the integrity of the data held in RMS, focusing on system maintenance and data capture processes, the production of reports and the accuracy of reporting. While there were no major system issues identified, a number of areas for improvement relating to the ongoing management of RMS were identified, including:

- creating and maintaining appropriate RMS documentation that describes the system, its data structures, interfaces, responsibilities—would reduce NOPSEMA's heavy reliance on an external service provider for ongoing system development and support;
- standardising the most significant and frequent reports used in the RMS reports facility to reduce reliance on specialist data analysts;
- developing formally documented procedures for user access review, system development and change management; and
- identifying in the IT Disaster Recovery Plan RMS as a specific item.

2.57 In December 2013, NOPSEMA informed the ANAO that a number of operational and reporting enhancements to RMS are planned or are underway. Given the importance of RMS to the day-to-day management of regulatory activities and its use as the basis of performance reporting, enhancing RMS will better position the regulator to: manage the integrity of the data; maintain system capability; and help ensure the continuity of regulatory activities in the event of a technical disruption.

Monitoring performance

2.58 Well-defined performance information enables a regulator to measure, monitor and assess the impact of regulatory activities. Public performance reporting also assists the Government, Parliament and stakeholders to assess the effectiveness of the regulator in discharging its responsibilities.

Key performance indicators

2.59 KPIs are a central element of the Australian Government's performance measurement and reporting framework. Agencies are required to set out their outcomes(s), programs, expenses, deliverables and KPIs in their PBS.

To achieve its outcome, NOPSEMA has one program in its 2013–14 PBS:

> Regulatory oversight of Safety Cases, Well Operations Management Plans and Environmental Plans coupled with effective monitoring, investigation and enforcement.[73]

2.60 The program is supported by three objectives:

- safety, integrity and environmental management culture and compliance;
- high quality and rigorous safety cases, well operations management plans, environmental plans and diving project plans; and
- improved industry performance and reduced safety and environmental risks.

2.61 NOPSEMA's KPIs, as outlined in the PBS, are as follows:

- Maintenance of effective interaction with companies, workforce, stakeholders and other authorities through NOPSEMA's national program initiative, and participation in safety and environmental management events.
- Assessments of safety cases applications for authorisation to undertake well activities, well operations management plans and environment plans undertaken consistently and in accordance with legislative requirements.
- Inspections and investigations of accidents, dangerous occurrences and complaints, undertaken consistently and in accordance with legislative requirement and relevant Government standards.

2.62 Setting KPIs for offshore petroleum industry regulation is challenging given the relationship between the conduct of regulatory activities and their ultimate impact on industry outcomes in an objective regime. Notwithstanding these challenges, the current KPIs are predominantly focused on activities and legislative compliance and do not include performance targets. As such, the indicators provide limited insights into the extent to which NOPSEMA's objectives have been achieved.

Reporting performance

2.63 NOPSEMA produces a range of reports and briefs on its compliance activities for internal management and for performance monitoring by the

73 Department of Resources, Energy and Tourism, Portfolio Budget Statements 2013–14, p. 117.

Advisory Board, the Minister, members of SCER, industry stakeholders and the general public. NOPSEMA informed the ANAO that its three key performance reports are the *Annual Offshore Performance Report*, its Annual Report, and the Annual Review of the Cost Recovery Arrangements.

Annual Offshore Performance Report

2.64 The *Annual offshore performance report*, provides information about petroleum industry activity and regulatory activity. Key messages from the 2013 report include:

- the number of facility operators decreased (from 35 to 29), while well titleholders increased (from 26 to 28) and activity operators requiring EPs increased (from 36 to 42) from 2012 to 2013;
- total hours worked offshore by operators decreased by 16 per cent (from an historical high of 15.7 million in 2012 to 13.2 million in 2013);
- the rate of injuries per million hours worked offshore is the lowest on record;
- the rate of uncontrolled hydrocarbon releases increased since its lowest point in 2012;
- total submissions received was 428 (down from 537 in 2012) of which nine per cent were rejected or refused,
- total inspections conducted was 99 covering 156 facilities, titles, wells and petroleum activities; and
- a total of 79 enforcement actions were issued (compared with 69 in 2012).[74]

2.65 Other information covered in the *Annual offshore performance report*, includes data on dangerous occurrences, workforce complaints about operator practices received by NOPSEMA and NOPSEMA's assessment notification timeframes. The information in the Report, while comprehensive, predominantly focuses on the conduct of regulatory activities rather than measures against which the performance of the regulator can be assessed. As

74 NOPSEMA, *Annual offshore performance report: Regulatory information about the Australian offshore petroleum industry to 31 December 2013*, April 2014.

such, it is difficult for stakeholders to assess the extent to which NOPSEMA is achieving its objectives.

Annual reports

2.66 NOPSEMA's annual reports (2011–12 and 2012–13) provide 'traffic light' progress guides against performance measures linked to legislative requirements outlined in its Corporate Plan 2012–15.[75] Those measures include:

- agency resourced adequately with skilled professionals;
- assessment decisions within required timeframes; and
- compliance inspections meet annual targets.[76]

2.67 The traffic light guides on progress are categorised as 'completed', 'on track', 'on watch', 'remedial plans being developed'. The annual reports also contain data on regulatory activities and performance information in relation to the timeliness of assessments. This form of reporting does not, however, provide measurable or comparable information to access against performance targets. Further, annual reports do not directly report performance against NOPSEMA's PBS KPIs, which is a requirement of the annual reporting guidelines.

Annual Review of the Cost Recovery Arrangements

2.68 NOPSEMA's annual review of the cost recovery arrangements enables industry input into the determination of levies.[77] The report of the annual cost recovery review contains information on the level of regulatory activity, the allocation of staff time on regulatory, administrative and development work, and refers to the activity indicators published in the *Annual offshore performance report* and the Annual Report.[78]

2.69 There is scope for NOPSEMA to review and further develop its KPIs and report against them in its *Annual offshore performance report*, Annual Report and its review of cost recover arrangements. Reporting against relevant,

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75 NOPSEMA, *Annual Report 2011–12*, pp. 28-29, *Annual Report 2012–13*, pp. 26-27.

76 NOPSEMA, *Annual Report 2012–13*, p. 26.

77 A financial report on cost effectiveness is to be provided in accordance with Regulation 62 of the *Offshore Petroleum and Greenhouse Gas Storage (Regulatory Levies) Regulations 2004*.

78 NOPSEMA, Financial Report on Cost Effectiveness of NOPSEMA Operations *2011–12,* December 2012.

reliable and complete KPIs would enable NOPSEMA to better demonstrate the extent to which it is achieving regulatory objectives.

Conclusion

2.70 The transition from NOPSA to NOPSEMA as the national regulator for safety, well integrity and environmental management in Commonwealth waters was achieved in a compressed timeframe. The Authority appropriately integrated the administrative arrangements for the new function of environmental management into its broader governance framework. NOPSEMA and industry feedback on the implementation of the new function does, however, demonstrate an expectation gap in how the new regulatory responsibilities are to be administered. The emergence of this gap highlights the importance of ongoing engagement between the regulator and industry.

2.71 NOPSEMA has developed a large number of procedures for oversight, planning and staffing arrangements including systems to coordinate the work of senior managers through internal committees, business-focused strategies, and measures to address staff capability requirements. NOPSEMA's management of key business risks that have potential to affect its ability to administer regulation, while maturing, require further attention. Engagement with industry stakeholders while maintaining regulatory independence is a balance that continues to require careful management.

2.72 NOPSEMA produces a large number of reports for internal and external audiences, primarily focusing on the conduct of regulatory activities. The development, monitoring and reporting on KPIs that focus on the effectiveness of regulatory activities and their impact on industry, including performance targets and trend analysis, would provide a sound basis for assessing NOPSEMA's progress towards meeting its regulatory objectives.

Recommendation No.1

2.73 To support the effective management of regulatory activities, the ANAO recommends that NOPSEMA strengthen its governance arrangements by:

- actively managing mitigation strategies for key business risks;
- developing relevant, reliable and complete key performance indicators and targets; and

- analysing and reporting against those indicators on the extent to which its objectives are being achieved.

NOPSEMA's response:

2.74 *The first part of this Recommendation is agreed and is complete. Parts two and three are agreed in part.*

2.75 *In respect of the first part from this Recommendation, NOPSEMA has reviewed its existing risk management system against the elements of AS/NZ 15031000:2009 Risk Management Principles and Guidelines and confirmed that it is consistent with the principles of the guideline. However, consistent with continuous improvement principles, NOPSEMA will continue to refine and improve its risk management system.*

2.76 *In respect of parts two and three, NOPSEMA publishes the Annual Offshore Performance Report*[79] *(Performance Report) which provides a comprehensive overview of NOPSEMA's performance of its regulated obligations and more importantly allows the reader to determine if the offshore industry is becoming safer. Prior to this publication there was little or no information about the performance of the industry. (In the future, NOPSEMA will also trend the national environment management performance of the regulated industry).*

2.77 *NOPSEMA disagrees with the ANAO Report where it states that the Performance Report provides 'limited insights' into the extent to which NOPSEMA's objectives are being achieved. NOPSEMA acknowledges that demonstrating a link between the Regulator's actions and the performance of the industry it regulates is problematic, however the performance information published goes to the very purpose of NOPSEMA and of the expectations of the regulator as specified in the Minister's Statement of Expectations.*[80]

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79 http://www. nopsema.gov .a u/assets/Publications-2/ Annual-offshore-performance-report-2013-web.pdf

80 The following are the first two guiding principles for NOPSEMA from the Minister's Statement of Expectations:

1. *Promote and secure compliance by dutyholders with the regulatory regime through monitoring, enforcement and proactive engagement with stakeholders to:*
   - *Reduce the risk to human health and safety of persons engaged in offshore activities to as low as reasonably practicable;*
   - *Maintain the structural integrity of facilities (including pipelines), wells and well-related equipment; and*
   - *Reduce environmental risks and impacts from offshore activities.*
2. *Continue to improve health and safety outcomes in the offshore petroleum and greenhouse gas storage industries, by encouraging an effective safety culture, workforce involvement, and securing compliance with OH&S legislation.*

2.78 *The Performance Report also reports on NOPSEMA's fulfilment of its obligations including those where the regulations specify timeframes for completion of regulatory activities. NOPSEMA is committed to maintaining transparency in its regulatory functions and demonstrating improvements in efficiency and effectiveness.*

2.79 *NOPSEMA intends to continue to review the data that informs the Performance Report metrics and to examine that data for insights into emerging risk areas.*

2.80 *It should be noted that the Performance Report draws on data that the industry is required submit to NOPSEMA on a mandatory basis. Any increase in reporting obligations would represent additional regulatory burden.*

ANAO Comment

2.81 The ANAO recognises that NOPSEMA has established a business risk management system in line with risk management standards and, in November 2013, the Authority conducted a review of that system. However, the focus of part one of the Recommendation was on NOPSEMA's implementation of that system, particularly its development and monitoring of measures designed to mitigate the business risks identified (refer to paragraphs 2.34–2.36 of the report). Regular monitoring and review of risks and the active implementation of risk mitigation measures will better position the Authority to maintain consistent and effective regulatory activity.

2.82 The ANAO also notes that NOPSEMA produces a range of reports covering offshore petroleum industry activity and the conduct of its regulatory activities, including the *Annual Offshore Performance Report*. While the ANAO considers that the *Annual Offshore Performance Report* provides a broad range of information on the conduct of regulatory activities, the report does not present information against KPIs and targets to enable internal and external stakeholders to assess the performance of the regulator. In making this recommendation, the ANAO is seeking to encourage the development of relevant, reliable and complete key performance indicators and targets and reporting against these to inform Authority management and stakeholders on

the extent to which the Authority is achieving its regulatory objectives (refer to paragraphs 2.58–2.69 of the report).[81]

81 Where NOPSEMA is unable to identify more direct measures of the effectiveness of its regulatory performance, proxy or output level performance indicators are useful tools in supporting public accountability. Further information on the use of proxy measures is provided in ANAO Report No. 21 2013–14, *Pilot Project to Key Performance Indicators*.

3. Assessing Compliance Risks

This chapter examines NOPSEMA's regulatory intelligence capability, its assessment of compliance risks and its approach to compliance monitoring.

Introduction

3.1 An effective regulatory regime depends on the identification and assessment of the risks that regulated entities are not complying with legislative requirements and the development of appropriate strategies to address non-compliance. The ANAO examined NOPSEMA's:

- management of intelligence relating to offshore petroleum operators;
- use of intelligence to assess risk(s) of non-compliance; and
- approach used to target its compliance monitoring arrangements.

Managing regulatory intelligence

3.2 Information on regulated entities underpins the assessment of the risk of non-compliance and the development of a targeted compliance strategy. This information is particularly important for regulating the offshore petroleum industry because of the range of factors that can indicate whether operators, facilities or activities present a higher (or lower) risk of non-compliance. Such compliance information and intelligence would generally include:

- history of past performance, including:
  - the quality and timeliness of documents the operator provides for assessment and approval;
  - the performance achieved in the field in relation to the operator's environmental and other obligations; and
  - the responsiveness of the operator to matters raised by the regulator;
- risks inherent in their operations (such as drilling and diving activities); and

- any other factors that may indicate the likelihood they will be non-compliant and the potential consequences of their non-compliance.[82]

3.3 Regulatory intelligence can also be obtained from industry publications and forums, interactions with operators, discussions with other regulators, and observations of facilities and operator records during inspections. This information needs to be appropriately recorded, analysed and regularly reviewed to prioritise and target compliance activities.

Regulatory intelligence capability

Collecting information

3.4 As discussed in Chapter 2, NOPSEMA uses its RMS as its primary mechanism for storing data about each of its assessment, inspection, investigation and enforcement activities.[83] NOPSEMA considers RMS to be a unique and powerful aid to its administration of regulation, and inspection derived intelligence as the most important means of informing its monitoring of compliance. Data in RMS is linked with information held in the Authority's electronic file storage system 'Objective' and relates to petroleum facilities, operators, titleholders, and activities, including the history of regulated facilities, duty holders and incidents in the regime since the implementation of the system in 2009.[84] Staff also use RMS to access regulatory documents including submissions, reports, letters and forms.

3.5 Stakeholder engagement activities, particularly operator liaison meetings, are important sources of external information and may reveal useful intelligence about operator plans for high risk activities, shutdowns for maintenance, timing of seismic surveys or drilling activity. This type of information can be used to inform NOPSEMA's regulatory program, including the schedule of activities and specific items to be included in the scope of inspections.

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82 Noetic Solutions Pty Limited, *National Legislative Compliance Framework: Offshore Petroleum and Greenhouse Gas Storage Act 2006*, Report commissioned by the Upstream Petroleum and Geothermal Subcommittee of SCER, July 2011, pp. 19–20.

83 The new regulatory function of environmental management was incorporated into RMS as part of the establishment of the regulator.

84 Earlier regulatory information dating back to 2005, excluding certain information such as recommendations, has also been imported into the system.

3.6 Broader information about industry trends and lessons learned from major incidents is available from other forms of industry engagement, such as conferences, including the International Regulators Forum that meets formally on an annual basis[85], and through staff information sessions at NOPSEMA's head office. For example, following the 2009 Macondo incident in the Gulf of Mexico, NOPSEMA hosted lessons learned sessions for staff with international guest speakers.

3.7 NOPSEMA also encourages members of the offshore workforce to raise complaints about facility safety and environmental issues with facility management and safety committee representatives, rather than reporting their concerns directly to the Authority. It does, nonetheless, provide information in publications and on its website to facilitate the direct receipt of complaints via email and telephone. In 2012, NOPSEMA received 13 complaints, down from 24 in 2011, comprising six email complaints, three as anonymous telephone calls, two directly to safety inspectors and two via letter.[86]

3.8 Under the regulations an operator must inform NOPSEMA as soon as practical following the discovery of an incident or significant event.[87] Notifications of incidents received from operators, including accidents, dangerous occurrences and environmental reportable incidents, are retained in RMS and Objective. The Authority collates operators' monthly reports on environmental recordable incidents, with this information is stored on spreadsheets that contain links to the reports in Objective and other information in RMS.[88]

3.9 While a formal procedure on the collection and use of regulatory intelligence has not been established, NOPSEMA's analysis of past performance, inherent risks and other factors is principally based on inspection-derived information retained in RMS and intelligence sharing among regulatory staff. NOPSEMA's procedures require that regulatory intelligence, including incident data, is used to inform the implementation of

85 NOPSEMA hosted the 2013 International Regulators Forum in Perth.

86 Of the complaints raised in 2012, 12 related to safety, including workplace culture, working conditions and incidents, and one complaint related to a suspected environmental management incident.

87 *OPGGS (Safety) Regulations 2009*, Regulation 2.42; *OPGGS (Environment) Regulations 2009*, Regulation 26.

88 Reportable and recordable incidents are discussed further in Chapter 5.

regulatory activities, particularly inspections, operator liaison meetings and the development of its operating plan.

Storing and sharing intelligence

3.10 The regulatory intelligence captured and retained in RMS is used to inform the development of NOPSEMA's compliance approach and to manage the implementation of individual compliance activities. However, the use of RMS in relation to the types of information to be stored in the system is not fully supported by internal procedures. NOPSEMA's guidance procedures primarily focus on the means by which regulatory activities are to be undertaken rather than the nature and extent of recording the data captured through these activities in RMS. The absence of appropriate guidance to staff has resulted in inconsistent practices for recording regulatory information. In May 2013, regulatory staff were advised not to record notable issues arising from assessments and inspections due to uncertainty about the nature of the issues to be captured in RMS. NOPSEMA informed the ANAO that further advice to staff on the matter will be provided once procedures are amended.

3.11 In addition to RMS, NOPSEMA regulatory staff share operator information through internal committees and meetings led by inspection team leaders. The information shared through these forums is drawn from assessments of permissioning documents, inspections of offshore facilities and onshore regulated premises, operator liaison meetings, investigations and other operator related information in RMS. This information from stakeholder engagement and shared through staff forums is not, however, generally held in a central repository, such as RMS. The Second Triennial Review of the Operational Effectiveness of NOPSA noted that the Authority is 'in a position to make good evidence-based decisions about its strategic priorities' but 'could consider the potential for using its engagement with stakeholders over its policies and programs more effectively'.[89]

3.12 In September 2012, NOSPEMA considered developing a structured procedure to capture and share intelligence as part of the role of its Operational Strategy and Improvement Section. A proposal for a system to store additional intelligence from conferences, international accident

89 Raper, C., Kantsler, A. and Stewart-Crompton, R., *Second Triennial Review of the Operational Effectiveness of the National Offshore Petroleum* Safety *Authority Report*, Commonwealth of Australia, November 2011, p. 39.

information and safety alerts issued by overseas regulators was subsequently prepared. This system was not, however, implemented because it was considered that existing electronic file storage facilities were sufficient.

3.13 In general, NOPSEMA possesses the capability to capture and analyse core operator and activity specific regulatory information in RMS and Objective. NOPSEMA has, however, informed the ANAO that it is unconvinced of the need for a single procedure to govern the collection, retention and management of regulatory intelligence in RMS or the need to enhance systems to store intelligence currently retained outside of RMS. Notwithstanding this view, the ANAO considers that there is considerable merit in further developing guidance on intelligence collection and enhancing intelligence storage systems, particularly given that relevant intelligence may not have been captured for almost a year.

Assessing compliance risks

3.14 Regular monitoring of compliance risks, based on regulatory intelligence, enables regulators to adjust strategies, activities and enforcement action to reflect changing priorities. NOPSEMA identifies priority compliance risks as part of the development of its Annual Operating Plan (AOP).

Developing the Annual Operating Plan

3.15 NOPSEMA's procedures require an AOP to be developed each financial year in the context of the Authority's Corporate Plan 2012–2015. The AOP is to set out the regulatory and corporate activities NOPSEMA intends to undertake to monitor compliance.

3.16 NOPSEMA's 2013–14 AOP, which is presented in a tabular format over two pages, is structured to align with the Authority's strategic priorities, including the following compliance and enforcement focused priorities:

- securing compliance;
- investigating accidents, occurrences and incidents; and
- promoting safety, well integrity and environmental management.

3.17 Against these three strategic priorities, NOPSEMA has identified 15 activities, such as 'Expand investigation functions to incorporate environmental management incident processing and investigation' and 'Undertake early engagement safety case assessments with operators of proposed facilities'.

3.18 To measure the extent to which activities are completed, NOPSEMA has also established performance targets (target outputs) for each strategic priority. A number of the 16 performance targets established for the three compliance and enforcement focused priorities are clearly aligned to the relevant activities and are easily measured (see Table 3.1).

Table 3.1: Example of AOP activity and performance target

AOP Activity	Performance Target
Continue inspection program in respect of activity operator compliance with environment plans	25 inspections conducted against accepted environment plans

Source: NOPSEMA.

3.19 However, in a number of cases, the performance targets are not clearly aligned to a specific activity, do not establish a clear performance standard to be achieved or are not easily measured. The absence of relevant, reliable and complete performance targets for all activities makes it more difficult for the Authority to determine the extent to which AOP activities have been completed and compliance and enforcement objectives achieved.

3.20 In general, NOPSEMA has established appropriate procedures to develop its AOP, including appropriate input and oversight by senior managers. There would, however, be merit in the Authority reviewing the alignment and appropriateness of the performance targets used to measure the completion of its proposed activities established under the plan.

Using intelligence to assess compliance risk

3.21 A compliance framework based on an analysis of the likelihood and consequences of non-compliance by operators is fundamental to directing regulatory effort so that resources are efficiently allocated to areas of highest risk. The ANAO reviewed the extent to which NOPSEMA uses intelligence to inform its assessment of compliance risk in the development of its AOP.

3.22 In developing the 2013–14 AOP, an internal working group reviewed industry activity and trends, quality of permissioning documents, responsiveness to the regulator, potential new and expanded offshore projects and considered compliance challenges, including the enforceability of permissioning documents. The working group also examined intelligence on regulatory activity levels, petroleum facility and activity types, and incidents.

3.23 This documented process sets the parameters for the frequency and scope of inspections—the main areas where NOPSEMA has broadest discretion to target its compliance monitoring activities proportionate to the level of risk of non-compliance. In 2012–13, NOPSEMA undertook 183 inspections comprising of 163 safety inspections, four well integrity and 16 environment inspections.

Well integrity inspections

3.24 The AOP does not set targets for the frequency of well integrity inspections. According to NOPSEMA procedures, the selection of well integrity inspections is to include a consideration of titleholder and well activity risks in relation to individual wells and well related structures (see Table 3.2).

Table 3.2: Well integrity risk assessment factors

Titleholder Risks	Well Activity Risks
• Maturity • Organisation / resources • Activity level relative to resources • Regulatory performance history	• Activity / well type (routine versus novel) • Pressure regime (for example, underbalance versus over pressure) • Water depth • Complexity of well activity

Source: NOPSEMA.

3.25 NOPSEMA procedures provide staff with guidance on the determination of a score for each category of titleholder and well activity risk. The allocation of scores makes use of regulatory intelligence and, while aspects of the assessment are dependent on the judgement of staff, importantly, the rationale for each score is recorded. The scores are then ranked and inspections are prioritised according to compliance risk. These assessments are documented and updated on an ad hoc basis to take account of changed circumstances.

Environmental inspections

3.26 The 2013–14 AOP set a target of 25 inspections to be conducted against accepted environment plans over the year, based on estimations of regulatory effort. The program for environmental inspections is determined through an assessment of compliance risks similar to the process undertaken to prioritise well integrity inspections. NOPSEMA's procedures require staff to analyse intelligence, with risks subsequently ranked using a scoring methodology.[90] The score is used to determine the current and future year's inspection program. The matters considered by NOPSEMA when developing the inspection program are recorded. The program is also reviewed and updated each quarter.

Assessing transitioned environment plans

3.27 As outlined in Chapter 1, the responsibility for offshore environmental management was transferred from the state and territory DAs to NOPSEMA. Under the Regulations, EPs approved by DAs prior to this date were to remain in force.[91] However, if NOPSEMA does not consider that a transitioned EP meets the requirements under the legislation, it can request an operator to provide an updated EP for assessment.[92] Given the variable regulatory approaches of the DAs, NOPSEMA considered that in force transitioned EPs posed a particular risk of non-compliance and designed an assessment strategy to ensure their compliance while minimising disruption to the broader program of compliance activities.

3.28 After receiving the transitioned EPs from the DAs, NOPSEMA contacted operators in January and February 2013 to gain assurance that they were in possession of an EP for every active facility and operation. Transitioned EPs were then screened by NOPSEMA to determine the risk they presented and to test their content against legislative requirements. This screening took into consideration the approving DA, the location of the facility, the activities undertaken, the scope of the EP, the remaining duration of activity and the facility's compliance history.

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90 The environmental management risk ranking method includes consideration of past performance, environmental sensitivities and petroleum type.

91 *OPSSG (Environment) Regulations 2009*, Regulation 40(1).

92 *OPSSG (Environment) Regulations 2009*, Regulation 18(8) to (13).

3.29 In the context of resource constraints, a business case to engage consultants to conduct a detailed assessment of the transitioned plans against regulatory requirements was approved by the CEO in December 2012. Of the 55 EPs in force when transferred, over three quarters of those were identified as 'high risk'. As of February 2014, NOPSEMA had requested 42 revisions[93] to the transition EPs, while nine EPs had been resubmitted without a request and four related to activities that had been completed prior to the detailed assessment.[94]

3.30 NOPSEMA appropriately identified transitioned EPs as a regulatory risk. In undertaking a staged series of assessments, including initial testing, screening and detailed examination, NOPSEMA implemented a graduated risk-based approach to assessing this compliance risk and enforcing compliance in relation to the transitioned EPs. However, as discussed in Chapter 2, given the change in regulatory approach, there would be merit in continuing to prioritise stakeholder engagement in this area of compliance.

Safety inspections

3.31 In relation to the conduct of safety inspections, NOPSEMA considers normally attended[95] production facilities and drilling rigs as higher risk than other facilities, such as pipelines and seasonally attended facilities. The inspection frequency of pipelines is to be informed by a risk assessment based on the probability of people being at or near the pipeline. This assessment determines the target inspection frequency of once every two years or once every four years. While the inspection procedure provides an indicative consideration of risk in relation to operator maturity and facility complexity in determining the frequency of inspecting normally attended production facilities and drilling rigs, the minimum frequency for inspecting these facilities is twice per year.

93 If NOPSEMA was not satisfied with the EP following those requests, it could take enforcement action, including requesting a formal revision of the EP.

94 At February 2014, 23 revised transitioned EPs were under assessment.

95 Normally attended facilities are those that provide accommodation for the workforce during routine operations.

3.32 NOPSEMA's target of two inspections per annum for normally attended facilities was first adopted as part of NOPSA's 2010–11 AOP and continued for the three subsequent AOPs. Prior to the introduction of this approach, NOPSA had an annual target minimum of one inspection for each fixed, normally attended facility.

3.33 The rationale for the frequency of inspections has been subject to consideration in previous reviews of the regulator. As part of the inaugural NOPSA operational review, the Australian Petroleum Production and Exploration Association (APPEA) submitted that the goal of conducting two inspections per year of every normally attended facility 'does not seem to be in proportion to the risk on the facility'.[96] The 2008 report of the review noted a 'need for NOPSA to review the approach to assessment and inspections to identify the most appropriate risk indicators to ensure that the high risks are adequately assessed, trended, reported and acted on'.[97]

3.34 A further review of offshore petroleum safety regulation in 2009 considered the frequency of safety inspections and recommended that:

> NOPSA develop a robust risk assessment matrix for use in assessing and responding to the changing risk associated with each facility and the operator. Further, we recommend that NOPSA increase auditing frequency and duration to audit each manned facility on average twice per year (covering each staff swing), but more often if the risk matrix indicates this is necessary; and that audits should average several days actually on major facilities.[98]

3.35 While the 2011 Second Triennial Review did not make any recommendations in relation to the frequency of inspections, the APPEA submission to that review suggested, 'Rather than striving to cover all platforms twice each year, a more effective approach may be for NOPSA to adopt a more comprehensive, risk-based approach to inspections'.[99]

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96 APPEA, letter to the NOPSA review team, in Ognedal, M., Griffiths, D. and Lake, B, *Review of the National Offshore Petroleum Safety Authority Operational Activities February–March 2008*, Commonwealth of Australia 2008, p. 46.

97 Ognedal, M., Griffiths, D. and Lake, B, *Review of the National Offshore Petroleum Safety Authority Operational Activities February–March 2008*, Commonwealth of Australia 2008, p.4.

98 Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation Better practice and the effectiveness of the National Offshore Petroleum Safety Authority*, Commonwealth of Australia, June 2009, p. 54.

99 APPEA, letter to the NOPSA review team, in Raper, C., Kantsler, A. and Stewart-Crompton, R., *Second Triennial Review of the Operational Effectiveness of the National Offshore Petroleum Safety Authority Report*, Commonwealth of Australia, November 2011, Appendix 8, p. 5.

3.36 NOPSEMA does not assess the risk of non-compliance with safety requirements against the profile of each individual normally attended production facility and drilling rig. As a consequence, these facilities are subject to the same routine program of two inspections per year regardless of the number of previous incidents, issues identified at previous inspections, enforcement actions undertaken and other intelligence on the risk of future non-compliance determined by NOPSEMA. These matters are, however, to be considered by inspectors when developing the scope of individual inspections (discussed in Chapter 4).

3.37 The Authority informed the ANAO that it did not see merit in profiling individual normally attended production facilities and drilling rigs on the basis of safety risks. NOPSEMA considers that risk profiling normally attended facilities would not usefully inform the planning of regulatory activities. Notwithstanding this view, the ANAO considers that there are significant benefits to be derived from risk-profiling facilities. All facilities will have a level of residual risk, which cannot be eliminated through a risk targeted program. This does not, however, provide sufficient basis for treating high risk operators the same as those operators presenting a lower risk. This approach was supported by the National Commission Report to the President on the Macondo incident, which recommended that the Department of the Interior 'develop a proactive, risk-based performance approach specific to individual facilities, operations and environments'.[100]

3.38 The Montara Commission of Inquiry also supported the implementation of a systematic risk-based program of compliance assessment activities, enabling the regulator to target available resources at the highest priority regulatory risks.[101] More recently, the Productivity Commission's indicators of good regulatory practice include:

- inspections targeted on high risk areas of operation;
- low risk (low-impact/low-likelihood) businesses are not typically inspected;

100 National Commission on the BP Deepwater Horizon Oil Spill and Offshore Drilling, *Deep Water The Gulf Oil Disaster and the Future of Offshore Drilling Report to the President*, January 2011, p. 252.

101 Commissioner Borthwick AO PSM, *Report of the Montara Commission of Inquiry*, Commonwealth of Australia, 2010, p. 15.

- some inspections occur on a random or routine basis to test the risk based approach; and
- compliance history is taken into account, with compliant businesses visited less frequently.[102]

3.39 While there is a public expectation of a minimum level of inspections to ensure a base level of coverage of the residual risks of offshore petroleum activities, there is also a public expectation that regulators target their efforts towards operators and facilities presenting the highest regulatory risk so that limited resources are allocated in proportion to known risks. The inquiries into the Macondo and Montara incidents reinforce the value of risk-targeted regulation in the offshore petroleum industry. Although NOPSEMA's inspection planning recognises broad categories of risks, based on whether facilities are normally attended, without assessing the risk of individual facilities within this category, the Authority cannot demonstrate that it is appropriately targeting its regulatory effort.

Themed or topic based safety inspections

3.40 The inclusion of themes or special topics in the scope of individual inspections can enable regulators to review priority issues across the industry. NOPSEMA's AOP identifies priority topics for safety inspections of facilities over the financial year (see Table 3.3). Inspection teams are to consider these topics as part of the process of planning the inspection schedule.

102 Productivity Commission, *Regulator Audit Framework*, 2014, p. 24.

Table 3.3: NOPSEMA priority topics for inspection (by financial year) for the period 2011–12 to 2013–14

Financial Year	Priority Topics
2011–12	• ageing facilities • contractor management • emergency management • maintenance management
2012–13	• control of ignition sources—hazardous area equipment • emergency preparedness—emergency power generation • vessel and aircraft control—helicopter operations • maintenance management • primary cementation • titleholder and rig operator communication
2013–14	• hazardous area equipment • well control equipment • operator internal audit and performance standards • well barrier controls including capping capability and relief well drilling

Source: NOPSEMA.

3.41 The changing emphasis on priority topics reflects the evolving areas of concern to the regulator. Similar themed inspections are undertaken by other objective regulators such as the United Kingdom Health and Safety Executive and the Norwegian Petroleum Safety Authority.

3.42 NOPSEMA's approach to targeting well integrity and environment inspections appropriately takes into account the compliance risk posed by the individual wells and activities, supporting a targeted allocation of regulatory effort. There would be merit in NOPSEMA adopting a similar approach to determine its safety inspection program to help plan, resource and prioritise this regulatory effort to the areas of greatest compliance risk. An assessment of past performance and future risk exposure would help to direct greater regulatory coverage towards the most significant regulatory risks and potentially reduce the regulatory burden on compliant operators, while maintaining a minimum frequency of safety inspections for all facilities.

Recommendation No.2

3.43 To help ensure that compliance activities are targeted to the areas of highest regulatory risk, the ANAO recommends that NOPSEMA develop its planned safety inspection program having regard to the risk profile of individual facilities.

NOPSEMA's response:

3.44 *Agreed in part. NOPSEMA's risk based approach to planned OHS Inspections is contained in its published Inspection Policy.*[103] *This policy sets targets for minimum inspection frequencies for facility types based on the hazard presented by the type of operations coupled with the likelihood of multiple persons being harmed. The policy also describes the risk issues to be considered in framing the inspection scope for a particular facility. Inspection topic scopes for a facility may change on the basis of higher risk matters being discovered during the inspection.*

3.45 *The ANAO Report suggests that NOPSEMA should produce a formal risk matrix for each normally attended facility and then adjusts its inspection frequency on the basis of the relative risk ranking of each facility. The ANAO Report nevertheless also recognises the requirement to maintain a minimum frequency of safety inspections.*

3.46 *NOPSEMA maintains that its current inspection policy sets an appropriate risk based target of two inspections per annum for normally attended facilities as recommended in the Report Offshore Petroleum Safety Regulation Better practice and the effectiveness of the National Offshore Petroleum Safety Authority, Commonwealth of Australia, June 2009.*[104] *These facilities present the greatest potential for Major Accident Events (MAEs) and NOPSEMA inspections monitor operators' compliance with respect to the existence and efficacy of control measures for the prevention of each category of MAE. NOPSEMA does not believe that the burden on industry and the regulator of creating and maintaining a formal detailed risk ranking of facilities is warranted given that it is unlikely to result in any material reduction in inspection frequency for such major hazard facilities.*

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103 http://www.nopsema.gov.au/assets/Policies/N-02000-PL0025-0HS-Pianned-Inspection-Rev16-July-2013.pdf

104 Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation Better practice and the effectiveness of the National Offshore Petroleum Safety Authority*, Commonwealth of Australia, June 2009.

ANAO Comment

3.47 The Australian Government's deregulation agenda seeks to lower cost, simplify regulation, and promote the use of non-regulatory solutions where possible. The Productivity Commission, in its recently released Regulator Audit Framework, stated that the most important high level principle to minimise the cost of monitoring and compliance while achieving the objectives of the regulation is for the regulator to apply a risk-based and proportionate approach. In particular, the Commission recommends that, in conducting monitoring and compliance activities, inspections are targeted towards high risk areas of operation. The approach adopted by NOPSEMA, which involves normally attended facilities being inspected twice a year, does not recognise the benefits to be obtained from reducing the level of inspections for low risk facilities and increasing the number of inspections for high risk facilities (refer to paragraphs 3.31–3.39 of the report). The adoption of such an approach is common across a number of regulators subject to ANAO audit coverage and is compatible with maintaining a minimum inspection frequency for all facilities.

Compliance monitoring arrangements

3.48 While NOPSEMA has not established an overarching compliance monitoring strategy, elements of NOPSEMA's approach to monitoring compliance are included in its Management System Handbook, Corporate Plan, AOP, Enforcement Management Model (EMM), and Compliance and Enforcement Policy. In general, the documents outline high level objectives for regulatory activities, including compliance monitoring.[105]

3.49 The EMM and Compliance and Enforcement Policy includes more detailed compliance information, but at present focus solely on the safety function.[106] The Compliance and Enforcement Policy describes NOPSEMA's strategy to improve safety outcomes as:

105 For example, the Management System Handbook is a comprehensive guide to the Authority's role, legislated powers as the regulator, internal management systems and structured procedural framework for assessments, inspections, investigations and enforcements.

106 NOPSEMA has, however, informed the ANAO that the principles outlined in its EMM and Compliance and Enforcement Policy generally apply to the well integrity and environmental management functions. Furthermore, that the 'One NOPSEMA" project, commenced in December 2013, will require, where possible, all regulatory policies and procedures, which cover processes that are largely common to all regulatory divisions, to be drafted in a common overarching document.

- educating the offshore petroleum industry about its regulatory obligations through fostering a spirit of cooperative compliance with the legislation;
- assessing risks posed by non-compliance; and
- addressing risks posed by non-compliance, in a fair and consistent manner, and in proportion to the offence or non-compliance committed.

3.50 The EMM provides guidance for implementing compliance and enforcement actions, including measures to support fairness and consistency in decision making. NOPSEMA's graduated response to safety non-compliance is articulated in the EMM, which sets out measures to encourage voluntary compliance and enforce corrective action, proportionate to the risks presented. The EMM is examined in further detail in Chapter 6.

Conclusion

3.51 Areas for strengthening NOPSEMA's intelligence capability include developing an intelligence procedure that incorporates guidance for staff on the consistency in which operator information is to be captured in RMS, analysed and used, and developing processes to store and share intelligence, not currently captured in RMS.

3.52 NOPSEMA currently identifies priority compliance risks through the preparation of its AOP. The current AOP aligns the legislated obligations of the Authority with its regulatory activities and target outputs each financial year, consistent with the framework established in the triennial Corporate Plan. While, NOPSEMA's procedures for developing its AOP are generally appropriate, there is scope to incorporate measurable performance targets for all of its proposed compliance activities in future plans.

3.53 NOPSEMA's assessment of compliance risk is broadly informed by regulatory intelligence captured in RMS and the knowledge of regulatory staff. Compliance risks posed by individual wells and activities are considered appropriately, supporting a targeted allocation of regulatory effort. There would, however, be merit in NOPSEMA adopting a similar risk-based approach to determine its safety inspection program to help ensure that regulatory effort is directed towards facilities at greatest risk of non-compliance. The reduced regulatory impact of fewer inspections may

serve as an incentive for compliant operators as well as enable greater resources to be directed towards high risk operators.

3.54 While elements of NOPSEMA's compliance monitoring strategy are established in various governance documents, there would be benefit in the Authority developing a consolidated compliance monitoring strategy that covers safety, well integrity and environmental management. NOPSEMA has commenced a process to integrate high level policies across its three regulatory functions. A consolidated strategy would assist the Authority to clarify, in consultation with industry, the legislative basis for its regulatory activities, its risk-based approach, and mechanisms for stakeholder engagement.

4. Monitoring Compliance

This chapter examines the implementation of key elements of NOPSEMA's compliance monitoring arrangements, including encouraging voluntary compliance, assessing permissioning documents and inspecting offshore facilities and onshore regulated premises.

Introduction

4.1 The delivery of safe and environmentally responsible offshore petroleum activities depends on operators appropriately managing the risks associated with their activities in accordance with regulatory requirements, and NOPSEMA effectively monitoring compliance. The ANAO examined NOPSEMA's implementation of its primary regulatory activities as part of its graduated compliance approach, that of:

- encouraging voluntary compliance by communicating regulatory priorities and expectations;
- setting parameters for petroleum operations through the assessment of permissioning documents; and
- monitoring the compliance of operators by conducting inspections.

Encouraging voluntary compliance

4.2 Voluntary compliance helps reduce the effort required by both the operator and regulator in ensuring that petroleum activities are conducted in a safe and environmentally responsible manner, minimising the need for formal enforcement measures. NOPSEMA is required under the Act to encourage voluntary compliance by:

- promoting the occupational health and safety (OHS) of persons engaged in offshore petroleum operations or offshore greenhouse gas storage operations;

- advising persons, either on its own initiative or on request, on OHS matters relating to:
  - offshore petroleum operations or offshore greenhouse gas storage operations;
  - offshore petroleum environmental management; and
  - offshore greenhouse gas storage environmental management.[107]

4.3 NOPSEMA seeks to implement these requirements primarily through its inspection program and by providing guidance material and workshops with industry.[108] NOPSEMA's promotional and guidance work arising from inspections are discussed later in the chapter.

Providing guidance material

4.4 NOPSEMA produces and publishes on its website material to assist operators in complying with regulatory requirements. These materials provide information on NOPSEMA's assessment, inspection and investigations processes, reporting obligations, and advice on good practice. The material includes overarching policies as well as guidelines, guidance notes and information papers that provide more detailed information on legislative requirements.[109] The development of guidance material is informed by engagement with government and industry.[110]

4.5 NOPSEMA also publishes a bi-monthly online newsletter, *the Regulator*, which discusses industry trends, recent legislative developments, the Authority's key focus areas, upcoming events, as well as an overview of recent submissions for assessment. NOPSEMA has reported that subscriptions for *the Regulator* increased by 156 per cent (to 2839 subscribers) during 2012–13.[111]

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107 *Offshore Petroleum and Greenhouse Gas Storage (OPGGS) Act 2006*, Subsection 646.

108 Other forms of engagement with industry, such as operator liaison meetings, as discussed in Chapter 2, further encourage voluntary compliance.

109 As at January 2014, NOPSEMA had published 59 guidance and policy documents on its website.

110 For example, in March 2012 NOPSEMA sought input on a draft guidance note on oil spill contingency plans from nine key stakeholders, including: state regulators; the former Department of Resources, Energy and Tourism; the Australian Maritime Safety Authority; the Australian Marine Oil Spill Centre; and the industry peak body, the Australian Petroleum Production and Exploration Association. Notwithstanding the Authority's efforts to obtain stakeholder input into the development of the draft guidance note on this occasion, only four of the nine stakeholders provided a submission. This response rate may, however, indicate limited interest on this particular matter.

111 NOPSEMA, *Annual Report 2012–13*, p. 34.

4.6 As outlined earlier, the ANAO sought comment from operators on various aspects of NOPSEMA's performance. Of the small number of respondents that commented on NOPSEMA's guidance material, 50 per cent (3 of 6 operators) indicated that the guidance material was readily accessible and made a positive contribution to the compliance process. The remaining respondents, however, considered that the guidance materials provide limited information, and could be improved through the addition of further detail and a greater focus on floating facilities. It is important that NOPSEMA continues to engage with industry to identify any gaps in guidance material and to ensure that its existing guidance remains relevant and effectively promotes its regulatory objectives.

Conducting workshops

4.7 NOPSEMA conducts workshops and seminars that are designed to clarify the Authority's priorities, to promote industry compliance and to share lessons learned. The Second Triennial Review recommended that NOPSEMA further develop its engagement with stakeholders through workshops and forums, in conjunction with industry peak bodies, to provide additional guidance on regulatory requirements.

4.8 NOPSEMA conducted 12 workshops and one seminar during 2012, each with an average of 37 attendees. All workshops conducted in 2012 focused on environmental management, indicating a shift in focus from the previous year, where there was a spread across all regulatory functions. The workshops and seminars held in 2013 mainly focused on safety and environmental management (see Table 4.1). NOPSEMA informed the ANAO that its workshop topics are determined based on issues identified in assessments and inspections or legislative change that affects stakeholders.

Table 4.1: NOPSA/NOPSEMA workshops and seminars (2011–2013)

Function	2011	2012	2013
Safety	1	-	5
Well Integrity	2	-	1
Environmental Management	2	12	5
General	1	-	-
Total	**6**	**12**	**11**

Source: ANAO analysis of NOPSEMA information.

4.9 At the conclusion of each workshop, NOPSEMA collects feedback to gauge initial views on the usefulness of topics and themes, the clarity of the information provided, and suitability of presenters and venues. The initial feedback has been largely positive.

Assessing permissioning documents

4.10 NOPSEMA assesses permissioning documents to determine whether the operator has taken into consideration all practicable risk reduction measures relevant to the particular facility, activity or well that is under consideration. It is an offence for an operator to undertake petroleum activities without, or in contravention of, an accepted permissioning document. The core permissioning documents are outlined in Table 4.2.

Table 4.2: Permissioning documents assessed by NOPSEMA

Function	Assessable Documentation	Validity Period
Safety	Safety Cases	5 years[1]
	Statements/Scopes of Validation	No timeline provided in Safety Regulations (2.40)
	Diving submissions, including: • Diving Safety Management Plans (DSMP) • Diving Project Plans (DPP) • Diving Start-up Notices (DSN)	DSMP: 5 years[2] DPP, DSN: No timeline provided in Safety Regulations (Chapter 4)
	Petroleum Safety Zone (PSZ)	No timeline provided in the Act (616)
Well Integrity	Well Operations Management Plans	5 years[3]
	Applications for Approval to Undertake a Well Activity	No timeline provided in RMA Regulations (Part 5, Division 7)
Environmental Management	Environment Plans	5 years[4]

Source: *OPGGS Act 2006* and subordinate legislation.

Note 1: *OPGGS (Safety) Regulations 2009*, Regulation 2.32.

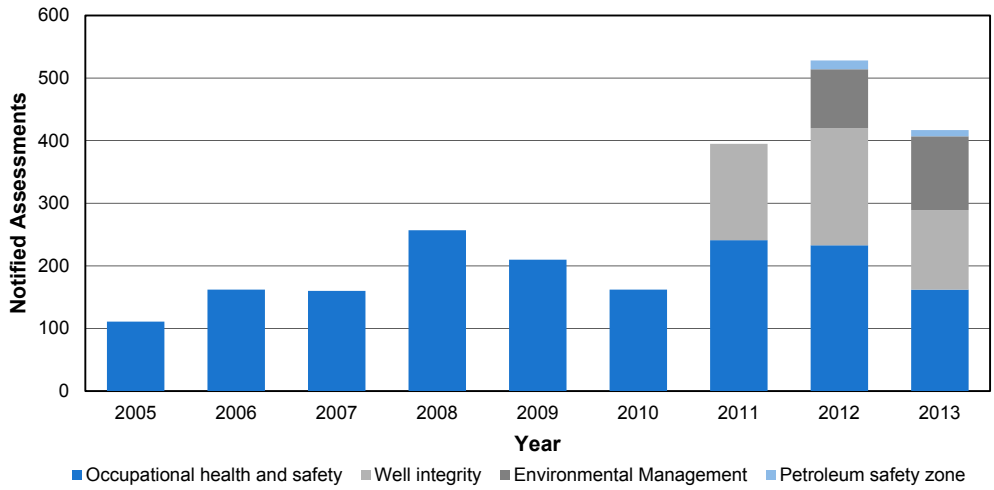
Note 2: *OPGGS (Safety) Regulations 2009*, Regulation 4.

Note 3: *OPGGS (Resource Management and Administration) Regulations 2011*, Regulation 5.17.

Note 4: *OPGGS (Environment) Regulations 2009*, Regulation 19.

4.11 The Authority's workload in relation to assessing permissioning documents has more than doubled over recent years from under 200 safety assessments in 2010 to over 500 safety, well integrity and environmental management assessments in 2012 (see Figure 4.1).

Figure 4.1: NOPSA/NOPSEMA completed assessments (2005–2013)



Source: NOPSEMA.

Assessment procedures

4.12 The assessment process is governed by legislation that sets out the requirements for permissioning documents and the timeframes within which NOPSEMA must complete its assessment.[112] To help ensure compliance with legislative requirements, internal policies and guidance procedures have been established by the Authority that are designed to promote consistent, transparent and systematic assessments for the safety, well integrity and environmental management functions. These policies and guidance materials address core legislative and regulatory requirements and include the Safety Case Assessment Standard Operating Procedure, Assessment

112 The Regulations outline timeframes within which NOPSEMA must complete its assessment of a submitted permissioning document. Revised safety cases, well operation management plans, and environment plans must be assessed and responded to within 30 working days, while new safety cases must be responded to within 90 days. Assessment of DSMPs must be completed within 60 days if new, or 28 days if revised.

Acceptance Conditions and Limitations Work Instruction, and Environment Plan Assessment Standard Operating Procedure.

Assessment outcomes

4.13 In the period from 1 January 2012 to 31 March 2013, NOPSEMA conducted a total of 605 assessments of permissioning documents. Of these, the ANAO reviewed the 113 finalised assessments (19 per cent) including 51 safety, 45 well integrity and 17 EP assessments.[113] This review examined the outcomes of assessments, timeliness in completing assessments and documented conformance with regulatory requirements and policies. A breakdown of the rate of acceptance and requests for further information/resubmissions in relation to these submissions is provided in Table 4.3.

Table 4.3: Summary of sampled assessment outcomes (January 2012–March 2013)

Function	Document	Sample	Accepted	*Rate of Acceptance (%)*
Safety	Safety Case	33	24	*73*
	Scope Of Validation	9	9	*100*
	Diving Start-Up Notice	8	6	*75*
	Diving Safety Management System	1	-	-
	Sub Total	**51**	**39**	***76***
Well Integrity	Well Operations Management Plan	10	10	*100*
	Well Activity	35	33	*94*
	Sub Total	**45**	**43**	***96***
Environmental Management	Environmental Plan	17	16	*94*
Total		**113**	**98**	***87***

Source: ANAO analysis of NOPSEMA information.

113 The ANAO sampled 129 assessments (21 per cent) but 16 assessments were not proceeded with or concluded at the time the sample was taken.

4.14 The overall acceptance rate for the sampled permissioning documents was 87 per cent, with 53 per cent of assessments including a request for further information or resubmission (see Table 4.4 on the following page).[114] Of the sample, EPs had the highest rate of deficiencies to be addressed during the assessment process (94 per cent).

4.15 The performance of operators in relation to environmental management assessments is consistent with comments provided by operators to the ANAO. Operators identified EP assessments as the area of greatest concern across all functions and regulatory activities. As previously noted, the timeliness, communication and consistency of EP assessments featured prominently in operator comments and the ANAO's analysis.

Timeliness of assessments

4.16 While it is important for regulators to obtain sufficient information on which to make sound regulatory decisions, additional requests have the potential to adversely affect the total duration of the assessment. The timeliness of NOPSEMA's assessment of permissioning documents is outlined in Table 4.4.

114 If a permissioning document is not accepted by NOPSEMA at the conclusion of the assessment process, an operator may accept the outcome, seek a formal review of the decision, or revise and resubmit the document as part of a new assessment process. As at February 2014, no operators have exercised the right to a merits or judicial review against NOPSEMA's decisions, either through the Fair Work Commission or the Federal Court.

Table 4.4: Legislated and observed timeframes for assessment

Permissioning Document	Sample Size	Assessment Requests for Further Information / Resubmissions	Average[1]	Legislated Assessment Timeframe (days)[2]	Average Assessment Timeframe (days)[3]	Assessments Outside Legislated Timeframe (days)	Average Total Timeframe (days)[4]
Safety							
Safety Case	9 (new)	5 (56%)	1.60	90 (new)	60.1	1 (11%)	75.8
	24 (revised)	17 (71%)	1.06	30 (revised)	36.6	14 (58%)	49.5
Statement of Validation	9	4 (44%)	2.50	Not legislated	17.4[5]	-	22.4
Diving Start-up Notice	8	-	-	Not legislated	10.9	-	10.9
Diving Safety Management Plan	1 (new)	-	-	60 (new) 28 (revised)	21.0	- -	21.0
Sub Total	**51**	**26 (51%)**	**1.38**	**-**	**33.3**	**15 (44%)**	**43.2**
Well Integrity							
Well Operations Management Plan	10	5 (50%)	1.00	30	18.4	-	20.2
Application for Approval to Undertake a Well Activity	35	14 (40%)	1.14	Not legislated	14.3	-	18.1
Sub Total	**45**	**19 (42%)**	**1.07**	**-**	**15.2**	**-**	**18.6**

Permissioning Document	Sample Size	Assessment Requests for Further Information / Resubmissions	Average[1]	Legislated Assessment Timeframe (days)[2]	Average Assessment Timeframe (days)[3]	Assessments Outside Legislated Timeframe (days)	Average Total Timeframe (days)[4]
Environmental Management							
Environment Plan	16 (new)	15 (94%)	1.53	30 (plus 2 x 30 days for resubmission)	53.8	2 (12%)	99.8
	1 (revised)	-	-		24.0		24.0
Sub Total	**17**	**15 (88%)**	**1.53**	**-**	**52.1**	**2 (12%)**	**95.4**
Total	**113**	**60 (53%)**	**1.33**	**-**	**28.9**	**17 (28%)**	**41.2**

Source: ANAO analysis of NOPSEMA information.

Note 1: The rate of requests for further information/notification of modification and resubmission per of assessment.

Note 2: *OPGGS (Safety) Regulations 2009*, Regulations 2.27, 2.34, 2.40, 4.5, 4.6; *OPGGS (Resource Management and Administration) Regulations 2011*, Regulations 5.06, 5.23; *OPSSG (Environment) Regulations 2009*, Regulation 10.

Note 3: Number of days the assessment and revised versions was with NOPSEMA, and does not include the time taken for operators to respond to requests for further information/resubmissions.

Note 4: Average total assessment timeframe between application received by NOPSEMA and the final decision provided to the operator.

Note 5: Documentation from one Statement of Validation was incomplete.

4.17 While NOPSEMA generally adheres to its own timeframes for undertaking assessments, average timeframes between submission and final acceptance of permissioning documents are longer due to the requests for further information/resubmission process. While it is important for the Authority to obtain all relevant information prior to finalising its assessments, the number of requests for further information or resubmission indicate that there is scope for the Authority to monitor this area and refine its guidance to industry where necessary.

4.18 Feedback from operators to the ANAO on the timeliness of NOPSEMA's assessments was variable. Of the 32 operators that responded to the ANAO, 18 commented on the time taken to complete assessments, with nine operators (50 per cent) expressing critical views of the Authority's timeliness and the total time taken from the first submission of documentation to receiving an outcome. These views primarily related to the time required to revise environment plans.

Communication during the assessment process

4.19 Providing appropriate feedback to operators on the outcome of assessments is an important part of encouraging voluntary compliance in the regulatory regime. Comments to the ANAO on NOPSEMA's communication during the assessment process were mixed. Of the 32 respondents, 10 of the 29 operators (34 per cent) commented on the quality of NOPSEMA's communication during the environment plan assessment process, with the other 56 per cent making more general comments about NOPSEMA's communications, as shown in Table 4.5.

Table 4.5: Stakeholder communication feedback

	Made Comment[1]	Agree		Neutral		Disagree	
		Count	%	Count	%	Count	%
Communication is timely	19	9	47	-	-	10	53
Communication is consistent	21	3	14	2	10	16	76
Communication is productive	22	5	23	11	50	6	27

Source: Stakeholder feedback provided to the ANAO.

Note 1: Not all 29 operators addressed each aspect of the communication process.

4.20 Comments in relation to the timeliness of NOPSEMA's action and the communication of expectations were expressed by operators, including:

> NOPSEMA provides a scope of work in a sufficient time frame to enable [operator] to plan for the site visit.
>
> * * *
>
> [Operator] has welcomed NOPSEMA's approach to flexibility in working with industry, and responding to changing business needs and priorities. Of note, NOPSEMA's reception of recent requests by [Operator] to prioritise work on EPs ... The negotiation over these prioritisations was in all instances businesslike prompt and effective ...
>
> * * *
>
> NOPSEMA has been unable to meet the review deadlines stated within the legislation and does not advise of possible delays until close to the end of the review period. This has resulted in cases where the inability to provide realistic availability dates to clients based on the review period... [and created] situations where delays of up to five months have been experienced with the potential for lost contracts and vessel operational days.
>
> * * *
>
> Many of the issues that NOPSEMA deem to make submissions unacceptable for approval are minor, documentation related and not of the nature and scale that should affect project approvals. The majority of such comments could have easily been resolved through upfront, direct and clear engagement by NOPSEMA. Each revision, however, results in considerable administrative cost burden on both NOPSEMA and the proponent.

4.21 NOPSEMA's communication of environmental management regulatory requirements was also considered by a consultant engaged by the Authority to review aspects of its assessment procedures.[115] The consultant observed:

> [Operator] questions are often answered with further questions, regulations are stated without interpretation, or points are elaborated in multiple speeches, by various assessment officers and the operator is left more confused following the session.

115 NOPSEMA contracted an external environmental specialist to review its assessment processes in response to concerns raised by an operator about the assessment of an environment plan. The referenced comment quotation is from the consultant's final report, provided to NOPSEMA in October 2013.

4.22 Given the extent to which additional requests for information are considered necessary by NOPSEMA, coupled with the concerns raised about communication in relation to EP assessments, there would be benefit in the Authority reviewing the appropriateness of existing guidance materials and communication practices. As there is a higher proportion of EP assessments subject to resubmission, appropriate guidance to industry on environmental management should remain a key focus.

Consistency in assessments

4.23 NOPSEMA has adopted a number of measures to support consistency in its assessments of permissioning documents, primarily through internal guidance procedures, templates, and mechanisms for senior staff review. The consistency of assessment outcomes, however, can be difficult to test because, to some degree, each permissioning document for a facility, well or activity is unique to the particular risks and the specific context of the operations being proposed.[116] Given the difficulties in comparing assessment outcomes, the ANAO examined NOPSEMA's documented consistency in applying core assessment policies and procedures with a particular focus on the sampled safety case and EP assessments.

4.24 Each safety case and EP assessment is to include records of the following core activities:

- description and justification of the scope of assessment;
- approval of the scope of the assessment;
- outcomes of general and scope assessments;
- findings against each of the applicable regulations; and
- review of the lead assessor's finding by a senior manager.

4.25 Of the 33 safety case assessments sampled, 30 included a description and justification for the scope of assessment. The records retained by NOPSEMA indicate that the other core activities were completed for all

116 Of the 32 respondents to the ANAO, 21 operators commented on the consistency of NOPSEMA's assessments, 16 of which raised concerns about inconsistent assessment outcomes. Of the 16 operators that raised inconsistency as an issue, six raised inconsistency in relation to EP assessments and one in relation to safety assessments. The remaining comments did not identify a particular function of NOPSEMA.

33 activities. In relation to the 17 EP assessments, NOPSEMA retained records to indicate that the required assessment activities were undertaken, including descriptions and justifications for the scope of assessment. The ANAO also examined NOPSEMA's adherence to other procedural requirements to support the assessment of the sampled permissioning documents and found a small number of minor inconsistencies.[117]

4.26 All safety case and EP assessments reviewed contained the required records of approval of the scope of the assessment, outcomes of general and scope assessments, findings against each of the applicable regulations and review of the lead assessor's finding by a senior manager.

Inspecting facilities and activities

4.27 Inspections of facilities and activities are undertaken at offshore facilities and onshore regulated business premises to help ensure that operators manage facilities, activities and wells in accordance with accepted permissioning documents and regulations to achieve safe and environmentally responsible outcomes. In addition to monitoring compliance, NOPSEMA considers its inspection program as its primary means of encouraging voluntary compliance.

4.28 All inspections are to be undertaken by at least two inspectors[118] and involve a series of meetings with the individuals responsible for implementing and maintaining control measures, reviewing the relevant records and information, and taking copies of this information where necessary. Safety and well integrity inspections are typically conducted at the offshore facility and involve observations and discussions at locations around the facility for up to four days. Environmental management inspections may be conducted offshore

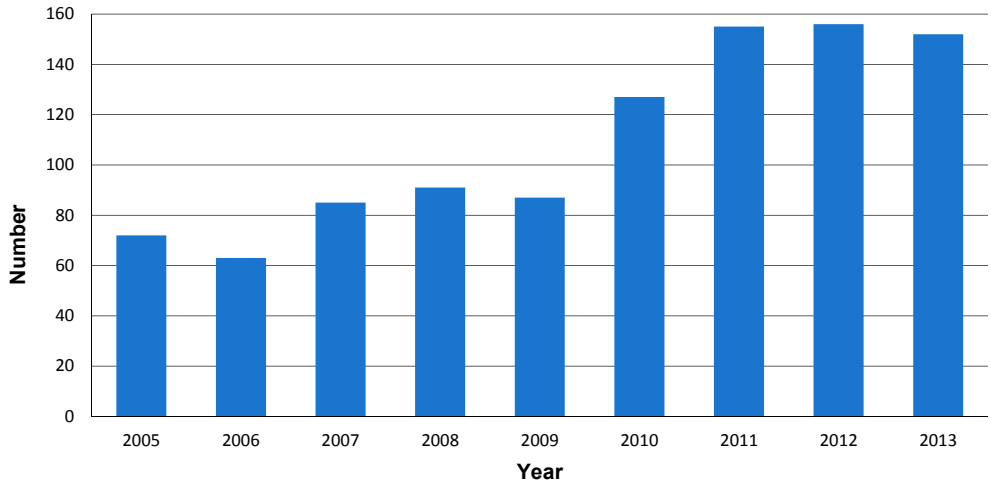
117 One permissioning document, a diving submission, had been incorrectly filed, creating difficulties for any subsequent review of the basis on which the assessment was undertaken. In 47 per cent (8 of 17) of environment plan submissions resubmission due dates, were not recorded. In 33 per cent (3 of 9) SoV assessments, evidence had not been retained to demonstrate assessment against legislative requirements. Quality assurance documentation for 17 per cent of assessments was incomplete prior to the introduction of a centralised tracking spreadsheet in September 2012.

118 Under the Act, safety inspections are conducted by OHS inspectors and environmental management inspections are undertaken by Petroleum Project Inspectors. Following the passage of the *Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures) Act 2013* in February 2013, the powers of safety and environmental management inspectors will be consolidated into a single title ('NOPSEMA inspector'). This change does not take effect until the Regulatory Powers (Standard Provisions) Bill receives Royal Assent. The Bill was introduced into the House of Representatives on 20 March 2014.

or onshore at an operator's premises for up to two days. The inspection process, including planning, undertaking the inspection and finalising the inspection report can take up to two months.

4.29 Over time, NOPSA's adoption of the twice per year inspection program for safety inspections since 2011 and the additional well integrity and environmental management inspections from 2011 and 2012 respectively, have led to an increase in the number of facilities, wells and activities inspected (see Figure 4.2).

Figure 4.2: NOPSA/NOPSEMA inspected facilities, wells and activities (2005–2013)



Source: NOPSEMA.

4.30 Both the number of inspections conducted and the number of inspected facilities, wells and activities have increased since 2011. As transitioned environment plans are reviewed and accepted, NOPSEMA expects the number of environmental management inspections to also increase. In the period from 1 January 2012 to 31 March 2013, NOPSEMA conducted a total of 170 inspections. Of these inspections, the ANAO reviewed 34 (20 per cent) including 25 safety, three well integrity and six environmental management inspections. The ANAO's review included the coverage of inspections, conformance with procedural requirements and NOPSEMA's monitoring of recommendations from inspections.

Inspection coverage

4.31 NOPSEMA's inspection programs allocate resourcing to the planned inspections for safety, well integrity and environmental management on an annual basis. As discussed in Chapter 3, intelligence and compliance risks are, to varying extents, taken into consideration when planning the program. Safety inspections for normally attended facilities are to be undertaken twice a year, other facilities annually or biannually, and well integrity and environmental management inspections are scheduled according to a compliance risk assessment of individual wells and activities.[119] The ANAO assessed the sampled inspections against NOPSEMA's frequency of inspections (see Table 4.6).

Table 4.6: Frequency of planned inspections

Function	Sample Size	First Inspection by NOPSEMA[1]	Average Days Since Previous Inspection	Range (days)	Facilities with 365+ Days Since Previous Inspection	
					Count	%
Safety	25	1	270	23–616	5	20
Well Integrity	3	3	-	-	-	-
Environmental Management	6	5	91	-	-	-
Total	**34**	**9**	**-**	**23–616**	**5**	**15**

Source: ANAO analysis of NOPSEMA information.

Note 1: Inspection where NOPSEMA has not previously inspected the facility/activity. These inspections were excluded from the calculation of the average days since previous inspection.

4.32 All 34 sampled inspections were undertaken in accordance with NOPSEMA's planned inspection program. Five facilities were inspected over one year since the previous inspection—three were pipelines and two were not normally attended facilities—which are required to be inspected once every one or two years.

4.33 In July and August 2013, the ANAO attended two planned safety inspections of offshore facilities to observe NOPSEMA's practical application of its compliance policies and procedures and operator responses. In particular, the ANAO witnessed the implementation of key inspection procedures including,

119 Pipelines are inspected either once every two or four years.

entry and exit meetings, meetings with Health and Safety Representatives (HSRs) and facility managers, reviews of operator documents and physical inspections of hazard controls and safety equipment. Also in September 2013, the ANAO attended two environmental management inspections at operators' onshore regulated premises, where similar inspection and document review procedures were observed. (Figure 4.3 shows NOPSEMA inspectors conducting offshore inspection activity).

Figure 4.3: NOPSEMA inspectors conducting an inspection

Source: ANAO attendance at NOPSEMA inspections, July and August 2013.

Conformance with procedural requirements

4.34 NOPSEMA generally allocated at least two inspectors per inspection and each inspection report was approved by a team leader. Once the inspection process has concluded, NOPSEMA procedures require lessons

learned to be reviewed and recorded by inspectors. However, as noted in Chapter 3, in May 2013 inspectors were directed not to complete this requirement because of inconsistent practices in capturing this information.

4.35 NOPSEMA's procedures require a final inspection report to be issued to the operator within 20–28 days of the inspection being conducted. The ANAO's examination found that the average timeframe for issuing a final report following an inspection was 47 days, as outlined in Table 4.7, with the longest time taken being 150 days.

Table 4.7: Average timeframe of key inspection milestones

Function	Sample Size	Target Timeframe (Days)	Average Report Issuing Timeframe (Days)	Median Report Issuing Timeframe (Days)	Reporting Issuing Date Range (Days)
Safety	25	20	42.6	32	6–132
Well Integrity	3	28	92.3	89	38–150
Environmental Management	5[1]	N/A[2]	42.0	34	22–76
Total	**33**	-	**47.0**	-	**6–150**

Source: ANAO analysis of NOPSEMA inspections.

Note 1: The date when one sampled report was issued was not evident from the Authority's records and as a result, it was not included in this analysis.

Note 2: No target timeframe specified in procedures.

4.36 Given the average days in excess of the target timeframe for issuing reports, there is scope for NOPSEMA to review the appropriateness of its inspection timeframes to provide a level of certainty to regulated entities and to guide Authority staff.

4.37 The ANAO's analysis of the 34 sampled inspections indicated that, generally, NOPSEMA had retained documentation to demonstrate that a formal response to each inspection report was provided by the operator. Of the 34 inspections sampled, six inspections were for the environmental management function. NOPSEMA procedures do not require responses to environmental inspection reports, although one response was received. For 26 of the remaining 28 inspections, NOPSEMA received the operator responses promptly. For two inspections, the final response from the operator was received six months after the inspection, after continued follow up by NOPSEMA.

Engagement with the workforce

4.38 While all offshore inspections include meetings with the operator staff, safety inspections may specifically include meetings with HSRs. The meetings are held to assess an operator's implementation of the requirement to consult with and enable the participation of the workforce, in relation to the risks and hazards on facilities. Meetings with HSRs also provide valuable regulatory intelligence regarding the operation of the facility.

4.39 The ANAO analysed the sampled safety inspection reports to assess the extent to which NOPSEMA met with HSRs and the outcome of those meetings. Of the 25 safety inspections sampled, 17 included documentation to evidence that a meeting with HSRs had been conducted, while the remaining eight included documentation noting that the meeting was not conducted because, at the time, no HSRs were available. In 16 of the inspections, a meeting with the HSRs was specified in the inspection scope. Where meetings with HSRs were conducted, on average, three HSRs were in attendance with the number of attendees ranging from one–11. Of the 17 inspections that involved meetings with HSRs, four recommendations were made to operators in relation to the role of HSRs.[120]

4.40 Overall, NOPSEMA's planned inspections are generally implemented in line with its compliance program and core policies and procedures. There is, however, scope for NOPSEMA to review its target timeframes for completing inspection activities, given the delays in issuing safety and well integrity inspection reports for sampled inspections.

Monitoring recommendations from inspections

4.41 Inspection reports typically include recommendations to advise of better practice, promote compliance or to address compliance related matters as a precursor to enforcement action. Operators are required to provide their proposed course of action in response to the conclusions and recommendations contained in inspection reports, but are not compelled to implement recommendations.[121] If an operator does not implement a

120 These recommendations included: ensuring a list of HSRs, and minutes from HRS meetings, are posted throughout the facility; ensuring clear reporting channels between the HRS and facility management are in place; and ensuring adequate hydration is made available to workers.

121 Clause 80(4), Schedule 3, OPGGS Act.

recommendation within an agreed period (typically by the next inspection), the recommendation will likely be held open and followed up at the next inspection.

4.42 In 2013, NOPSEMA undertook 128 inspections of 151 facilities, wells and activities and made a total of 1537 recommendations. The total number of recommendations per year has been consistently above 1400 since NOPSA increased the number of safety inspections in 2010–11. The rate of recommendations per inspection reached a peak of 11.5 in 2010 and has since remained steady at around 10 per inspection.

4.43 Of the 34 inspections between 1 January 2012 and 31 March 2013 sampled by the ANAO, a total of 450 new recommendations were made, while 198 recommendations remained open. The age of open recommendations varied from 91 days to 1638—or over four years.[122] The number of recommendations made for individual facilities can also vary considerably. Of the sampled safety inspections, the number of open recommendations ranged from 0–33 days, and the number of new recommendations range 5–37 days. The outcomes from the sampled inspections are presented in Table 4.8.

Table 4.8: Summary of sampled inspection outcomes

		Safety	Well Integrity	Environmental Management	Total
Sample Size	First Inspection	1	3	5	**9**
	Follow up inspections	24	-	1	**25**
Open Recommendations	Average number	9	-	-	**9**
	Average Age (days)	483.7	-	-	**483.7**
	Age Range (days)	91–1638	-	-	**91–1638**
New Recommendations	Average number	16.2	3.7	5.7	**13.2**
	Number range	5–37	3–5	0–22	**0–37**

Source: ANAO analysis of NOPSEMA information.

122 Recommendations remain 'open' when a facility leaves the Australian waters. It may be some years until a facility returns to the regime following a period of absence.

4.44 There is no automatic trigger for enforcement action if an operator does not implement a recommendation. Where recommendations are not implemented, inspectors may consider possible enforcement action or whether to keep the recommendation open, having regard to:

- the extent of progress the operator has made towards the implementation of the recommendation;
- the level of the outstanding risk; and
- if the compliance objective has been achieved by other means.

4.45 The extent to which recommendations are implemented can be influenced by the experience of the operator within the regulatory regime, the level of cooperation and support provided by the operator during the inspection and the level of importance that operators place on the recommendations.[123] Operators may not always respond to recommendations as intended. For example, after a number of inspections at a particular facility, an inspection report noted the following:

> [The operator] is using NOPSEMA planned inspections in the same way they would use a 3rd party audit and inspection supplier. This is not in the spirit of the Act or Regulations and is to be discouraged. [The operator] should ensure that the commitments made in the facility safety case are complied with and that systems and processes allow for proactive identification and management of hazards.

4.46 NOPSEMA does not rank recommendations in order of priority for each facility. Further, apart from its individual inspection activity, NOPSEMA does not monitor the implementation of the recommendations by the industry as a whole, for example by examining the average time taken by operators to implement recommendations, or analysing the number and nature of recommendations being made.

123 In relation to the two inspections observed by the ANAO, one operator dedicated an onshore staff member to accompany the NOPSEMA inspectors and support the inspection process by following up on matters as they arose during the course of the inspection. By contrast, in the other inspection, NOPSEMA inspectors received a lower level of support from the operator and as a consequence, were required to follow up on a greater range of matters onshore once the offshore inspection had been completed.

4.47 The monitoring of a large number of recommendations in a dynamic operating environment is challenging. Some previous recommendations are closed during inspections, some are closed prior to the next inspection, some may be re-opened following verification at an inspection, and some may be amended or combined with other recommendations. For example, one inspection undertaken in October 2012 closed 15 of 47 previous recommendations, leaving 32 recommendations open and issuing a further 37 new recommendations. Two outstanding recommendations dated back to an inspection conducted in November 2008 and four dated back to May 2010. While in this case, NOPSEMA worked closely with the operator to ensure recommendations were addressed, there are considerable regulatory and reputational risks associated with potential failures by NOPSEMA to adequately track and monitor recommendations across facilities from one regulatory activity to the next. NOPSEMA has undertaken enhancements to RMS to mitigate these risks.

4.48 Notwithstanding NOPSEMA's performance in monitoring recommendations, there would be merit in NOPSEMA focusing its recommendations for each facility on matters related to compliance with regulatory requirements, ranked in order of priority. This would enable NOPSEMA to focus its recommendations on the matters of greatest priority that may warrant the consideration of enforcement action, if not implemented within an agreed timeframe. Such an approach would also send a clear message to operators on the priorities for attention and enable the Authority to better manage compliance. The monitoring of fewer recommendations at each inspection would also better target compliance efforts and reduce the regulatory burden on operators.

4.49 In addition, NOPSEMA should continue to advise of better practice, promote compliance and monitor industry responses to such findings though the inspection process. The inclusion of better practice suggestions in inspection reports would help ensure that opportunities for improvement are brought to the attention of operators, while allowing recommendations to focus on more significant compliance related matters.

Conclusion

4.50 Since its establishment in January 2012, NOPSEMA has redirected much of its education and awareness activities, including workshops and seminars, towards the preparation of EPs. As this was a new regulatory function, coupled with the expectation gap that emerged in relation to the assessment of EPs in early 2012, the focusing of attention towards environmental management is appropriate.

4.51 Compliance activities are broadly delivered in accordance with the compliance monitoring approach outlined in NOPSEMA's planning documents. In relation to the assessment of permissioning documents, EPs have the highest rate of revision, and the longest timeframes from submission to final decision. This finding is consistent with comments provided by operators, highlighting the importance of the Authority's continued attention on communicating expectations to industry.

4.52 NOPSEMA's assessment and inspection activity generally complies with the Authority's policy and procedural guidance and key evidence is retained to document decision making. In relation to inspections in particular, there is merit in NOPSEMA reviewing its timeframes for key milestones, and focusing recommendations on compliance related matters, while continuing to provide advice on better practice and monitoring responses to inspection reports.

Recommendation No.3

4.53 To better target the management of compliance, the ANAO recommends that NOPSEMA focus and prioritise its recommendations arising from inspections towards compliance related matters, while continuing to identify and monitor opportunities for better practice in its inspection reports.

NOPSEMA's response:

4.54 *Agreed in part. NOPSEMA agrees that OHS inspections recommendations should consider the operators' compliance with the legislation.*

4.55 *The ANAO Report notes that NOPSEMA's Inspectors make, on average*[124]*, 10 recommendations per planned OHS inspection and acknowledges that NOPSEMA tracks the responses to all recommendations through subsequent inspections and operator liaison meetings.*

4.56 *The ANAO Report suggests that the regulatory effort in tracking all recommendations is overly burdensome for the regulator and sends uncertain messages to the operator. It suggests that NOPSEMA should make recommendations only in the case of suspected non-compliance but should however continue to offer suggestions for improvement which need not be addressed by the operator or monitored by NOPSEMA.*

4.57 *NOPSEMA considers that in an objective based regulatory regime, the most effective regulatory tool is the conduct of diligent planned inspections. Recommendations arising from NOPSEMA inspections are not directly enforceable under the legislation. They are nevertheless multi-purpose; they may promote compliance, be advisory or constitute a preliminary step of enforcement. Importantly all recommendations are framed to challenge the operator to demonstrate compliance with the legislation to ensure that the risks of Major Accident Events and all OHS risks are reduced to ALARP. Hence, NOPSEMA considers that all matters addressed within inspection recommendations warrant attention by the operator and follow-up by the regulator.*

4.58 *NOPSEMA does not consider the average of 10 recommendations per inspection (20 per annum for normally attended facilities) to be unreasonably onerous.*

4.59 *It should be noted that where there is non-compliance found that exceeds the risk threshold encompassed by NOPSEMA's Enforcement Management Model, an enforcement notice may be issued rather than a recommendation.*

ANAO Comment

4.60 Over time, facilities can accumulate a large number of open recommendations, which are in addition to the new recommendations made at each inspection. NOPSEMA has acknowledged the considerable regulatory and reputational risks associated with potential failures to adequately track

124 Generally there may be more recommendations where NOPSEMA is concerned about the operator's performance and less where the operator is closely meeting its Safety Case commitments and maintaining Major Accident Event control measures.

and monitor recommendations across facilities from one regulatory activity to the next.

4.61 In making this recommendation, the ANAO is seeking to focus recommendations to those matters related to compliance with regulatory requirements, ranked by priority. Such an approach would also send a clear message to operators on the priorities for attention and enable the Authority to better manage compliance. The monitoring of fewer recommendations at each inspection would also better target compliance efforts and reduce the regulatory burden on operators (refer to paragraphs 4.41–4.49 of the report).

5. Responding to Incidents

This chapter examines NOPSEMA's response to incidents, including its conduct of investigations.

Introduction

5.1 Offshore petroleum activities can be extremely hazardous with potentially serious consequences for human life and the environment. In this context, operators of petroleum facilities and activities, such as drilling and seismic surveys, have a legal obligation to report accidents, dangerous occurrences and environmental incidents to the regulator. These reports enable NOPSEMA to monitor the implementation of appropriate remedial measures, including minimising the risk of reoccurrence and, where the Authority considers appropriate, undertake investigations to identify any non-compliance with regulatory requirements. The ANAO examined NOPSEMA's handling of reported emergencies and incidents, its consideration of incident reports, and its procedures for, and conduct of, investigations.

Reported emergencies and incidents

NOPSEMA's role in incidents and emergencies

5.2 As NOPSEMA is not a frontline emergency response agency, under the current regulatory regime, the primary responsibility for responding to offshore incidents and emergencies rests with the petroleum titleholder or the facility operator. In addition to detailing major risk mitigation measures in permissioning documents, operators are required to have in place appropriate plans to manage their response to incidents and emergencies.

5.3 Under the Act, NOPSEMA may provide advice and issue notices or directions as part of its response to an incident affecting an offshore petroleum operation. For example, the day after the Montara wellhead blowout, the Authority issued notices to prohibit persons from being on the rig or being on support ships adjacent to the rig due to safety risks. It is an offence under the Act for an operator to breach a direction or notice.

5.4 NOPSEMA is also responsible for overseeing any response action by the offshore petroleum industry to oil spills and supporting a whole-of-government approach to incident coordination.[125]

Operator incident reporting

5.5 As previously noted, operators are required to notify NOPSEMA of accidents, dangerous occurrences and environmental incidents ('reportable incidents') verbally or in writing, as soon as practicable after the event. The *Offshore Petroleum and Greenhouse Gas Storage (OPGGS) Act 2006* safety and environment regulations describe the nature of reportable incidents[126] (see Table 5.1).

Table 5.1: Reportable accidents, dangerous occurrences and environmental incidents

Event	Description
Accident	Death, serious injury and lost time due to injury greater than three days.
Dangerous occurrence	Includes: occurrences that could have caused death or serious injury; a fire or explosion; the collision of a vessel with a facility; an uncontrolled release of petroleum within a defined range; and damage to safety critical equipment.
Environmental incident	An activity that has caused or has the potential to cause significant environmental damage as defined in an operator's accepted environmental plan. Environmental incidents may include the release of petroleum, chemicals and drilling fluid/mud and fauna incidents.

Source: NOPSEMA.

5.6 The environment regulations also require operators to notify 'recordable incidents' (incidents that have caused or have the potential to cause, moderate to significant environmental damage) to NOPSEMA on a monthly basis.

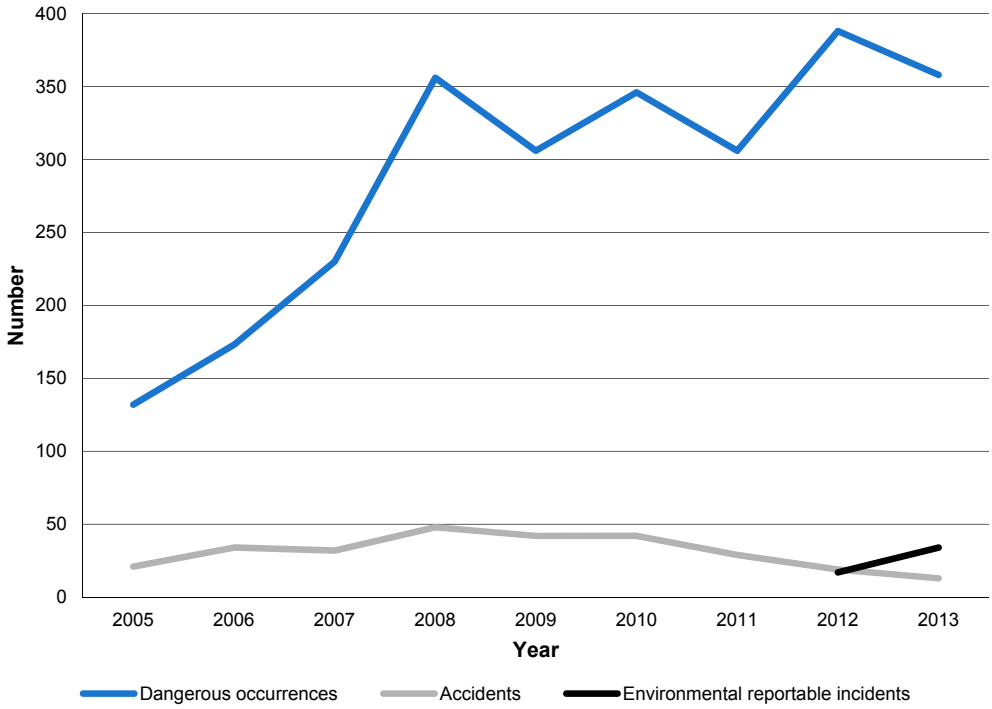
125 The Australian Maritime Safety Authority (AMSA) is responsible for overseeing response action for oil spills other than those from offshore petroleum operations in Commonwealth waters. Under the Inter-governmental Agreement on the National Plan to Combat the Pollution of the Sea by Oil and Other Noxious and Hazardous Substances (National Plan IGA) AMSA is the Australian Government's Combat Agency for marine pollution in Commonwealth waters and is required to engage with and support the offshore petroleum industry response to oil spills.

126 *OPGGS (Safety) Regulations 2009*, Regulation 2.42(2); and *OPGGS (Environment) Regulations 2009*, Regulation 4(1).

Reportable incidents

5.7 In 2013, a total of 405 incidents were reported to NOPSEMA, including 13 reported accidents[127], 358 dangerous occurrences and 34 environmental incidents. The number of safety incidents overall (accidents and dangerous occurrences) in 2013 represents an eight per cent decrease from 2012. The rate of accidents per million hours worked is at the lowest level since 2005 (see Figure 5.1).

Figure 5.1: Accidents and dangerous occurrences (2005–2013)



Source: NOPSEMA.

5.8 In addition to initial notification, operators must provide a report outlining a description of the incident, action to make the work-site safe, and details of injuries, any fluid escape and damage within three days of the incident occurring. A further report for safety incidents is required within 30 days

127 The 13 accidents comprised two serious injuries and 11 instances of incapacitation for a period greater than three days.

providing a 'root cause analysis' and the actions being taken to prevent any reoccurrence.[128] The failure to provide these reports within the prescribed timeframe is a breach of the Act and may result in enforcement action.

5.9 In the period 1 January 2012 to 31 March 2013, NOPSEMA received and reviewed 613 incident notifications. Of these, the ANAO sampled 122 cases (20 per cent) including nine accidents, 101 dangerous occurrences and six environmental incidents.[129] The review examined NOPSEMA's performance in assessing the incident notifications in relation to timeliness for submitting reports and documented conformance with legislative requirements and procedures.

5.10 In general, receipt of the three day reports required for the sampled incident notifications were recorded, with the documentation retained. Of the 110 safety incident notifications sampled, 82 (75 per cent) had a 30 day report or a combined 3 and 30 day report retained. In 28 cases, operators only submitted one report within the three day period, although they had been noted in RMS as satisfying both the three day and 30 day reporting requirements. In 25 of these cases, operators did not use NOPSEMA's template reporting form and the Authority had not noted its acceptance of the report as a combined report. The three reports submitted on NOPSEMAs template form indicated that the investigation was continuing.

Recordable environmental incidents

5.11 Operators with responsibility for petroleum activities have an additional requirement to submit a monthly report on 'recordable environmental incidents', covering all other breaches of the environmental performance objectives or standards contained in their approved EP that have not been reported previously.[130] Recordable environmental incidents include petroleum spills, solid waste discharge, dropped objects, gas releases, and breaches of procedural controls.

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128 The requirements of written incident reports are set out in a Determination under Regulation 2.42(2)(c) of the *OPGGS (Safety) Regulations 2009*, issued by NOPSEMA on 14 March 2012.

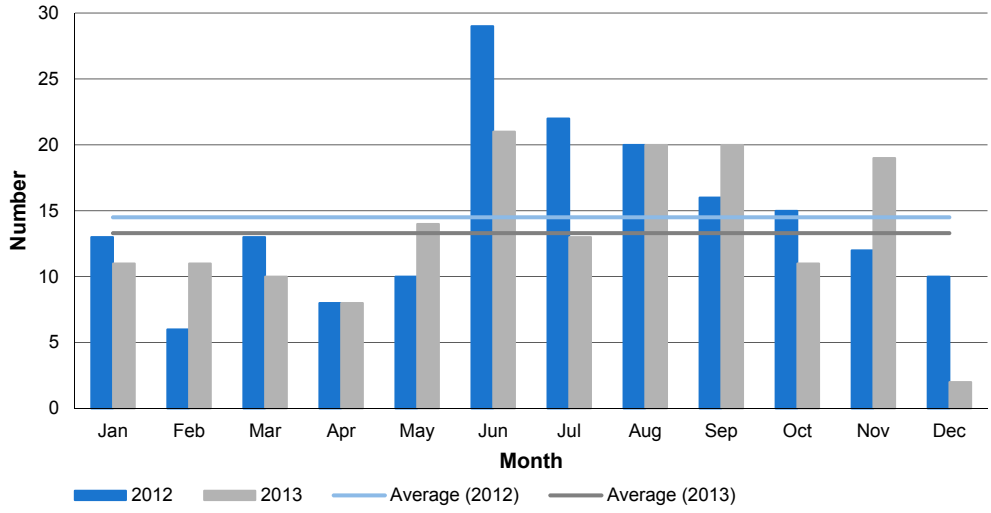
129 In the period 1 January 2012 to 31 March 2013, NOPSEMA received a total of 625 incident notifications, of which 613 had been reviewed by NOPSEMA at the time the ANAO sample was taken. Of the 122 cases sampled, two were noted to be complaints and four were non-notifiable incidents.

130 *Offshore Petroleum and Greenhouse Gas Storage (Environment) Regulations 2009* Regulation 26b.

5.12 Operators are to submit monthly reports on recordable environmental incidents no later than 15 days after the end of the relevant calendar month. Of the 174 recordable incidents reported in 2012 and the 160 incidents reported in 2013, only three reports in each year were provided late. In each instance, NOPSEMA noted the late submission in accordance with its procedures.

5.13 In its 2012 Annual Offshore Performance Report, NOPSEMA noted that the reporting of recordable incidents to the Authority had been variable.[131] NOPSEMA informed the ANAO that the variability of reporting of recordable incidents reflected a period of adjustment for industry with the new regulatory regime. The level of recordable incidents reported in 2013 follows a similar pattern to 2012 with a peak in reporting in June each year followed by a gradual decline (see Figure 5.2).

Figure 5.2: Recordable environmental incidents (by month)



Source: ANAO analysis of NOPSEMA information.

131 NOPSEMA, *Annual Offshore Performance Report: Regulatory information about the Australian offshore petroleum industry to 31 December 2012*, NOPSEMA, 2013, p. 27.

5.14 NOPSEMA procedures require that all recordable environmental incidents are reviewed to ensure that any major incidents were also reported as reportable incidents. If a major incident was not previously notified as a reportable incident, the operator may be found to be in breach of the regulations.

5.15 Overall, NOPSEMA has established appropriate procedures to receive notifications from operators of accidents, dangerous occurrences and environmental incidents and lower level environmental recordable incidents. There is, however, scope for the Authority to review its arrangements for the receipt and management of operator reports on notifications to help ensure that all reports are received and are accessible to staff.

Post-incident monitoring

5.16 Monitoring the implementation of operator responses to incidents is not a mandatory scope item for inspections. Of the 25 safety inspections examined by the ANAO, 16 were undertaken after an incident had been reported. Of those 16 inspections, seven (44 per cent) discussed the operator's response to the incident in the inspection report. In nine cases, the inspection report did not verify any further follow up on the incident by NOPSEMA. The inclusion of the review of actions undertaken in response to incidents as a mandatory item for each inspection would provide NOPSEMA with greater assurance regarding the actions taken by operators to respond to reported incidents.

Incident investigations

5.17 Notifications and subsequent operator reports of accidents, dangerous occurrences and environmental incidents are to be reviewed by a NOPSEMA investigation manager to determine if the severity of the event, or the adequacy of the operators proposed response, warrants an investigation by NOPSEMA. A preliminary inquiry is to be undertaken if it is not clear whether an investigation is warranted.

5.18 The ANAO examined the sampled of notifications to assess the time taken by NOPSEMA to reach an investigation decision—to accept the operator's report, to undertake a preliminary inquiry, or to commence an

investigation.[132] The median time taken to review notifications was two days for safety notifications and 11 days for environmental management notifications, as outlined in Table 5.2.

Table 5.2: Average timeframe for considering notifications

Function[1]	Sample Size	Median Timeframe Decision (days)
Safety[2]	109	2.0
Environmental Management[3]	4	10.5
Total	**113**	

Source: ANAO analysis of NOPSEMA information.

Note 1: Reporting requirements do not include the well integrity function.

Note 2: One incident was excluded from the analysis because the date of the decision was recorded as being prior to NOPSEMA being notified of the incident.

Note 3: Of the six environment incidents notified, two were subsequently recategorised as recordable incidents. The four reportable environmental incidents are included in this analysis.

5.19 Of the 116 notifications sampled, four resulted in investigations (see Table 5.3).

Table 5.3: Outcomes of notifications to NOPSEMA

Item			Number
Investigations			4
Nature of event	Accident	Death or serious injury	1
	Dangerous Occurrence	Uncontrolled release of hydrocarbons (>300kg)	1
		Damage to safety-critical equipment	1
		Other occurrence requiring investigation	1
Nature of investigation	Preliminary Inquiry		2
	Category 1		2
	Category 2		-
Completed investigations			2
Outcomes of investigations			• 17 Recommendations • 1 Recommendation

Source: ANAO analysis of NOPSEMA information.

132 On 26 October 2012, NOPSEMA enhanced the functionality of RMS to record the time incidents occurred. Of the incidents sampled after 26 October 2012, 17 per cent (7 of 42) were recorded with a blank event time or with a default time of 12:00:00AM.

5.20 NOPSEMA has established appropriate procedures for the consideration of safety incident notifications. Accident and dangerous occurrence notifications are considered promptly, enabling early commencement of further action if required. There would, however, be merit in the Authority reviewing the current arrangements for the consideration of the reportable environmental management incident notifications, which although much fewer in number, were found to take almost six times the median time to review compared with safety notifications.

Investigation procedures

5.21 While the OPPGS Act does not differentiate between an inspection and investigation, NOPSEMA's procedures include the following definitions:

- inspections are routinely scheduled visits to facilities during which inspectors are not expected to gather evidence to support enforcement activities; and
- investigations are typically conducted following an incident or report of non-compliance and allows inspectors to utilise their full powers of search and inquiry.[133]

NOPSEMA has established a range of internal procedures to guide the conduct of investigations, including over 30 policies, standard operating procedures, work instructions, forms and templates. Investigations are classified as either Category 1 or Category 2, as outlined in Table 5.4.

133 These powers include those provided under Schedule 3, Division 3, Part 4, Subdivision B, such as the authority to break open storage devices to access material.

Table 5.4: Categories of NOPSEMA investigations

	Category 1	Category 2
Trigger Event	There may be a suspected breach of relevant OHS legislation.	An offence has been committed against the relevant offshore OHS legislation. When a Category 1 investigation has: • detected a suspected breach of OHS law; or • determined prosecution to be the most appropriate enforcement measure.
Nature of Investigation	Uncomplicated, short-lived and minimum resources. Escalated to Category 2 if not completed within six weeks.	Complex, protracted and resources intensive which may involve working in a multi-agency environment. Require 'higher standard of proof, beyond reasonable doubt'.
Typical Outcomes	Written warning, improvement notice, or prohibition notice.	Criminal prosecution.

Source: ANAO analysis of NOPSEMA information.

5.22 As an Australian Government agency that conducts investigations, NOPSEMA is also required to adhere to the Australian Government Investigation Standards (AGIS). The AGIS provides a set of minimum procedures for conducting investigations under Commonwealth legislation. NOPSEMA procedures have been developed to comply with the AGIS and the *Evidence Act 1995*.

5.23 Investigations are to be planned using a standard template that incorporates information provided by the operator and information held by NOPSEMA in RMS. Internal procedures provide guidance for inspectors on the conduct of interviews, issuing and acting on search warrants, gathering and recording photographic, video and documentary evidence, and requesting assistance from the facility workforce. They also highlight the importance of maintaining stakeholder relationships throughout the investigation, and note that investigations can involve persons dealing with shock or trauma. Following an investigation, NOPSEMA is required to issue a final report.[134] The report may form the basis of an enforcement action and include

134 OPGGS Act, Schedule 3, Clause 80.

recommendations. The operator's implementation of any remedial action is also to be monitored by a lead inspector.

5.24 Investigations may involve offshore visits, exercising powers of entry and search, compelling the production of evidence, obtaining certified copies of documents and, for Category 2 investigations in particular, issuing search warrants. However, most investigations are Category 1 and involve examination of operator documents and discussions with operator management and the offshore workforce. Of the 14 investigations commenced by NOPSEMA in its first 15 months of operation, 13 were classified as Category 1 and one was classified as Category 2.

5.25 Overall, NOPSEMA has established an appropriate range of internal procedural material to guide the conduct of investigations. In particular, Category 2 investigations are supported by a range of procedural documents, including policies and standard operating procedures, work instructions, forms and template letters. This level of guidance is appropriate given the circumstances that give rise to these investigations.

Conduct of investigations

5.26 An effective response to an adverse event is timely, targeted at addressing the harm that may have already been caused, and minimises or eliminates the threat of further harm.

5.27 In the period 1 January 2012 to 31 March 2013, NOPSEMA received notification of 16 incidents which it considered warranted further enquiry. Category 1 investigations were completed for 13 of the incidents, with three being discontinued after the completion of preliminary enquiries. The ANAO reviewed the 13 completed Category 1 investigations to determine the extent to which NOPSEMA complied with core investigation procedures.

5.28 Each investigation is to have an investigation plan that details how the investigation will be executed, risk mitigation measures and stakeholder analysis. Of the 13 sampled investigations, 10 had an investigation plan of which eight were signed by an investigation manager.[135]

135 This includes two signed investigation plans which were filed after the conclusion of the ANAO's fieldwork.

5.29 Each investigation is also required to have a running sheet to assist in the management of the investigation and document key activities. The running sheets are to record notes of investigation management meetings, track milestones in the investigation timeframes and record follow up action with the operator. In particular, running sheets help to track key documents, such as the operator responses to recommendations from inspections. These responses are not easily verified without a completed running sheet. Of the sampled investigations, running sheets were not completed or maintained in either RMS or Objective in 46 per cent (6 of 13) of cases.

5.30 The signed final report issued to the operator was retained for all investigations. Procedures also require the lessons learned from each investigation to be recorded at the conclusion of an investigation. No lessons learned reviews had been documented and retained for the sampled investigations.[136]

5.31 NOPSEMA's investigation procedures established timeframes for completing investigations. At the time the cases sampled were under investigation Category 1 investigations were either to be completed or escalated to a Category 2 investigation within six weeks from the time of commencement.[137] Of the 13 sampled investigations, the average time to complete the investigation was 44.9 days, ranging from 10 to 82 days. Notwithstanding this requirement, none of the six investigations that exceeded six weeks in duration were escalated to a Category 2 investigation. NOPSEMA removed the timeframe for the escalation of investigations in July 2013.

Preparation of briefs of evidence

5.32 In circumstances where it is suspected that an offence has been committed and prosecution is determined by the Authority as the appropriate means of enforcement, briefs of evidence are to be prepared by NOPSEMA for consideration by the Commonwealth Director of Public Prosecutions (CDPP). NOPSEMA's guidance materials indicate that briefs of evidence for prosecution are an expected outcome of Category 2 investigations.

136 NOPSEMA issued safety alerts to industry, based on investigation findings, covering the topics of food safety, scaffold safety, dropped objects and rescue crafts.

137 *OPGGS Act 2006*, Clause 80, provides that reports must be provided 'as soon as practicable'.

5.33 The CDPP's and NOPSEMA's procedures provide guidance on the development of briefs of evidence to support a proposed prosecution. When considering whether to proceed with prosecutions, the CDPP takes into account a number of factors, including the sufficiency of evidence collected, the serious of the alleged offence, the passage of time since the alleged offence, and the need to give effect to regulatory or punitive imperatives.

5.34 In the period from 2005–2011, NOPSA submitted six briefs of evidence to the CDPP resulting in one successful prosecution in 2007. Since its establishment, NOPSEMA has finalised one brief of evidence, commenced by NOPSA, relating to the successful prosecution for the Montara incident (see Table 5.5).

Table 5.5: NOPSA/NOPSEMA briefs of evidence (2005–2013)

Year	Case	Outcome
2006	Australian FPSO Management Pty Ltd (Four Vanguard Floating Production, Storage And Offloading vessel)	Trial discontinued, August 2008
2007	Coogee Resources (Jabiru Venture Floating Production, Storage And Offloading vessel)	Successful prosecution Fine of $AUD 180 000 Finalised December 2007
2008	Premium drilling (Wilcraft Mobile Offshore Drilling Unit)	Withdrawn, November 2008
2009	Teekay Shipping Pty Ltd (Karratha Spirit)	Withdrawn, June 2010
2009	Teekay Shipping Pty Ltd (Karratha Spirit) – Master of Karratha Spirit.	Withdrawn, June 2010
2010	Woodside Energy Ltd (North Rankin Alpha Platform)	Withdrawn, July 2010
2010	PTTEP Australasia Pty Ltd (Montara Wellhead Platform)	Successful Prosecution Fine of $AUD 510 000 Finalised August 2012 by NOPSEMA

Source: ANAO analysis of NOPSEMA information.

5.35 The most recent finalised brief of evidence was for the prosecution of PTTEP Australasia Pty Ltd in relation to the Montara wellhead blowout. In August 2012, the Northern Territory Magistrates Court made findings against PTTEP Australasia Pty Ltd in relation to three OHS offences and one non-OHS offence. The matter was finalised almost three years after the commencement of NOPSA's investigation.

5.36 The investigation into the Montara wellhead blowout was both complex and high profile, given the prominence of the incident as Australia's largest offshore petroleum blowout. Following the incident on 21 August 2009, NOPSA initially issued notices to prohibit persons from being on or near the rig due to safety risks, and to enable operators to respond to any fire that might occur.

5.37 NOPSA met with the Darwin Office of the CDPP to discuss the potential investigations shortly after the uncontrolled release was capped on 3 November 2009. NOPSA formally commenced its investigation into the incident in December 2009 and continued to consult with the CDPP on the preparation of the brief of evidence throughout 2010 and 2011. NOPSA's OHS inspectors interviewed a number of witnesses and seized evidence under search warrants executed on a number of premises. The investigation was the first time that NOPSA had used formal powers to interview witnesses under clause 74, Schedule 3 of the OPGGS Act.

5.38 NOPSEMA's investigation was delayed due to the Montara Commission of Inquiry, which impacted on the availability of witnesses. The brief of evidence was submitted to the CDPP in June 2010. Some material obtained from witness interviews was subsequently provided to an expert witness engaged to support the brief of evidence. The charges against PTTEP Australasia Pty Ltd were based on a statement of facts agreed between NOPSEMA, the CDPP and the operator.

5.39 NOPSEMA commenced a review of the investigation and brief of evidence in February 2012. The final review report was endorsed by NOPSEMA's manager of investigations in January 2014 in response to an ANAO request for documentation in relation to the review. The Authority subsequently advised the ANAO that the report has not been approved by senior management and does not represent the views of the Authority.

5.40 Notwithstanding the status of the review report provided to the ANAO, it outlined a number of areas for improvement in relation to the conduct of the investigation which the ANAO raised with NOPSEMA. These included: the manner in which statutory powers were exercised; the experience of the investigation team; the manner in which the investigation was planned; the level of resourcing; and the adequacy of documentation retained. NOPEMA informed the ANAO that relevant procedures were revised in relation to these issues during the course of the investigation.

5.41 As such, the Authority has advised that it does not intend taking any further action in response to the matters raised in the review. While acknowledging the Authority's view on the status of the review report, it is important that lessons learned from investigations, in particular those that involve serious forms of enforcement action such as prosecutions, are appropriately considered through a formal review process, communicated to industry and staff and incorporated into revised procedures to better support future investigations.

Conclusion

5.42 Following an incident, the NOPSEMA is to consider notifications and reports of operators to ensure that appropriate action will be taken. NOPSEMA has established appropriate procedures for the consideration of incident notifications and promptly considers accident and dangerous occurrence reports. There is, however, scope to improve recording the receipt of incident reports and the timeliness of considering environmental incident notifications.

5.43 NOPSEMA has established an appropriate range of internal guidance material to govern the conduct of investigations. Over time, these materials have been updated in response to the findings of reviews, in particular the Montara well blowout. However, the absence of investigation plans and running sheets for one sixth of the sampled investigations makes it more difficult for the Authority to demonstrate that investigations were conducted in accordance with established standards. An increased focus on the completion and retention of investigation documentation, and the completion of internal reviews of investigations, would better place the Authority to defend its regulatory decisions and incorporate the lessons learned into improved procedures.

6. Enforcing Compliance

This chapter examines NOPSEMA's approach for addressing non-compliance by offshore petroleum operators in meeting their obligations under the OPGGS Act.

Introduction

6.1 The OPGGS Act and Regulations provide a range of formal and informal enforcement measures to encourage compliant practice and address non-compliance. These measures include the withdrawal of accepted permissioning documents, prosecution, prohibition notices and improvement notices. They are designed to promote compliance by operators, enforce specific corrective action, stop non-compliant activities, or impose penalties for unlawful conduct.

6.2 The ANAO examined NOPSEMA's approaches for promoting and enforcing compliance, the implementation of these approaches as well as arrangements for monitoring any remedial action to be undertaken by petroleum operators.

Enforcement management

6.3 Arrangements for managing the enforcement of regulatory obligations on industry should be designed to ensure that responses to non-compliance are lawful, proportionate to risk, fully documented and timely.

Statutory enforcement measures

6.4 The Act and Regulations provide NOPSEMA with a variety of enforcement options, including the ability to:

- issue prohibition notices or improvement notices;
- issue written directions to a titleholder, including the closing of a wellhead, should an incident threaten resource management or security[138] or present an environmental threat[139];
- withdraw its acceptance of a permissioning document[140]; and

138 OPGGS Act, subsection 574.
139 OPGGS Act, Part 6.2, Division 3.

- remove an operator from the register of operators, if the Authority considers the person does not have day-to-day control of a facility.[141]

6.5 In cases were directions from NOPSEMA are not followed, the Authority has the power under the Act to 'do any or all of the things required by the direction or arrangement to be done', including the removal and sale of repossessed equipment in order to cover retrieval costs.[142] Additional enforcement measures can be imposed under the Act by a court, including the forfeiture of equipment, vessels, and captured petroleum.[143]

Enforcement approach

6.6 NOPSEMA's Compliance and Enforcement Policy and Enforcement Management Model (EMM) set out the arrangements for the consideration of safety enforcement action once non-compliance has been determined. The EMM categorises responses to non-compliance as 'informal compliance actions'—designed to promote compliance by operators—and 'enforcement actions', which are used when serious instances of non-compliance have been determined. While the EMM focuses on the safety function, NOPSEMA informed the ANAO that it is also used to guide the consideration of well integrity and environmental management enforcement. NOPSEMA plans to revise the EMM when new legislated enforcement powers take effect.[144]

6.7 NOPSEMA's measures outlined in the EMM align with the statutory enforcement powers and underpin the Authority's proportional responses to non-compliance. For NOPSEMA, immediate safety is a threshold consideration, after which other enforcement measures may be applied in accordance with the level of risk (see Figure 6.1).

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140 *OPGGS (Resource Management and Administration) Regulations 2011*, Regulation 5.18; *OPGGS (Environment) Regulations 2009*, Regulation 23; *OPGGS (Safety) Regulations 2009*, Regulation 2.37.

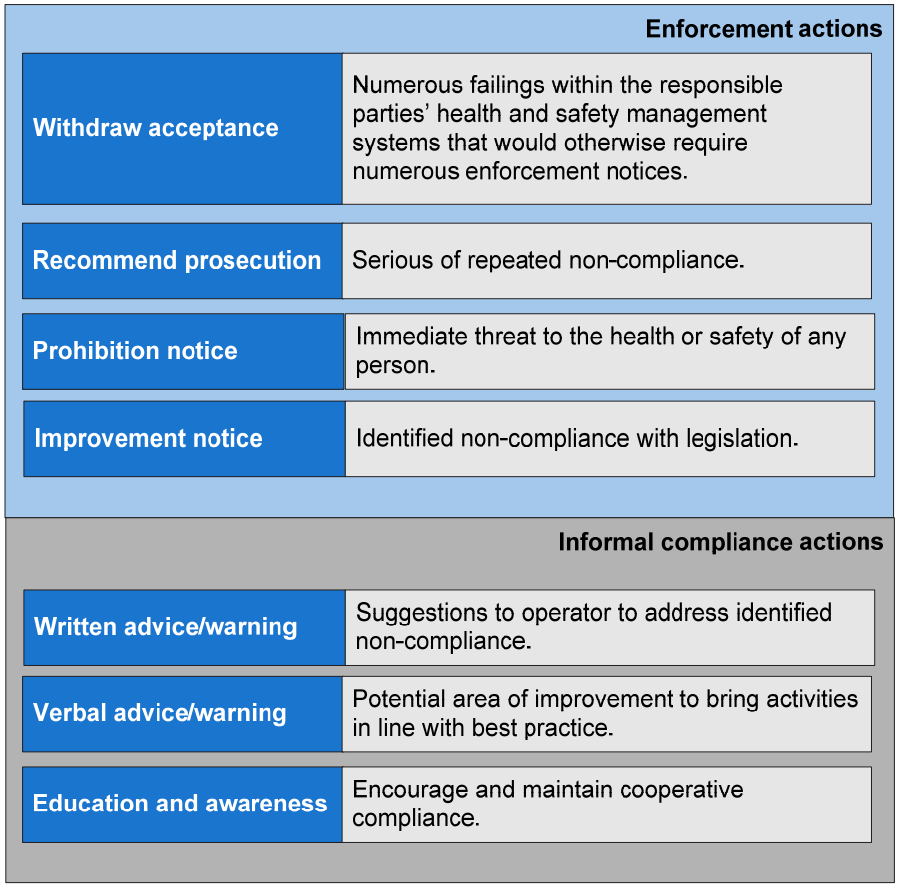
141 OPGGS Act, subsection 603.

142 OPGGS Act, Part 6.4, Division 1.

143 OPGGS Act, subsection 604.

144 The *Offshore Petroleum and Greenhouse Gas Storage Amendment (Compliance Measures No. 2) Act 2013 (Compliance Measures Act No. 2),* which gained Royal Assent in May 2013, introduced alternative enforcement measures, including infringement notices, daily penalties for continuing offences, civil penalty provisions, injunctions, adverse publicity orders, environmental improvement notices and environmental prohibition notices. The new measures seek to further implement the Government's response to the Montara Commission of Inquiry and do not take effect until the proposed Regulatory Powers (Standard Provisions) Bill receives Royal Assent. The Bill was introduced into Parliament in October 2012 but lapsed at the end of the 43rd Parliament (November 2013). The Bill was introduced into the 44th Parliament on 20 March 2014.

Figure 6.1: Graduated responses to non-compliance



Source: ANAO analysis of NOPSEMA information.

Informal compliance actions

6.8 As discussed in Chapter 4, NOPSEMA considers its inspection process as the most important activity for encouraging voluntary compliance. Voluntary compliance is also supported by workshops, seminars and publications. NOPSEMA has directed additional effort towards education and awareness activities focusing on environmental management since 2012 in response to operator performance and feedback from industry.

6.9 Verbal or written warnings are issued when an inspector observes a practice that does not constitute a breach of legislation, but rather is not consistent with 'good practice'. Written warnings are issued in response to breaches or potential breaches of the legislation raised in inspection, incident or investigation reports and may take the form of recommendations or a letter.

Enforcement actions

6.10 NOPSEMA can issue improvement notices directing a facility operator to correct a contravention of an OHS law within a specified timeframe.[145] These notices may be issued in the event of an operator's failure to meet an explicit or clearly defined standard, which is well known and obvious, with serious consequences.

6.11 Prohibition notices require the operator to immediately cease an activity causing the observed threat and to remove the hazard. These notices are issued when an immediate threat to health and safety has been identified and does not require prior consideration of an improvement notice or written warning.

6.12 NOPSEMA's EMM provides that prosecutions are expected to be pursued where there is:

- fatality or near fatality;
- serious injury;
- unlawful deviation from permissioning documents;
- failure to comply with previous notices;
- providing misleading information to inspectors; or
- a serious or ongoing alleged non-compliance.

6.13 The most severe enforcement measure available to NOPSEMA is to withdraw acceptance of the operator's permissioning document. Withdrawal of acceptance is to be considered as a response to numerous failings within an operator's health and safety management system, where a prosecution may not achieve the desired outcome within an acceptable period or where non-compliances would otherwise require numerous enforcement notices.

6.14 Examples of matters on which NOPSEMA has issued improvement notices, written warnings and prohibition notices are outlined in Table 6.1.

145 The timeframe for resolving the matter is determined in consultation with the facility operator.

Table 6.1: Examples of safety enforcement actions issued

Enforcement	Non-compliance
Improvement notice	A significant number of items of electrical equipment in a hazardous area were found to be non-compliant. The operator had not undertaken an appropriate risk assessment against identified deficiencies and mitigated the risk to as low as reasonably practicable. The enforcement action was issued following an inspection. Failure to implement the latest version of the catering manual which is a key source of food handling and hygiene information for the catering crew. The enforcement action followed an outbreak of salmonellosis and gastroenteritis and was issued after an inspection.
Written warning	Failure of riser emergency shutdown to meet performance standard. During leak off testing, the riser shutdown valve was leaking at a rate greater than the maximum allowable leakage rate. The riser emergency shutdown valve was impaired. The warning followed an investigation. Failure to complete remedial actions within required timeframe stated in previous improvement notice for deficient electrical equipment in hazardous areas. The warning followed an operator's non-compliance with a previous improvement notice.
Prohibition notice	Use of 240 volt portable tools and appliances with deficiencies including damaged leads and missing portable appliance test tags and a domestic plug. The prohibition notice was issued during an inspection. Significant corrosion on fuel lines to flare tip ignition panel. The prohibition notice was issued during an inspection.

Source: ANAO analysis of NOPSEMA information.

6.15 In 2013, NOPSEMA initiated 79 enforcement actions. Of these, 32 were requests for revised environment plans (EP)—the most frequently used enforcement measure. These actions stemmed from NOPSEMA's project to assess transitioned EPs, as discussed earlier in Chapter 3. The other most frequently initiated enforcement actions were improvement notices and written warnings (see Table 6.2).

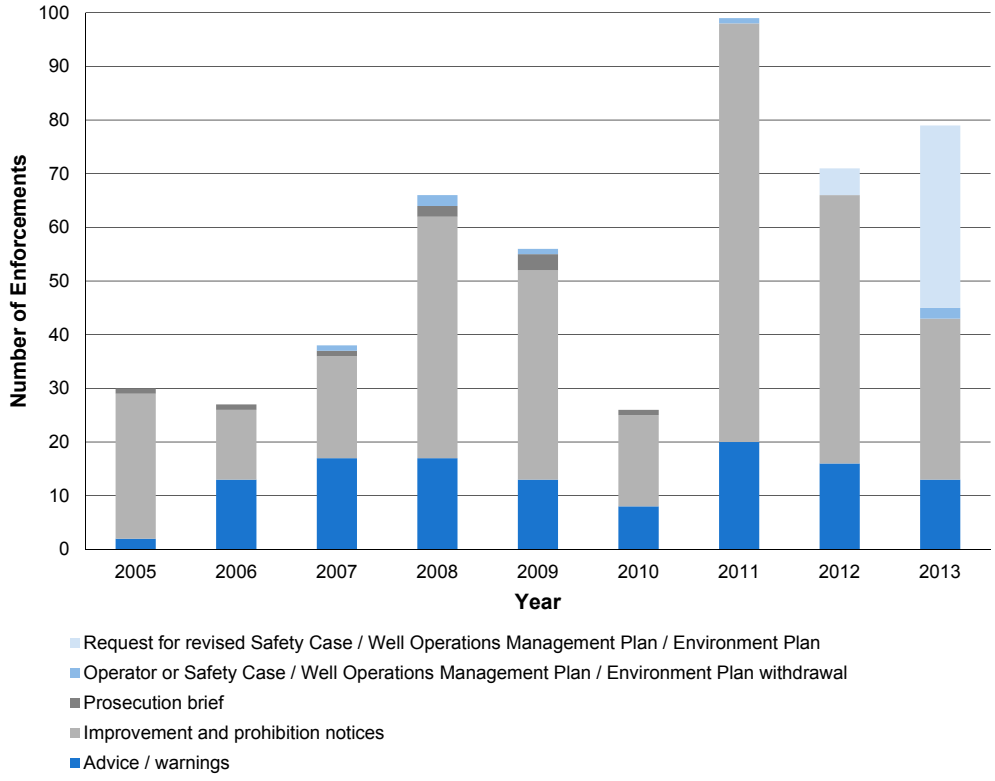
Table 6.2: NOPSEMA initiated enforcement actions (2013)

Enforcement	Number
Request for a revision to an environment plan	32
Improvement notices	27
Written warnings	12
Prohibition notice	3
Request for a revised safety case	2
Verbal warning	1
Intent to withdraw environment plan acceptance	1
Intent to withdraw a well operations management plan acceptance	1
Total	**79**

Source: NOPSEMA.

6.16 The total number of enforcement actions initiated in 2013 increased from 75 in 2012, following a peak of 99 enforcement actions initiated by NOPSA in 2011 (see Figure 6.2).

Figure 6.2: NOPSA/NOPSEMA enforcement action (2005–2013)



Source: NOPSEMA.

Enforcement procedures

6.17 Once non-compliance is determined, the standard operating procedure established under the EMM requires a risk gap analysis to be prepared by the assigned investigator[146] to determine the enforcement action to be taken. The investigator is to determine the likelihood (remote, possible, probable) and consequence (nil, minor injury, significant injury, major injury) of the incident. This rating is then to be compared against the likelihood and consequence rating for the incident had all practicable measures to minimise the risk been taken—the benchmark. A 'risk gap' for the incident is then calculated—extreme, substantial, moderate or nominal.

6.18 If a risk gap has been identified, the EMM provides the investigator with guidance as to the enforcement measure that is most appropriate by taking into consideration the type of standard breached.[147] When determining the enforcement action to be taken, NOPSEMA's investigators are to also consider the operator's compliance history and response to enforcement actions, national and industry trends, the net benefit to the wider community, and the dangers posed by immediate threats to workforce personnel. Such an approach is designed to ensure that enforcement actions are proportional to the risks posed by non-compliant activities.

6.19 Overall, NOPSEMA's guidance materials, in particular its EMM, provide a graduated approach to address non-compliance. The EMM lists criteria to assist decision makers in developing a regulatory response that is proportionate to the risks posed by the non-compliance with safety regulations. NOPSEMA plans to revise the EMM to include well integrity and environmental management once its expanded legislated powers take effect, which was originally expected in 2012, and is now expected in 2014.

Management of enforcement actions

6.20 In the period from 1 January 2012 to 31 March 2013, NOPSEMA initiated 121 enforcement actions of which the ANAO sampled 60 enforcement

146 NOPSEMA inspectors conduct the investigations on behalf of the Authority.

147 For example, if a substantial risk gap against a defined standard is detected, an improvement notice is recommended, while a substantial risk gap against an interpretative standard would be grounds for a written warning or formal recommendations in an inspection report. Standards are considered by NOPSEMA to be 'defined' (Legislation and Regulations), 'established' (Codes of Practice) or 'interpretative' (not published, put forward by OHS specialists).

cases (50 per cent), and reviewed 58 completed actions.[148] To assess NOPSEMA's management of enforcement actions, the ANAO examined the use of the risk gap analysis tool for the sampled safety enforcement actions and NOPSEMA's timeliness in initiating the enforcement actions. A breakdown of the sampled enforcement actions is provided in Table 6.3.

Table 6.3: Completed enforcement actions sampled

Enforcement	Safety	Well integrity	Environmental Management
Improvement notice	26	-	-
Written warning	4	-	2
General directions— removal of plant or sample	4	-	-
Prohibition notice	2	-	-
Directions	-	3	-
Do not disturb notice	1	-	-
Revision of permissioning document	-	-	15
Intent to withdraw permissioning document	-	1	-
Total	**37**	**4**	**17**

Source: ANAO analysis of NOPSEMA information.

Risk gap analysis

6.21 Of the 58 enforcement actions sampled, a risk gap analysis was required for 28 actions—for each safety improvement notice and two of the four safety written warnings. A risk gap analysis was not required for:

- the two safety written warnings, which were issued for administrative breaches in relation to the operators' failure to comply with incident reporting requirements;
- the well integrity and environmental management enforcement actions, which were determined and documented through separate processes;

148 Of the 60 cases sampled, enforcement action was not proceeded with in two cases. In one case, on review, NOPSEMA decided not to proceed with the action. In the other case, NOPSEMA decided to delay any action.

- the two prohibition notices issued during inspections, although both were reviewed as part of the inspection reporting process; and
- the general directions and do not disturbed notices, which were issued as part of Category 2 investigations.

6.22 Where a risk gap analysis was prepared, the approved analysis was consistent with the requirements outlined in the enforcement procedures. Other processes were used to determine the well integrity and environmental management enforcement actions. For example, the 15 environmental management enforcement actions requiring the revision of EPs arose from the transitioned EP review project discussed in Chapter 3.

6.23 Generally, where a risk gap analysis was prepared, the approved analysis was consistent with enforcement procedures. While team managers confirmed the assessments, they did not sign the assessment in one case and confirmed one of two assessment outcomes in the remaining case.

6.24 The ANAO's analysis of the sampled enforcement cases found that the rationale for enforcement decisions were recorded with relevant supporting documentation. The risk gap analysis provides a useful mechanism to document the factors taken into consideration when determining enforcement action and similar tools should be considered for the future implementation of NOPSEMA's expanded enforcement powers.

Timeliness of enforcement action

6.25 Once non-compliance is determined, the decision to implement enforcement action must be made promptly in consideration of the consequences of non-compliance and the facilitation of due process. Prompt implementation of enforcement is particularly important where significant adverse outcomes, such as death or serious injury, may occur if the non-compliance is not addressed. The ANAO assessed a sample of safety enforcement actions, as outlined in Table 6.4, to determine the time taken to initiate action.

Table 6.4: Timeframes for initiating safety enforcement actions

Enforcement Action	Sample	Average (days)	Median (days)	Range (days)
Improvement notices	25[1]	54.7	42.0	3–526
Warning	6	14.2	4.5	3–62
Prohibition notice	2	0.5	0.5	0–1
Total	**33**	**44.0**	**34.0**	**0–526**

Source: ANAO analysis of NOPSEMA information.

Note 1: The ANAO was unable to assess one improvement notice due to incomplete documentation.

6.26 The two sampled prohibition notices were issued during inspections on the day the infringement was determined. Given the purpose of prohibition notices is to immediately cease non-compliant activity to address imminent risk, it is appropriate that enforcement is undertaken at the earliest opportunity. Of the six written advice/warnings sampled, two were raised for non-compliance with incident reporting requirements, where, for example, a 30 day reporting requirement was not met for a known incident. Such administrative breaches are a relatively straightforward to monitor and promptly address.

6.27 NOPSEMA procedures require careful consideration of improvement notices because they may lead to further enforcement action (prosecution) in the event of non-compliance. Of the sampled enforcement actions, improvement notices were issued at an average of 55 days and a median of 42 days following the incident or identification of non-compliance. The longest timeframe between an incident or identification of suspected non-compliance and the ensuing enforcement action was 526 days. This was for an improvement notice issued for an inspection recommendation that had not been implemented. In this case, the facility was absent from the regime for a period[149] and the recommendation was reviewed at subsequent inspections prior to the improvement notice. Another two had extended timeframes (90 and 42 days). In general, these enforcement actions were initiated within six weeks of NOPSEMA becoming aware of non-compliance.

149 Certain facilities including vessels and mobile offshore drilling units may cease operations in Australian waters to undertake maintenance or other work overseas and return to operation in Australian waters some months or years later.

Monitoring remedial action

6.28 Once NOPSEMA has identified and responded to non-compliance, the next step is for the operator to implement a remedial action plan that meets the objectives of the regulatory regime. NOPSEMA communicates its expectations for remedial action though enforcement notices. The implementation of remedial action by operators is to be monitored by NOPSEMA to ensure that operators return to compliance with regulatory obligations.

Monitoring enforcement action

6.29 NOPSEMA's procedures require that enforcement notices stipulate the required action to achieve compliance, that the action should be focused on systematic improvement, and include operator discretion to achieve the compliance by any other means. The time period established in NOPSEMA's procedures for the implementation of remedial action should be determined in consultation with the operator; and requests for extension of time to comply should not normally be granted, but should be limited to half the original specified time, if exceptional circumstances are presented.

6.30 Of the 58 enforcement actions examined by the ANAO, the remedial action was specified in all notices where required (50 of 58), with remedial actions not required to be specified in warnings, directions and do not disturb notices. Of the 50 notices with specified remedial action, 49 included the time period for the implementation of the remedial action, with one notice setting an implementation deadline of 'as soon as practicable'.

6.31 Operators can close-out remedial action by certifying to NOPSEMA that the stipulated remedial action has been undertaken and providing relevant documentation to verify the action, where required. Offshore verification of remedial measures following enforcement action is not, however, a mandatory item for inclusion in the scope of subsequent inspections. Of the 34 sampled inspections reviewed by the ANAO, two followed investigations, both of which did not refer to the investigation in the inspection reports.

6.32 NOPSEMA negotiates remedial timeframes with operators in consideration of the operator's planned maintenance schedule or the need to have equipment manufactured or repaired overseas. The ANAO sampled 49 safety and environmental management enforcement notices to examine the timeframes for responses that were provided to operators, the length of any

extensions granted, and instances when enforcement actions were responded to after the initial or extended deadline (outlined in Table 6.5).

Table 6.5: Enforcement response timeframes

		Improvement Notice (Days)	EP Revision (Days)	Written Warning (Days)	Prohibition Notice (Days)
Sample		26	15	6	2
Initial timeframe granted to operator	Average	118.1	62.1	N/A	N/A
	Median	90	60		
	Range	21–500	60–90		
Timeframe of granted extensions	Instances	7	11[1]	-	-
	Average	129.0	77.5	N/A	N/A
	Median	60	54		
	Range	43–364	16–189		
Close out timeframe of responses after initial/ extended deadline	Instances	10	14[2]	1[3]	2
	Average	131.0	232.3	4.0	3.5[4]
	Median	59	243	4	4
	Range	6–483	67–462	-	2–5

Source: ANAO analysis of NOPSEMA information.

Note 1: Three instances were detected in which an operator requested an extension, but no evidence was retained as to whether it was approved or rejected by NOPSEMA. For this table, such assessments are counted as not having been extended.

Note 2: One instance was detected in which NOPSEMA did not provide an expected completion date to the operator, only stating 'as soon as practicable' as the deadline.

Note 3: While written warnings do not typically specify a deadline for action to be taken, one warning in the sample did.

Note 4: As prohibition notices must be acted on immediately and do not have a specified deadline the figures reflect the time taken for operators to respond to the initial notice.

6.33 Contrary to NOPSEMA's policy for the consideration of extensions for remedial action, when extensions were granted, the new timeframe, on average, exceeded the original timeframe. Further, operators that had been granted an extension generally missed the second deadline. NOPSEMA informed the ANAO that there was a legitimate reason for an extension to be granted in each case and further enforcement action would have been impractical given the progress towards completion that had been made. Given the range of responses to remedial action and the timeliness in which operators implement the required action, there is scope for NOPSEMA to review its

policies and procedures for ensuring that operators return to compliance in a timely manner.

Conclusion

6.34 NOPSEMA has developed a graduated approach to respond to non-compliance of safety regulations, with the Authority advising that this approach is also used in the consideration of well integrity and environmental management enforcement action, pending the enactment of further enforcement powers. A similar strategy to support a proportionate response to non-compliance will be important to underpin the effective implementation of the expanded enforcement powers in future years. NOPSEMA's implementation of enforcement actions has generally been proportionate and timely.

6.35 NOPSEMA's management of remedial action to return operators to compliance is generally sound. However, there is scope for the Authority to systematically review the implementation of actions following incidents and investigations as a mandatory item in subsequent inspections. The systematic monitoring of actions following incidents would better place the Authority to manage non-compliance. There would also be merit in NOPSEMA reviewing procedural guidance covering the granting of extensions to operators to complete remedial action, given the length of time currently required by operators to implement required actions.

Ian McPhee
Auditor-General

Canberra ACT
12 June 2014

Appendices

Appendix 1: Response from the National Offshore Petroleum Safety and Environmental Management Authority

NOPSEMA welcomes the conclusion of the ANAO's Performance Audit that had the objective 'to assess the establishment of the National Offshore Petroleum Safety and Environmental Management Authority and the effectiveness of its regulatory function'.

As noted in the Report, this Audit was executed in addition to the legislated operational effectiveness reviews of NOPSEMA which are conducted every 3 years. These Triennial Reviews are conducted by panels of experts with petroleum, industry or regulatory, backgrounds. The audit officers from the ANAO did not have such experience and may have found it challenging to comprehend the nature of regulation required in a performance based regulatory regime for the high hazard offshore petroleum industry.

Nevertheless, the audit has been extensive. Over a period exceeding 12 months, the Audit has been informed by approximately 190 requests for information, the review of nearly 4000 of NOPSEMA's regulatory records and an examination of NOPSEMA's personnel files. It has consumed substantial resources from both the ANAO and NOPSEMA.

While the Report does not directly provide an overall conclusion in line with the above audit objective, NOPSEMA notes the Report's summary statement 'Overall, NOPSEMA has appropriately integrated administrative arrangements for the new function of environmental management and has established a sound framework for the regulation of the offshore petroleum industry'.

This summary statement is similar to that made in the Report of the *Second Triennial Review of the Operational Effectiveness of the National Offshore Petroleum Safety Authority* in November 2011 which stated as follows. "The period since the 2008 operational review of NOPSA has been one of consolidation, interspersed with ongoing legislative change, significant reviews and inquiries requiring resource intensive operational and policy responses. This year, NOPSA has had to plan and prepare for significant structural change with the passage of legislation to create NOPSEMA, which is to commence at the start of 2012. We have concluded that, notwithstanding these significant events and some recommendations for further improvement in our Report, NOPSA has firmly established itself as a respected and competent safety regulator among stakeholders and peers in both the domestic and international offshore petroleum and gas industry".

The ANAO's Performance Audit (conducted during the calendar years 2013 and 2014) immediately precedes the next Triennial Review which is scheduled to commence in 2014.

The ANAO Report points to a number of potential improvement areas which have either been addressed or would likely have been considered anyway as part of NOPSEMA's ongoing reviews of its policies and procedures.

As feedback on the conduct of the Performance Audit, it is suggested that the ANAO consider raising emerging issues or concerns during the progression of the audit rather than waiting until the last weeks of the audit. Such an approach would provide an opportunity to correct misunderstandings or errors of fact prior to the production of the ANAO's Issues Papers and might facilitate better learning opportunities for the audited agency.

NOPSEMA makes the following comments in respect of the 3 Recommendations:

Recommendation No. 1

To support the effective management of regulatory activities, the ANAO recommends that NOPSEMA strengthen its governance arrangements by:

- actively managing mitigation strategies for key business risks;
- developing relevant, reliable and complete key performance indicators and targets; and
- analysing and reporting against those indicators on the extent to which its objectives are being achieved.

The first part of this Recommendation is agreed and is complete. Parts two and three are agreed in part.

In respect of the first part from this Recommendation, NOPSEMA has reviewed its existing risk management system against the elements of AS/NZ 15031000:2009 Risk Management Principles and Guidelines and confirmed that it is consistent with the principles of the guideline. However, consistent with continuous improvement principles, NOPSEMA will continue to refine and improve its risk management system.

In respect of parts two and three, NOPSEMA publishes the Annual Offshore Performance Report[150] (Performance Report) which provides a comprehensive overview of NOPSEMA's performance of its regulated obligations and more

150 http://www.nopsema.gov.au/assets/Publications-2/ Annual-offshore-performance-report-2013-web.pdf

importantly allows the reader to determine if the offshore industry is becoming safer. Prior to this publication there was little or no information about the performance of the industry. (In the future, NOPSEMA will also trend the national environment management performance of the regulated industry).

NOPSEMA disagrees with the ANAO Report where it states that the Performance Report provides 'limited insights' into the extent to which NOPSEMA's objectives are being achieved. NOPSEMA acknowledges that demonstrating a link between the Regulator's actions and the performance of the industry it regulates is problematic, however the performance information published goes to the very purpose of NOPSEMA and of the expectations of the regulator as specified in the Minister's Statement of Expectations.[151]

The Performance Report also reports on NOPSEMA's fulfilment of its obligations including those where the regulations specify timeframes for completion of regulatory activities. NOPSEMA is committed to maintaining transparency in its regulatory functions and demonstrating improvements in efficiency and effectiveness.

NOPSEMA intends to continue to review the data that informs the Performance Report metrics and to examine that data for insights into emerging risk areas.

It should be noted that the Performance Report draws on data that the industry is required submit to NOPSEMA on a mandatory basis. Any increase in reporting obligations would represent additional regulatory burden.

151 The following are the first two guiding principles for NOPSEMA from the Minister's Statement of Expectations:

1. *Promote and secure compliance by dutyholders with the regulatory regime through monitoring, enforcement and proactive engagement with stakeholders to:*
   - *Reduce the risk to human health and safety of persons engaged in offshore activities to as low as reasonably practicable;*
   - *Maintain the structural integrity of facilities (including pipelines), wells and well-related equipment; and*
   - *Reduce environmental risks and impacts from offshore activities.*
2. *Continue to improve health and safety outcomes in the offshore petroleum and greenhouse gas storage industries, by encouraging an effective safety culture, workforce involvement, and securing compliance with OH&S legislation.*

Recommendation No. 2

To help ensure that compliance activities are targeted to the areas of highest regulatory risk, the ANAO recommends that NOPSEMA develop its planned safety inspection program having regard to the risk profile of individual facilities.

This recommendation is agreed in part.

NOPSEMA's risk based approach to planned OHS Inspections is contained in its published Inspection Policy.[152] This policy sets targets for minimum inspection frequencies for facility types based on the hazard presented by the type of operations coupled with the likelihood of multiple persons being harmed. The policy also describes the risk issues to be considered in framing the inspection scope for a particular facility. Inspection topic scopes for a facility may change on the basis of higher risk matters being discovered during the inspection.

The ANAO Report suggests that NOPSEMA should produce a formal risk matrix for each normally attended facility and then adjusts its inspection frequency on the basis of the relative risk ranking of each facility. The ANAO Report nevertheless also recognises the requirement to maintain a minimum frequency of safety inspections.

NOPSEMA maintains that its current inspection policy sets an appropriate risk based target of two inspections per annum for normally attended facilities as recommended in the Report Offshore Petroleum Safety Regulation Better practice and the effectiveness of the National Offshore Petroleum Safety Authority, Commonwealth of Australia, June 2009.[153] These facilities present the greatest potential for Major Accident Events (MAEs) and NOPSEMA inspections monitor operators' compliance with respect to the existence and efficacy of control measures for the prevention of each category of MAE. NOPSEMA does not believe that the burden on industry and the regulator of creating and maintaining a formal detailed risk ranking of facilities is warranted given that it is unlikely to result in any material reduction in inspection frequency for such major hazard facilities.

152 http://www.nopsema.gov.au/assets/Policies/N-02000-PL0025-0HS-Pianned-Inspection-Rev16-July-2013.pdf

153 Bills, K. and Agostini, D., *Offshore Petroleum Safety Regulation Better practice and the effectiveness of the National Offshore Petroleum Safety Authority*, Commonwealth of Australia, June 2009.

Recommendation No. 3

To better target the management of compliance, the ANAO recommends that NOPSEMA focus and prioritise its recommendations arising from inspections towards compliance related matters, while continuing to identify and monitor opportunities for better practice in its inspection reports.

This Recommendation is agreed in part.

NOPSEMA agrees that OHS inspections recommendations should consider the operators' compliance with the legislation.

The ANAO Report notes that NOPSEMA's Inspectors make, on average[154], 10 recommendations per planned OHS inspection and acknowledges that NOPSEMA tracks the responses to all recommendations through subsequent inspections and operator liaison meetings.

The ANAO Report suggests that the regulatory effort in tracking all recommendations is overly burdensome for the regulator and sends uncertain messages to the operator. It suggests that NOPSEMA should make recommendations only in the case of suspected non-compliance but should however continue to offer suggestions for improvement which need not be addressed by the operator or monitored by NOPSEMA.

NOPSEMA considers that in an objective based regulatory regime, the most effective regulatory tool is the conduct of diligent planned inspections. Recommendations arising from NOPSEMA inspections are not directly enforceable under the legislation. They are nevertheless multi-purpose; they may promote compliance, be advisory or constitute a preliminary step of enforcement. Importantly all recommendations are framed to challenge the operator to demonstrate compliance with the legislation to ensure that the risks of Major Accident Events and all OHS risks are reduced to ALARP. Hence, NOPSEMA considers that all matters addressed within inspection recommendations warrant attention by the operator and follow-up by the regulator.

NOPSEMA does not consider the average of 10 recommendations per inspection (20 per annum for normally attended facilities) to be unreasonably onerous.

154 Generally there may be more recommendations where NOPSEMA is concerned about the operator's performance and less where the operator is closely meeting its Safety Case commitments and maintaining Major Accident Event control measures.

It should be noted that where there is non-compliance found that exceeds the risk threshold encompassed by NOPSEMA's Enforcement Management Model, an enforcement notice may be issued rather than a recommendation.

ANAO Comment

The ANAO has included comments in the report in relation to NOPSEMA's response. The ANAO's comments on the Authority's summary response are provided at paragraphs 44–46, while comments on the Authority's response to each of the recommendations are provided at paragraphs 2.81–2.82, 3.47 and 4.60–4.61.

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