
7 Occupational health and safety

Key points

- Regulatory arrangements for occupational health and safety (OHS) vary for onshore and offshore operations. Regulation of most offshore activities has been harmonised with the creation of the National Offshore Petroleum Safety Authority (NOPSA), while onshore operations are regulated under the OHS regimes applying in each State and Territory.
- The formation of NOPSA has led to improvements in the efficiency and effectiveness of OHS offshore petroleum regulation.
- To reduce regulatory duplication and uncertainty, the legislated coverage of NOPSA should be extended to include the safety and integrity of pipelines, subsea equipment and wells. If NOPSA were given these additional responsibilities, the authority would need to be adequately resourced to carry them out.
- To minimise potentially complex interface issues facing some projects, subject to the outcomes of the current Australian and WA Governments joint inquiry into the 2008 Varanus Island explosion, States and Territories should consider conferring powers on NOPSA to regulate OHS matters for all State and Territory waters seaward of the low tide mark, including islands within those waters.
- Cost recovery arrangements for NOPSA appear broadly consistent with regulatory best practice, and are likely to have assisted with staff retention.
- In view of the difficulties involved (including the potential creation of new regulatory overlaps and the possible loss of synergies for State and Territory based regulators), on balance the Commission does not see a case for extending NOPSA's responsibilities to include onshore integrated production facilities.

Regulatory arrangements for occupational health and safety (OHS) are quite different for offshore and onshore petroleum operations. The OHS regulation of offshore operations has been harmonised with the creation of a national offshore petroleum regulator. Onshore operations continue to be regulated under the OHS regimes applying in each State and Territory.

7.1 Offshore OHS regulation

Current offshore regulatory arrangements for petroleum safety reflect the recommendations of a review completed in 2000 by an international team of offshore safety experts. The review found that the regulatory arrangements prevailing at the time were complicated and insufficient to ensure effective regulation of offshore petroleum activity. In particular, the report found too many Acts, directions and regulations were in place, with problems stemming from legislative overlaps. State and Territory regulators were described as lacking skills, capacity and consistency when administering OHS regulations (DISR 2001).

The review recommended establishing a national petroleum regulatory body to oversee regulation in most Commonwealth waters. Subsequently, and in consultation with the State and Northern Territory Governments and various stakeholders, the Australian Government established the National Offshore Petroleum Safety Authority (NOPSA) on 1 January 2005 to regulate OHS in offshore areas.

NOPSA has regulatory responsibilities for offshore petroleum activities in both Commonwealth and coastal waters (box 7.1). It reports to the Australian Government, all State and Northern Territory Ministers with responsibility for the offshore petroleum sector, and to the Ministerial Council on Mineral and Petroleum Resources.

The major piece of OHS legislation for the offshore petroleum sector is the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cwlth) (OPGGSA) — which is administered and enforced by NOPSA — in conjunction with the following Commonwealth regulations:

- Petroleum (Submerged Lands) (Occupational Health and Safety) Regulations 1993
- Petroleum (Submerged Lands) (Management of Safety on Offshore Facilities) Regulations 1996
- Petroleum (Submerged Lands) (Pipelines) Regulations 2001
- Petroleum (Submerged Lands) (Diving Safety) Regulations 2002

These regulations will be superseded by one set of safety regulations, as part of the proposed consolidation of the OPGGSA.

Box 7.1 Regulatory responsibilities of the National Offshore Petroleum Safety Authority

Under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cwlth), the National Offshore Petroleum Safety Authority (NOPSA) has occupational health and safety (OHS) regulatory responsibilities for offshore petroleum activities in Commonwealth waters and designated coastal waters where State and Territory legislation has conferred such powers. Designated coastal waters incorporate coastal waters as defined throughout the rest of this report, and any other areas that were the subject of an exploration permit under the repealed *Petroleum (Submerged Lands) Act 1967* (Cwlth) immediately before the commencement of the equivalent State or Territory Petroleum (Submerged Lands) Act (where either an exploration permit, retention lease, production lease or an application for a retention lease or production licence is still current).

States and Territories can also provide NOPSA with additional powers to regulate OHS in State and Territory internal waters, and for onshore facilities, by passing appropriate laws and agreeing on funding arrangements.

Source: Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cwlth).

In addition to the Commonwealth legislation and regulations, there is, or — for some jurisdictions — it has been agreed there will be, OPGGSA mirror legislation or regulations in each State and the Northern Territory dealing with coastal waters (NOPSA 2008b).

Key regulatory processes and requirements

Regulation of offshore petroleum activities changed significantly following the 1988 Piper Alpha disaster in the United Kingdom sector of the North Sea. The Piper Alpha disaster claimed 167 lives, and led worldwide to a fundamental reassessment of how best to regulate the offshore petroleum sector.

Safety case regulation

The UK Committee of Inquiry into the Piper Alpha disaster recommended moving from prescriptive regulation to an objective-based ‘safety case’ regime. Following a 1991 Australian Government report, it was determined that Australia should embrace this trend. The *Petroleum (Submerged Lands) Act 1967* (Cwlth) was amended in 1992 to require safety cases to be developed for all offshore petroleum facilities. By 1996 the safety case regime was fully implemented with the completion of safety case regulations.

The ‘safety case’ regime entrenches the notion that ongoing management of safety at offshore facilities is the responsibility of operators and not governments or regulators (DISR 2001). The safety case presented must assure the regulator that operators are aware of potential safety problems, know how to manage them and how to deal with an emergency. Once a safety case is accepted, it forms the benchmark for compliance (box 7.2).

Box 7.2 What is involved in a safety case?

Occupational health and safety (OHS) laws contained within the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cwlth) require the operator of each facility to submit a safety case to the National Offshore Petroleum Safety Authority. The safety case must set out the facility operator’s commitments to reducing risks to a level that is as low as reasonably practicable. It documents the arrangements for OHS that are to be observed by managers, supervisors and the workforce. The safety case must include a detailed description of the safety management system for a facility. The safety management system must provide for all activities occurring at the facility.

Once a safety case for a facility is accepted, the operator must comply with the commitments made in the safety case for reducing risk at the facility. All work on a facility must comply with the safety case and all people on a facility must comply with the safety requirements that apply to them.

Source: NOPSA (2008c).

While there is widespread agreement that the formation of NOPSA has simplified offshore petroleum regulation, a number of issues have been raised. Many of these were canvassed in a 2008 review of NOPSA’s operational activities, the recommendations from which are now being considered by government (box 7.3).

The Australian and WA Governments announced at the beginning of 2009 a joint inquiry into the 2008 Varanus Island explosion. This inquiry is to also examine the effectiveness of NOPSA and offshore petroleum safety regulation more generally. The inquiry is being conducted by Kym Bills, the Executive Director of the Australian Transport Safety Bureau, and Dave Agostini, a former Woodside Petroleum executive (Ferguson 2009; Moore 2009).

Performance of NOPSA

Feedback provided to the Commission on the performance of NOPSA has typically been consistent with the major finding of the 2008 review of NOPSA’s operations:

NOPSA has made good progress in building a safety regulatory regime and authority of world class calibre, and, as expected there are still some aspects of the regime that can be improved on to achieve best practice regulation. (RET 2008i, p. 1)

Box 7.3 Independent review of National Offshore Petroleum Safety Authority operations 2008

In line with legislative requirements for three-yearly reviews, in early 2008 a team of three independent safety experts conducted an independent evaluation of the operational effectiveness of the National Offshore Petroleum Safety Authority (NOPSA). The team comprised:

- Mr Magne Ognedal, Director General, Norwegian Petroleum Safety Authority
- Dr Derek Griffiths, Australian major hazards consultant
- Mr Bruce Lake, Managing Director of Vermilion Oil and Gas Australia.

The review team assessed whether NOPSA was delivering on its objectives and made recommendations to improve the overall operation of NOPSA, and the safety performance of the Australian offshore petroleum sector.

Overall, the panel found that NOPSA had made good progress, with the potential to improve in some areas. Specific recommendations of the review panel included:

- the need for NOPSA to develop guidelines in consultation with stakeholders to provide clarity and consistency to the process, which ultimately will result in better safety outcomes
- clarification that, particularly where it is unclear whether title holders or drilling contractors should be made responsible for demonstrating to NOPSA that drilling operations can be conducted safely, the party making all major decisions related to petroleum activities should bear this responsibility
- extension of NOPSA's legislative responsibility to cover the complete hydrocarbons production system from wells through to a custody transfer point or a reasonable physical/technical system boundary
- linking the initial acceptance of a new facility safety case to the inspection of a facility upon commencement of operations.

Source: RET (2008i).

The Australian Petroleum Production and Exploration Association (APPEA) noted:

The Australian offshore OHS regulatory regime has continued to evolve since the inception of the National Offshore Petroleum Safety Authority (NOPSA) in 2005, with greater efficiencies and effectiveness being achieved over the last three years. NOPSA has worked hard to consult with industry to identify areas where lack of clarity around regulations has led to inconsistency and delays and to address these concerns, particularly in the area of the submission and assessment of safety cases. (sub. 16, p. 17)

ExxonMobil expressed similar views:

We believe that since the inception of the National Offshore Petroleum Safety Authority (NOPSA) in 2005 that the offshore OHS regulatory regime has continued to

evolve with greater efficiencies and effectiveness. We have reviewed the recent independent report concerning NOPSA and generally support its findings and recommendations. We support the NOPSA concept in which a single regulator provides national coverage and the onus is placed on each enterprise to develop and implement processes that meet regulatory requirements. (sub. 13, p. 5)

APPEA has since stated to the joint Australian and Western Australian inquiry into offshore safety regulation:

The regulatory approach and legislation for petroleum safety, both onshore and offshore in Australia, are working effectively and are consistent with world standards – resulting as they have from the findings of numerous national and international reviews over the past decade. There are inevitably, and always will be, room for improvement and many of these improvements have been well identified. (APPEA 2009, p. 4)

There has also been support for NOPSA’s use of memorandums of understanding (MoUs) to minimise confusion over regulatory boundaries, and to promote cooperation with other agencies. NOPSA has entered into MoUs with 19 other agencies, including a number of Commonwealth and State and Territory departments, the Australian Maritime Safety Authority, the Civil Aviation Safety Authority and the Timor Sea Designated Authority.

APPEA suggested other agencies could learn from this approach:

The gamut of MoUs established between NOPSA and bodies such as the Australian Maritime Safety Authority and the Civil Aviation Safety Authority is another good example of improved regulatory efficiency. Unfortunately however these arrangements are the exception. (sub. 16, p. 51)

The Commission encountered very few participants that were critical of NOPSA, although some observed that it was premature to state that the NOPSA model has yet been wholly successful.

On balance, the Commission agrees with major finding of the 2008 review of NOPSA’s operations (as quoted above). The formation of NOPSA has led to improvements in the efficiency and effectiveness of offshore petroleum regulation.

Sources of unnecessary regulatory burden

A number of sources of potential unnecessary regulatory burdens were suggested to the Commission. Issues raised included the dual regulation of pipelines and wells, concern about a perceived shift towards prescriptive regulation, funding arrangements for NOPSA, regulatory resourcing issues, confusion regarding regulatory responsibilities in waters off the WA coast and a number of issues relating to marine regulation.

Dual regulation of wells and pipelines

At the time of NOPSA's formation, the Commonwealth, State and Northern Territory Governments agreed that NOPSA would regulate OHS matters, while the broader regulation of wells and pipelines initially would not be transferred to the new authority. The 2008 review of NOPSA's operations found this decision contributed to the authority's ability to establish its core corporate governance arrangements successfully (RET 2008i).

However, these arrangements could potentially lead to regulatory confusion. As APPEA stated:

The main area where APPEA believes reform is required is the administration of Well Operations Management Plans (WOMPs), subsea equipment and Pipeline Management Plans, where currently regulatory responsibilities are shared by the [Designated Authorities] and NOPSA. These activities carry risks that impact upon the integrity of the total petroleum systems. The interaction between the various activities is critical to the safety performance of operations and should be regulated by a single body. (sub. 16, p. 20)

The 2008 review of NOPSA's operations said that some Designated Authorities (DAs) had stated they did not possess the expertise to review well operations management plans (WOMPs) or pipeline management plans:

Most stakeholders supported the view that NOPSA should also regulate the integrity of pipelines and sub sea equipment. In particular the DAs advised that they no longer retain the necessary technical competence to assess the issues involved. They thought the current arrangement with both NOPSA and DAs having responsibility for integrity issues of parts of the petroleum offshore upstream industry made efficient regulation cumbersome to achieve.

On the subject of who should regulate the safety and integrity of wells (WOMPs), the majority of stakeholders supported NOPSA taking on this role. The Western Australian DA indicated they still had the expertise to assess the issues involved and was neutral on who should regulate the safety of wells. The Victorian DA indicated they no longer had the necessary expertise and supported the regulation of wells by NOPSA. (RET 2008i, pp. 14–15)

The Victorian DA has indicated to the Commission since the draft report was published that Victoria does, in fact, still possess the expertise to regulate well integrity, and that it did not support NOPSA taking over this role. In response to the Commission's draft report proposal for NOPSA to take over regulation of the integrity of offshore pipelines, subsea equipment and wells, the Victorian Government said:

The integrity of a well ... depends on well design parameters ... [that] are in the realm of resource management and therefore, currently in the realm of the DA. NOPSA's key role is occupational health and safety. While NOPSA has the requisite skills and

expertise to regulate pipeline integrity, it does not have reservoir engineering skills required to assess well integrity. If well integrity were moved to NOPSA, then NOPSA would be required to acquire reservoir engineering skills just for well design ... It would be an inefficient use of scarce skills. (sub. DR26, p. 2)

The Victorian Government indicated its concerns would be diminished if a new suitably resourced national petroleum regulator was formed incorporating the current activities of other federal and state regulators (and its concerns would be completely alleviated if the national regulator incorporated the current activities of NOPSA).

Other jurisdictions take a different view to Victoria. For example, the SA Government stated:

South Australia concurs with the [draft report] recommendation for NOPSA to have coverage for all matters relating to safety in the offshore area. This will greatly assist in achieving greater efficiency through a one window to government for all matters relating to safety. South Australia also concurs that when extending NOPSA jurisdiction to include other offshore activities not currently under its ambit such as pipeline, seismic and other geoscientific exploratory activities, subsea equipment and wells, consideration needs to also be given to ensuring adequate resourcing. (sub. DR23, p. 10)

And APPEA has expressed a similar view:

APPEA has long been working with NOPSA and the Commonwealth Department on the Integrity Working Group and has identified that regulatory requirements for wells and pipelines are largely a safety issue, with a small element of resource management. (sub. DR29, p. 11)

The Commission considers that shared responsibility for regulation of the safety and integrity of offshore pipelines, subsea equipment and wells creates unnecessary duplication. Moreover, in view of the importance of these areas to the safety of petroleum operations, clarification of responsibilities should be addressed as a matter of priority. With specific regard to well integrity, while there are resource management considerations, the Commission believes unambiguously clarifying responsibilities for safety issues is of paramount importance and the Commission believes NOPSA should take this role.

Steps proposed as part of the consolidation of the OPGGSA go some way towards reducing duplication in these areas. In particular, the proposed removal of safety issues from WOMPs (meaning the plans will concentrate on resource management issues), and the proposed removal of pipeline management plans represent positive steps in reducing regulatory overlap (RET 2008h).

However, the Commission considers the best solution is for the legislated coverage of NOPSA to be extended to include the safety and integrity of offshore pipelines, subsea equipment and wells. This effectively mirrors a recommendation of the 2008 review of NOPSA's operations. As this recommendation would add to NOPSA's responsibilities, it is important that it be adequately resourced for the additional tasks.

RECOMMENDATION 7.1

The legislated coverage of the National Offshore Petroleum Safety Authority should be extended to include the safety and integrity of offshore pipelines, subsea equipment and wells. If the National Offshore Petroleum Safety Authority is given these additional responsibilities, it would be necessary to ensure the authority was adequately resourced to carry them out.

Environmental compliance

At the time of NOPSA's establishment, the Ministerial Council on Mineral and Petroleum Resources also recommended consideration be given to expanding NOPSA's responsibilities to include environmental regulation (Wilkinson 2003). It was suggested that the Australian, State and Territory Governments could delegate responsibility for regulating environmental compliance in both coastal and Commonwealth waters to NOPSA.

It was envisaged that the relevant government in each jurisdiction would retain responsibility for setting environmental policy and approving development activity. NOPSA would then monitor and regulate compliance with the conditions set during the approval process. The DA and Joint Authority model would be retained, and the roles of the Department of Resources, Energy and Tourism (RET) and Geoscience Australia would be unchanged.

Governments decided that, at least initially, NOPSA should focus purely on safety. In the draft report, the Commission discussed whether NOPSA's responsibilities should be expanded to include environmental compliance, noting there are workable examples of petroleum agencies in other countries (including Canada, the Netherlands, the United States and Norway) undertaking environmental compliance in addition to other regulatory functions, including OHS.

Expanding NOPSA's role to include environmental compliance would increase the complexity of the agency's workload to a degree, but there would be benefits from combining activities associated with knowledge of offshore facilities, system auditing and inspection requirements. Wilkinson (2003) observed that a competent offshore petroleum regulatory organisation requires skills including operational and

engineering knowledge relevant to offshore technology, appropriate personal attributes and health and safety regulatory competencies. Adding environmental regulation to NOPSA's areas of responsibility could allow the agency's existing operational and engineering knowledge to be used in regulating environmental compliance.

There are also some important synergies. For example, engineering and operational aspects of pipelines related to safety and preventing emissions are likely to be relevant to preventing environmental damage. When NOPSA undertakes health and safety system audits of offshore facilities, it is likely there would be little additional difficulty in combining these with environment-related compliance checks of the same facilities.

However, the extent to which efficiency can be increased by combining OHS regulatory competencies and environmental compliance competencies is unclear. The Victorian Government suggested there were no real efficiency gains:

While it is acknowledged that there are a number of synergies between safety and environment considerations associated with petroleum projects, joint audits carried out by NOPSA and the Victorian DA indicate there is no efficiency gain achieved by combining safety and environment considerations for audit purposes. Often, safety and environment considerations are competing for the same company personnel ... which makes the audit process less efficient than if conducted separately. (sub. DR26, p. 2)

While the WA Department of Mines and Petroleum stated:

Experience with combined safety and environmental audits has shown that it is far more efficient to split the agenda to ensure time is used most efficiently without excessively burdening a facility's personnel during the audit. Also, aspects of the environmental audit tend to become overshadowed by the safety matters. Consequently, the quality of the environmental inspection can be compromised, as can the quantity and quality of environmental information included in the report. (sub. DR22, p. 16)

Some participants saw greater synergies from keeping environmental assessment and compliance within the one agency. The Victorian Government expressed the view that:

Environmental compliance is essentially about compliance with the environmental plan for a particular petroleum activity. Compliance typically requires understanding and knowledge of complex environmental issues. Separating environmental assessment from environmental compliance will require duplication of knowledge and understanding of the same issues. (sub. DR26, p. 2)

While the WA Department of Mines and Petroleum argued separating environmental assessment and compliance:

... will result in double-handling of any amendments to projects and ongoing liaison due to the operator being required to advise both the approvals agency and the compliance agency of the amendment or additional information, thereby *increasing* duplication in the process. From the operator's perspective, rather than having one contact point within the Designated Authority for environmental matters, they would now conceptually have different contact points in different agencies for varying aspects of any one single proposal. This will increase the likelihood for miscommunication and errors in both the compliance and assessment stages of projects. (sub. DR22, p. 19)

There is also some potential risk, albeit probably low, that expanding NOPSA's role beyond OHS could diminish the emphasis on safety present in a single 'role' body. Some participants considered there was a greater risk that, given the importance of safety, giving NOPSA responsibility for environmental risk could result in a diminished focus on environmental issues. The WA Department of Mines and Petroleum stated:

DMP would argue that the risk of diminished safety emphasis is extremely low. In fact ... based on DMP's experience (prior to the formation of NOPSA), the real risk is in having environmental issues being overshadowed by safety issues. It is acknowledged of course that in all circumstances safety of personnel is paramount and always the first priority. However this ethos appears to affect resourcing available to environmental regulation. So even if there is any potential synergy in combining health, safety and environmental regulation, the tendency is for environmental matters to assume a lower priority in the organisation which could potentially result in compromised environmental outcomes. Therefore, any proposed recommendations to combine environment and safety regulatory functions should give detailed consideration to the structures in place to ensure environmental regulation is not compromised. (sub. DR22, p. 16)

On balance, the Commission considers NOPSA's responsibilities should remain solely focused on safety and integrity issues.

The issue of whether NOPSA's responsibilities should be further extended to all onshore OHS regulation for the upstream petroleum sector is discussed later in the chapter.

OHS regulation in coastal and inland waters

NOPSA was formed in large part to remove regulatory inconsistencies across jurisdictions and to reduce the number of regulators the upstream petroleum sector had to deal with. While NOPSA is able to exercise power in Commonwealth and coastal waters (and State and Territory internal waters subject to States and

Territories passing appropriate laws), the Commission has heard that there is still potential for regulatory confusion in some offshore areas.

The regulatory arrangements for Varanus Island at the time of the 2008 explosion can be used to illustrate this. At the time of this incident, Apache's operations on Varanus Island were regulated under the *WA Pipelines Act 1969*, with regulatory responsibility for OHS and integrity issues lying with the then WA Department of Industry and Resources (DoIR) (which was restructured in January 2009 and its regulatory responsibilities moved to the Department of Mines and Petroleum). NOPSA provided technical advice and contractor services to DoIR under a service contract.

Under the *Offshore Petroleum Act 2006* (Cwlth) and the *WA Petroleum (Submerged Lands) Act 1982*, NOPSA had OHS regulatory responsibilities for offshore platforms and pipelines feeding into the Varanus Island hub in Commonwealth waters, and in designated coastal waters where power was conferred on it.

The OHS and integrity issues relating to the mainland onshore operations of the pipelines were the responsibility of DoIR, with the WA Department of Consumer and Employment Protection providing regulatory services to DoIR for these pipelines under a memorandum of understanding (RET 2008d).

While the Commission is not suggesting these arrangements played any part in the Varanus Island incident, the arrangements do highlight that despite the formation of NOPSA, offshore regulatory arrangements can be quite complicated. Indeed, anecdotal evidence provided to the Commission has suggested projects could be subject to a number of OHS regulators (and alternate between regulators) if they went, for example, from Commonwealth waters, to onshore islands, to designated coastal waters, to State and Territory internal waters, to the mainland onshore.

The OPGGSA (and mirror legislation in the States and Territories) allows jurisdictions to confer powers on NOPSA in designated coastal areas and (subject to necessary laws being passed and funding arrangements being agreed with the Commonwealth) in State and Territory internal waters. It appears there would be a reduction in the unnecessary regulatory burden faced by the upstream petroleum sector if these powers were conferred on NOPSA more widely.

There would potentially be further benefits from giving NOPSA OHS regulatory responsibilities for islands located off the mainland States where offshore petroleum activity takes place.

The complex interface issues facing some projects in offshore waters across Commonwealth waters, coastal waters, State and Territory internal waters and islands in terms of occupational health and safety is confusing and adds to the risk of poor regulation of safety and potentially adds to unnecessary regulatory burdens.

The Commission notes that the joint Australian and WA inquiry into the Varanus Island incident is considering these issues, particularly in the context of regulatory arrangements in Western Australia.

Subject to the outcomes of the current Australian and Western Australian Governments joint inquiry into the 2008 Varanus Island explosion, States and Territories should consider conferring powers on the National Offshore Petroleum Safety Authority to regulate occupational health and safety matters for all State and Territory waters seaward of the low tide mark, including islands within those waters.

Concern about prescriptive ‘guidelines’

The upstream petroleum sector raised concerns about a perceived drift away from objective-based regulation towards greater prescription in some OHS areas. APPEA stated:

One area of real concern for APPEA’s members however, is a discernable trend to introduce ‘guidelines’ that add new requirements rather than clarifying existing requirements – recent examples being ‘Offshore Accommodation Standards’ and ‘Helicopter Standards’. This ‘prescription by stealth’ is strongly opposed. Any ‘guidelines’ introduced by NOPSAs should provide genuine guidance on existing requirements and their development should be done in full consultation with the industry and the workforce... APPEA and its members would be particularly concerned by any developments that resulted in a move towards a more prescriptive regulatory regime, away from the objective based risk assessment approach that applies to onshore and offshore regulation of petroleum exploration and production activities. We continue to strongly support the objective based regime. (sub. 16, pp. 17–18)

Following the release of the draft report, NOPSAs disputed that the documents referred to by APPEA could be described as guidelines, and said they had been provided to the sector to obtain feedback.

In determining whether to accept proposed safety cases, NOPSAs refers to internal standards and ‘guidelines’ for assistance. Many of NOPSAs’s published documents

appear to be these internal standards designed to guide NOPSA staff and supervisors. Such standards are particularly relevant in areas such as helicopter safety, which is unlikely to be an area of particular expertise for NOPSA staff. In these areas, the ‘standards’ are typically based on advice from other agencies, or consultants.

By making these ‘standards’ available to the sector, NOPSA could be seen as providing useful information to aid in completion of a successful safety case. (Moreover, sections of the sector have requested more guidelines and, as noted in box 7.3, the 2008 review of NOPSA’s operations found a positive role for them.) However, publishing them means they could then be interpreted as being mandatory, thus partially undermining the objective-based regulatory regime.

Clear differences can be seen by the approach of NOPSA and, for example, the equivalent regulator in the United Kingdom, the Health and Safety Executive. While offshore petroleum safety regulation in both countries is based on safety case principles, the UK Health and Safety Executive publishes a wide range of safety alerts, information sheets and operations notices to guide industry.

FINDING 7.2

In those areas where the National Offshore Petroleum Safety Authority uses internal standards when assessing safety cases, there are likely to be net benefits from making these available to the offshore petroleum sector. However, it is important that the extent of use of, and the style of, such standards does not undermine the objective-based nature of the regulatory regime.

Marine issues

The Austral Chapter of the International Association of Geophysical Contractors, which represents seismic contractors, observed that the *Navigation Act 1912* (Cwlth) effectively requires Australian officers and seamen to take over from existing crews on seismic vessels before arriving in Australia. The organisation sees this restriction as creating particular problems given the shortage of qualified marine personnel in Australia:

This procedure has resulted in undue burdens on the cost of exploration in Australia and has increased the risks of accidents as the Australian crews often have little or no experience of seismic operations or the complex vessels they are expected to man. This lack of experience is an increasing problem as there is an acute shortage of qualified marine personnel in Australia. Australia is the only country in which we operate which has the requirement to utilise local crews. We now are resorting to duplicating senior marine crew positions with our overseas experienced crew. (sub. 10, p. 1)

It saw the requirement as a disincentive for the seismic industry, and more broadly the oil and gas sectors, to invest in exploration in Australia.

In the draft report, the Commission sought further comment on whether requirements for Australian qualified marine personnel in the Navigation Act created unnecessary regulatory burdens. Relatively few comments were received. APPEA, however, submitted that the shortage of marine personnel was one of a number of skill shortages faced by the sector, and that it was important for the sector to develop appropriate responses:

APPEA generally supports the views expressed by the Austral Chapter of the International Association of Geophysical Contractors in regard to the shortage of qualified marine personnel in Australia. APPEA's position would not however be to remove requirements to have Australian officers and seamen as a first position, but to develop a number of mechanisms to ensure the oil and gas industry is able to access the skills required in a timely and effective manner through, for example, developing strategies to increase availability of qualified marine personnel in Australia and specific immigration and visa arrangements to address short term shortages. This is consistent with the broad strategy adopted by the oil and gas industry to skills shortages. (sub. DR29, p. 20)

Given the limited evidence received stating that this is a significant unnecessary regulatory burden, the Commission considers major changes to the Navigation Act are not justified based purely on the regulatory burden faced by the upstream petroleum sector (particularly when weighed up against other government objectives). As suggested by APPEA, the sector will need to develop mechanisms to overcome any skill shortages stemming from the Act's application.

Another issue causing some confusion stems from the decision that the Navigation Act would no longer apply to Australian registered vessels and floating production, storage and offloading vessels when these are working under the safety case regime.

Currently NOPSA has jurisdiction over offshore facilities (whether floating or fixed) while they are in operation, being prepared for operation, or being decommissioned as an offshore facility. At other times, the Australian Marine Safety Authority has jurisdiction over vessels under the Navigation Act.

The Australian Marine Safety Authority stated that, to avoid a regulatory gap, in practice the Navigation Act requirements must be maintained so that a vessel can safely disconnect and sail away (RET 2008i). However, these arrangements provide for regulatory uncertainty during the transition phase.

The 2008 review of NOPSA's operations noted that it appears there are some unintended consequences arising from the changed regulatory arrangements. It further recommended:

The consequences of the disapplication of the Navigation Act should be analysed, the actual consequences identified and unintended consequences addressed. The result of the analysis must be communicated to all stakeholders. (RET 2008i, p. 21)

The Commission agrees that if there is any regulatory uncertainty stemming from the decision to no longer apply the Navigation Act to Australian registered vessels and floating production, storage and offloading vessels working under the safety case regime, this should be clarified and resolved. However, given the highly prescriptive and all encompassing nature of the Navigation Act, reapplication of the Act to vessels would impose an onerous regulatory burden.

The current joint Commonwealth and WA inquiry into the Varanus Island explosion, which also is to focus on offshore petroleum safety regulation more broadly, is likely to consider this issue further.

RECOMMENDATION 7.3

The Australian Government should clarify whether any significant regulatory uncertainty results from the decision that the Navigation Act would not apply to Australian registered vessels and floating production, storage and offloading vessels when these are operating under the safety case regime. If so, it should act to remove the uncertainty. Reapplication of the Act would impose an onerous regulatory burden and would be unlikely to result in net community benefits.

The application of the safety case regime to ‘associated offshore facilities’ also has another consequence. Vessels require safety cases to be able to perform petroleum related work in Australia. This means vessels with safety cases are the preferred option for operators, even when they might not be the best or safest vessel available for a particular task. APPEA noted:

The other key area requiring reform is the definition of Associated Offshore Facility and its application to various marine vessels. This area currently causes considerable confusion and duplication in regard to safety regulation and the interaction between the safety case regime and other internationally recognised regulatory controls. (sub. 16, p. 20)

The 2008 review of NOPSA’s operations suggested that, from a practical viewpoint, if a vessel were regulated under a maritime regime, there is no point in duplicating this under the petroleum regulatory regime. It recommended that regulations (or their interpretation) should be changed to ensure that only petroleum-related functions representing a risk to people, environment and asset integrity of the petroleum facilities were regulated under the safety case regime (including collision or interaction risk) (RET 2008i). The Commission endorses this approach.

Following the release of the Commission's draft report, there was widespread agreement with the Commission's recommendation, although some participants wanted clarification of what would constitute a 'petroleum-related function' under such a regime. For example, the NT government said:

The [Northern Territory Government] notes the draft recommendation, but considers that clarification of this recommendation is required to determine if pipeline laying vessels are classed as petroleum related vessels as the *Offshore Petroleum Act 2006* (Cth) also regulates gas. (sub. DR32, p. 7)

The Commission agrees clarification is important, and notes the 2008 independent review of NOPSA's operations attempted to define 'petroleum-related functions'. However, the Commission acknowledges it is not best placed to determine which functions are, or are not, petroleum related, and therefore considers the Australian Government should liaise with the upstream petroleum sector and the relevant regulators to determine which activities are petroleum-related and should therefore be regulated by NOPSA.

RECOMMENDATION 7.4

The Australian Government should clarify occupational health and safety regulations under the Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cwlth) to ensure that there is complete clarity about which petroleum-related sea going vessels must be regulated under the safety case regime. In determining which activities are petroleum related and pose sufficient risk to health, safety and the environment to warrant such inclusion, the Australian Government should liaise with the upstream petroleum sector, the National Offshore Petroleum Safety Authority and the Australian Maritime Safety Authority.

Funding arrangements

NOPSA is funded on a full cost recovery basis under the *Offshore Petroleum (Safety Levies) Act 2003* (Cwlth). Levies are calculated based on the *Offshore Petroleum (Safety Levies) Regulations 2004* (Cwlth). The sector suggested that these arrangements fail to recognise that the activities of NOPSA benefit the wider public and not just the offshore petroleum sector.

APPEA stated:

With clear ... public benefits from the regulation of the industry, the application of a full cost recovery system contradicts the Productivity Commission's *Report into Cost Recovery by Government Agencies 2001*. In this [2001] report, the Commission supports the *Beneficiary Pays Principle*, which it defines as 'the idea that those who benefit from the provision of a particular good or service should pay for it'. With some public funding, APPEA strongly believes that this would be accompanied by a high

degree of public oversight of all expenditures by NOPSA, a higher level of confidence in the case for the significant expansion in the NOPSA budget and a far lower level of reluctance by industry to accept any further regulatory functions being incorporated into a joint Commonwealth–State national regulatory body. (sub. 16, p. 19)

In its 2001 Cost Recovery inquiry report, the Commission raised a number of concerns about applying the ‘beneficiary pays’ principle in the manner suggested by APPEA:

There are three problems with this approach. First, funding regulatory activities from the budget would disguise the costs to consumers and producers of the regulatory activities deemed necessary to limit the risk of the spillover occurring. This could inappropriately encourage the regulated industry to expand, to the disadvantage of other industries where spillover effects are not as important and where regulatory costs are not as high. In addition, where consumption of regulatory activities is discretionary, regulated firms would not face the same financial discipline.

Second, the benefits to the rest of the community result from costs foregone (that is, from not incurring a cost or not coming to some harm) and it may be argued on equity grounds that the community should not bear the expense of avoiding being harmed. Third, taxpayer funding creates other efficiency costs as a result of the impacts of taxes on the general community. (PC 2001a, pp. 28–29)

Moreover, the Commission viewed partial cost recovery as generally inappropriate, as this involved making subjective decisions about the degree of public and private benefits derived from regulation. The Commission found that, in principle, the prices of regulated products should incorporate all of the costs of bringing them to market, including the administrative costs of regulation.

Charges for goods and services consumed can provide important messages to users and consumers about the cost of resources involved in their production (PC 2001a):

The case for recovering the costs of administering regulation is complex. Because some regulation is intended to reduce the likelihood of negative spillovers, the beneficiary pays principle does not universally apply. A more general principle that may apply is that where regulation is designed to minimise impacts on either consumers or third parties (that is, from spillover effects), the price of each regulated product should incorporate the efficient costs of its regulation. This approach has efficiency and equity advantages over the alternative of funding through general revenue. (PC 2001a, pp. 33–34)

The Commission notes there are potential downsides to regulatory cost recovery. While it can improve agency efficiency by instilling cost consciousness and promoting demand responsiveness, it can also weaken government scrutiny through normal budget processes. To the extent that agencies become effectively self-funding, there is less incentive for their respective portfolio departments and expenditure review processes to subject them to close scrutiny.

Cost recovery can also lead to regulatory creep (that is, additional regulation imposed without adequate scrutiny), gold plating (imposition of unnecessarily high standards) and cost padding (failure to seek efficiency savings, as costs can be readily recovered). Cost recovery may also encourage agencies to pay less attention to non-cost recoverable activities.

Cost recovery should not necessarily apply to all activities undertaken by regulatory agencies. In 2001, the Commission suggested that registration, monitoring of compliance and the issuing of exclusive rights would be potentially suitable candidates for cost recovery, while other activities would typically be funded from general taxation revenue (such as community education, investigation and enforcement, and policy development).

The Commission found that cost recovery charges should be linked as closely as possible to the costs of regulatory activities. This is best achieved by implementing fee-for-service arrangements reflecting efficient costs, although levies were also seen as appropriate albeit only where the basis of collection is closely linked to the costs involved. Further, cost recovery arrangements should apply to specific activities, rather than to agencies, and should avoid cross-subsidisation between groups.

Two of the three levies used to fund NOPSAs appear to fit clearly within the guidelines laid down by the Commission and subsequently adopted by the Australian Government. These are the safety case levy (an annual levy to be imposed in relation to the safety case that is in force in relation to a facility) and the pipeline safety management plan levy (an annual levy to be imposed in relation to the pipeline safety management plan that is in force in relation to a pipeline).

The case for cost recovery of the third levy, the safety investigation levy (imposed on operators of facilities under investigation by NOPSAs due to an accident or dangerous occurrence where the cost of an investigation exceeds \$30 000), is more contentious. The levy is designed to quarantine these costs from the broader sector.

While the cost of investigations is typically met by taxpayers, it was argued in the Cost Recovery Impact Statement at the time the levy was introduced that:

The prime beneficiaries of an efficient and consistent best practice safety regulatory regime are the owners and operators of offshore facilities. It is the owners who create the need for safety regulation and it is therefore appropriate to recover the costs of safety regulation. Investigations act as a safeguard of investment and revenue streams and do not undermine the objectives of safety regulation in the petroleum industry. (DITR 2004, p. 7)

The Cost Recovery Impact Statement also noted that the investigation levy is intended to cover incremental costs of major investigations only and that where an investigation leads to a prosecution, the investigation levy ceases on the day the brief of evidence is sent to the Director of Public Prosecutions. NOPSAs can effectively waive the investigation levy in the event that the investigation identified that the operator had not been at fault or if the investigation had significant sector-wide implications. There are also appeal mechanisms for operators who believe the levy has been imposed unfairly.

The imposition of the safety investigation levy seems reasonable where major investigations are required given the safeguards in place.

Following the Commission's draft report finding that cost recovery arrangements for NOPSAs appeared broadly consistent with regulatory best practice, a number of participants reiterated their disagreement with this position.

For example, APPEA stated:

With a clear set of public benefits from the regulation of the industry, the application of a full cost recovery system contradicts the Productivity Commission's Report into Cost Recovery by Government Agencies 2001. In this report, the Commission supports the Beneficiary Pays Principle, which it defines as 'the idea that those who benefit from the provision of a particular good or service should pay for it'. Clearly with the significant public benefits derived from regulation ensuring the secure provision of energy to meet the everyday life demands and expectations of the Australian public, there should be some degree of public funding in recognition of this public benefit. (sub. DR29, p. 19)

The Commission sees no contradiction between its position adopted with regard to NOPSAs and the principles of cost recovery contained in the 2001 report. For the reasons outlined above, the Commission is still of the view that cost recovery arrangements for NOPSAs appear broadly consistent with regulatory best practice.

FINDING 7.3

Cost recovery arrangements for the National Offshore Petroleum Safety Authority appear broadly consistent with regulatory best practice.

Some study participants have questioned why NOPSAs has generated surpluses in recent years, given its cost recovery funding principles. NOPSAs recorded a surplus of just under \$2.9 million in 2005-06 (on revenue of \$9.6 million), a smaller surplus of just under \$1 million in 2006-07, and a surplus of \$668 000 in 2007-08 (NOPSAs 2008a). These surpluses do not, of themselves, indicate NOPSAs has strayed from its cost recovery principles, although they may provide grounds for reviewing levy rates (particularly if maintained over time) or service levels. NOPSAs attributes the surpluses to a high rate of growth in the petroleum industry (meaning

there were many new facilities), and to difficulties in attracting qualified staff. This meant that their collections through levies for a period exceeded their costs.

A scheduled three-yearly review of cost recovery arrangements for NOPSA was held in 2008. The review was to consider the principles laid down for cost recovery against NOPSA's actual activities, consider the effectiveness of monitoring of cost recovery by NOPSA, review cost recovery issues raised by stakeholders and recommend on whether there is a need for legislative amendments (RET 2008g). The review was well placed to consider issues relating to the surpluses generated by NOPSA and the levies charged. No outcomes from the inquiry have yet been made public.

There is further discussion of cost recovery principles, particularly in relation to how they might apply more broadly, in chapter 9.

Resourcing issues

As previously noted, one factor leading to the formation of NOPSA was concern about the capacity of earlier State and Territory regulators to adequately enforce OHS regulations. The Commission has heard concern about resourcing of regulatory agencies across a number of areas in the course of this study. In the case of offshore OHS regulation, however, the sector saw the creation of NOPSA as helping to ensure adequate resourcing. Indeed, it was considered that similar arrangements could assist elsewhere. APPEA considered:

The establishment of the National Offshore Petroleum Safety Authority saw a consolidation of regulatory requirements, administered by those who had the technical capacity and qualifications to provide a vital community assurance role and capacity to assess the industry's performance. The structure of NOPSA and consolidation of offshore safety regulators under the one joint statutory authority has allowed a unique remuneration structure that provides salaries for regulators that are attractive and competitive with industry pay scales. A consolidation of the dispersed but highly qualified regulators into a single regulatory authority may like NOPSA, reduce the prevalence of leakage of valuable regulatory skills and qualifications into the industry. (sub. 16, p. 39)

The Commission agrees that the consolidation of offshore OHS regulation into one agency is likely to have reduced resource pressures. The full cost recovery arrangements for NOPSA are likely to have assisted the agency in retaining staff by ensuring maintenance of competitive salaries.

Role of the NOPSA Board

NOPSA is overseen by a Board that provides advice to Commonwealth and State and Territory Ministers on policy and strategic matters, as well as providing advice and recommendations to the Chief Executive Officer of NOPSA about operational policies and strategies to be followed. The Board has six members with a mixture of industry, government and trade union experience. The Board members are appointed by the Commonwealth Minister, based on recommendations from the Ministerial Council on Mineral and Petroleum Resources.

The 2008 Review of NOPSA's operations found that while the NOPSA Board provided beneficial advice to NOPSA during its initial establishment phase:

After NOPSA established itself and became operational the role of the Board became unclear to stakeholders. Some thought it was a governing Board, some looked at it as an access door to Ministers, and some did not see the need for a Board. The Board itself became more operational on a principal level engaging with stakeholders and maybe overlapped the responsibilities of the CEO of the independent NOPSA. (RET 2008i, p. 32)

The Commission agrees that, in practice, the role of the NOPSA Board is not entirely clear, and that there is potential for confusion and overlap between the Board and the Chief Executive Officer. The need for a board and, if such a need exists, the role of the Board, should be explicitly clarified and communicated to all stakeholders. The Commission is strongly of the view, however, that NOPSA should remain an independent statutory authority.

RECOMMENDATION 7.5

The Australian Government should consider whether it is still appropriate to have a Board for the National Offshore Petroleum Safety Authority and, if so, explicitly clarify the role of the Board and communicate this to all stakeholders.

7.2 Onshore OHS regulation

While offshore OHS regulatory arrangements have been harmonised, onshore activities are regulated under each State and Territory's OHS regime. Across jurisdictions, mechanisms for regulating onshore petroleum facilities vary, with some jurisdictions regulating via principal OHS Acts, some having industry-specific regimes, and some facilities being regulated principally via dangerous goods or major hazards legislation. OHS arrangements in the industry are governed by many pieces of legislation, with the major Acts shown in table 7.1.

Table 7.1 Major onshore OHS legislation

<i>Jurisdiction</i>	<i>Legislation</i>
New South Wales	<i>Petroleum (Onshore Act) 1991</i> <i>Occupational Health and Safety Act 2000</i>
Victoria	<i>Occupational Health and Safety Act 1985</i> <i>Dangerous Goods Act 1995</i>
Queensland	<i>Petroleum and Gas (Production and Safety) Act 2004</i> Petroleum and Gas (Production and Safety) Regulations 2004 <i>Dangerous Goods Safety Management Act 2001</i>
Western Australia	<i>Occupational Safety and Health Act 1984</i> <i>Mines Safety and Inspection Act 1994</i> <i>Petroleum and Geothermal Energy Resources Act 1967</i> <i>Petroleum Pipelines Act 1969</i>
South Australia	<i>Occupational Health, Safety and Welfare Act 1986</i> <i>Petroleum Act 2000</i> Petroleum Regulations 2000 <i>Dangerous Substances Act 1979</i>
Tasmania	<i>Workplace Health and Safety Act 1995</i> <i>Dangerous Substances (Safe Handling) Act 2005</i> <i>Dangerous Goods Act 1998</i>
Northern Territory	<i>Petroleum Act 1984</i> Petroleum (Occupational Health and Safety) Regulations <i>Workplace Health and Safety Act 2007</i> <i>Dangerous Goods Act 1998</i>

Onshore OHS issues

The Commission received relatively few comments about onshore OHS regulation. Those issues raised included whether a national model OHS Act could adequately regulate the onshore petroleum sector, regulatory inconsistency between State and Territory OHS regulations, and whether NOPSA should take over onshore OHS regulation.

General versus industry-specific OHS regulation

Study participants presented differing views on the relative merits of regulating OHS via principal Acts or industry-specific regimes. An Australian Government inquiry into national model OHS regulation recently reviewed the extent to which the current industry-specific Acts could be accommodated under a principal (model) OHS Act. The inquiry reported in January 2009 (Australian Government 2009), following a report on priority issues in November 2008.

Some industry participants expressed a preference for one model OHS Act across all industries, possibly supported by industry-specific regulation. Santos observed:

When business is subject to OHS laws of both general and specific application, this creates a significant administrative burden for business that is required to report to two different regulatory bodies in the same State. The preferred Model Act should also promote single national OHS laws, with national industry specific regulation for the offshore and onshore oil and gas industry where required. This will ensure consistency and certainty for the offshore and onshore oil and gas industry across all jurisdictions. (Santos 2008, pp. 2–3)

BP suggested:

Industry specific legislation should be abolished in favour of a streamlined and unified model OHS Act. Industry specific provisions should be addressed in comprehensive supporting regulations and codes of practice which would allow for effective transition. (BP 2008, p. 3)

However, others preferred maintenance of industry specific legislation, largely based on recent experiences with offshore regulation. The Australian Council of Trade Unions stated it:

... strongly supports the retention of separate legislation for the offshore oil and gas industry ... The same principles outlined in relation to shipping also apply to the offshore oil and gas industry, including the fact that it has its own regulator, NOPSA. (ACTU 2008, p.12)

APPEA also expressed doubts about whether model OHS legislation could adequately deal with petroleum related OHS issues:

APPEA believes the offshore regime has already achieved a best practice national approach ... APPEA is strongly of the view that the offshore oil and gas industry is fundamentally too different from the range of industries and organisations covered by the COAG reform. Most importantly, the safety regulation of the offshore industry is critical to Australia in regard to ensuring the security and reliability of energy supplies and providing community oversight for environmental and social issues. (sub. 16, p. 21)

The 2009 report on the national review of OHS laws saw a role for industry-specific laws, albeit a limited one. In discussing its preferred model (that is, separate and specific OHS laws for particular hazards or high-risk industries only where objectively justified), the review stated:

... there may be understandable and valid reasons for there being ... separate legislation. Many stakeholders have claimed that this is the case. Nonetheless, we consider that any such claims should be tested and periodically reviewed to determine whether the justification for that approach continues to exist. Where separate legislation was permitted, in the event of any overlap or inconsistency, the model Act should be paramount, other than in exceptional and specified circumstances. As far as possible,

the separate legislation should adopt and apply the key requirements of the model Act (e.g. general duties of care). (Australian Government 2009, p. 12)

The review added that to have one single Act would assume there were no circumstances where separate legislation is warranted, and it was not clear that this was the case (Australian Government 2009).

With regard to offshore safety regulation, the Commission has heard overwhelming support for current arrangements. As APPEA reiterated in its response to the draft report:

APPEA remains strongly of the view that the offshore regime has already achieved a best practice national approach and that the oil and gas industry is fundamentally different to other industries in terms of the environment and safety issues it faces. Notwithstanding this strong view, APPEA believes there may be opportunities for NOPSA and for the industry to work cooperatively with the national OHS regime to align common principles and to benefit where there are opportunities for joint initiatives. (sub. DR29, p. 20)

The Commission considers that the highly specialised (and high risk) nature of the upstream petroleum sector justifies separate OHS legislation in addition to that provided under one principal OHS Act. This is particularly the case for regulation of the offshore sector.

FINDING 7.4

The highly specialised nature of upstream petroleum operations (particularly offshore operations) would justify legislation for the upstream petroleum sector remaining separate from a principal (model) occupational health and safety Act.

A further issue is whether OHS legislation should incorporate a duty of care to the broader public, as well as to employees and contractors, and what that duty should entail. The 2009 report of the national review of OHS laws found general support for incorporating protection of public safety in OHS laws, noting that the only real disagreement among stakeholders was over how wide the protection should be. The review stated:

We have kept in mind that the primary purpose of OHS laws is to protect people from work-related harm. In our view, the status of such people is irrelevant. It does not matter whether they are workers or have some other work-related status or are members of the wider public. They are entitled to that protection. At the same time, the OHS laws should not have an operation that affords such protection in circumstances that are not related to work. There are other laws, including the common law, that require such protection and provide remedies where it is not supplied. (Australian Government 2009, p. 19)

The review recommended that a model OHS Act should protect:

... the health and safety of any person—including the wider public—from exposure to hazards and risks that are inherent in, or emanate from:

- a) the performance of work
- b) anything that is provided or used for or in the performance of work, or intended to be so provided or used; or
- c) a workplace, in its capacity as a workplace. (Australian Government 2009, p. 19)

The Commission broadly concurs with this view.

Regulatory inconsistency

Australia Worldwide Exploration (Western Region) (sub. 17) noted it was part of a group arranging for the import from the United States into Western Australia of a land based drill rig. Australia Worldwide Exploration (Western Region) stated that while the rig was built to US petroleum standards, additional requirements must be adhered to under WA regulations before the rig can be given approval to operate in Western Australia. It stated that as a consequence of the need to meet WA standards:

The estimated cost and time for the rectification work for rig 826 is four weeks and more than one million dollars. (sub. 17, p. 7)

It also noted that there are also differences in standards between Australian States. For example, it suggested that requirements were more onerous in Western Australia than in Queensland. As a result of these differences, work must be done on a drilling rig before it can travel between States. Such differences create unnecessary regulatory burdens, and potentially limit options for using equipment deemed safe under standards prevailing in the United States and in other Australian States.

The WA Department of Mines and Petroleum disputed the facts in the example quoted by Australia Worldwide Exploration (Western Region), stating the drill rig in question did not meet Australian standards and would not have been approved in any Australian jurisdiction. It noted, however, that the zone compliance distances in Western Australia differ from other jurisdictions:

... while Western Australia may have differing hazardous areas (zone compliance) distances, in the example cited the problems arose from the fact that the equipment and wiring simply did not comply — it was not a matter of zone compliance distances. (sub. DR22, p. 20)

The Commission is aware of efforts currently being made to harmonise safety standards for equipment across jurisdictions, and is supportive of these efforts. The

Commission's draft recommendation for greater harmonisation received widespread support. For example, the NT Government said:

The [Northern Territory Government] supports the draft recommendation to standardise regulations across all jurisdictions with a view to developing nationally consistent guidelines and procedures. (sub. DR32, p. 7)

APPEA was also supportive:

APPEA agrees with this recommendation and supports the Commission's call for clarity and harmonisation of standards across jurisdictions. (sub. DR29, p. 12)

Some jurisdictions highlighted that they are moving away from prescriptive safety regulations. In supporting the Commission's draft recommendation, the SA Government noted:

... the focus of objective-based legislative regimes, such as the SA Petroleum Act, is for licensees to demonstrate achievement of desired outcomes. In line with the principles of efficiency and practicality, the aim of any such demonstration is that equipment is 'fit for purpose' rather than any strict compliance to the letter of onerous standards. (sub. DR23, p. 10)

Some study participants suggested to the Commission that some problems stemming from regulatory inconsistency between jurisdictions are due to differences in regulatory interpretation, rather than in the regulations themselves. There is potential for unnecessary regulatory burdens when regulators choose to interpret regulations in a manner that makes them more onerous.

RECOMMENDATION 7.6

State and Territory Governments should make greater efforts to harmonise safety standards, or the interpretation of those standards, for imported upstream petroleum equipment across jurisdictions, whilst giving recognition to appropriate prevailing international standards. Where the application of standards is more onerous than those prevailing in other jurisdictions or comparable countries, efforts should be made to ensure that the application of these more onerous standards provides net public benefits.

Should NOPSA take over regulation of onshore petroleum facilities?

There is broad agreement that the formation of NOPSA has reduced duplication and inconsistencies stemming from earlier offshore regulatory arrangements. Consequently, it may be worth examining whether there would be benefits in NOPSA taking over regulation of onshore sections of pipelines and integrated production facilities as well. This would further reduce duplication, and assist in alleviating confusion over regulatory responsibility for integrated facilities.

However, clear administrative agreements would be needed to prevent confusion over jurisdictional boundaries with an expansion to onshore OHS. Well defined MoUs would be required to assign responsibility between NOPSA and the relevant State and Territory safety and petroleum departments. For example, MoUs would be required between NOPSA and state OHS regulators (such as regulators of major hazard facilities).

The Petroleum and Gas Inspectorate of the Department of Mines and Energy in Queensland stated the NOPSA model was not appropriate for onshore OHS regulation:

... the [Petroleum and Gas] Inspectorate does not consider that there is any significant duplication of requirements or addition compliance costs in regard to safety obligations ... The NOPSA model is not considered an effective model for regulation of on shore upstream petroleum matters. The majority of production is conducted in only two States (South Australia and Queensland). In Queensland the majority of production is now coming from coal seam gas. Coal seam gas production activities require extensive drilling in stark contrast to similar production from conventional resources on shore and even more so from offshore resources. (sub. 5, p. 1)

In fact, it considered that moving to the NOPSA model involved removing some synergies:

... there is significant overlap of issues with coal mining activities and the [Petroleum and Gas] Inspectorate works closely on safety matters with our mining colleagues in the Mines Inspectorate, including undertaking joint audits. Moving to a national body would remove these synergies ... The [Petroleum and Gas] Inspectorate also regulates transmission pipelines, reticulation of gas, LPG industries including automotive LPG, and down stream industrial, commercial and domestic use of gas. Removal of any upstream component would reduce efficiencies gained from this one stop approach to petroleum and gas safety regulation in Queensland. (sub. 5, pp. 1–2)

The 2008 review of NOPSA's activities suggested that 'the definition of coverage for NOPSA needs to consider the relevant total petroleum systems rather than current statutory boundaries' (RET 2008i, p. 21). If safety cases were intended to include all risks affecting system integrity, including carbon capture, transport and storage, it therefore followed:

Coverage of the regime should be increased to cover the complete hydrocarbons production system from wells through to the custody transfer point or reasonable physical/technical system boundary. (RET 2008i, p. 21)

The Commission recognises there would be some benefits of having one safety regulator within integrated (on and offshore) production facilities. However, in view of the difficulties involved (including the potential creation of new regulatory overlaps and the possible loss of synergies for State and Territory based regulators),

on balance the Commission does not see a case for extending NOPSA's responsibilities to include onshore integrated production facilities.

FINDING 7.5

On balance, the Commission does not see a case for extending the National Offshore Petroleum Safety Authority's legislated responsibilities to include onshore integrated production facilities.

That said, the Commission notes the OPGGSA enables States and Territories to empower NOPSA to regulate onshore facilities on a case by case basis. The Commission agrees such powers should be conferred in individual cases where it is mutually agreed that this would reduce unnecessary regulatory burdens and lead to improved regulatory outcomes.

The potential benefits and costs of applying the NOPSA model more widely are discussed in chapter 9.