
OVERVIEW

Key points

- Oil and gas projects are large and complex. From the community's perspective, it is important that they meet reasonable requirements for the environment, heritage, land access, and occupational health and safety. It is also important to achieve these objectives without imposing unnecessary costs on companies or the broader community.
- Currently, duplication and overlap, and inconsistent administration of the 22 petroleum and pipeline laws and more than 150 statutes governing upstream petroleum activities impose significant unnecessary burdens on the sector.
 - Project approvals are taking longer than a streamlined approval process would allow, potentially diminishing the present value of petroleum resource extraction in Australia by billions of dollars each year.
- There is no simple, single answer to reducing the unnecessary regulatory burdens on the upstream petroleum sector. A suite of changes will be needed. The Commission's proposals fall into two broad groups: implementing regulatory best practice and reforming institutional arrangements.
- Key recommendations for improving existing regulatory arrangements include:
 - reducing unnecessary delays (particularly for environmental and heritage processes) through setting statutory timelines, ensuring legislative objectives are clear, promoting clear guidelines on information requirements, and introducing a 'lead agency' approach for approvals
 - clarifying and clearly articulating the objectives for intervention in resource management and ensuring the costs of intervention are the minimum necessary.
- To cut through regulatory duplication and overlap, the Commission proposes the staged establishment of a new national offshore petroleum regulator to undertake resource management, pipeline and environmental regulation in all Commonwealth, State and Territory waters (including islands).
 - The Australian Government initially would establish the new national offshore petroleum regulator in Commonwealth waters, and then provide State and Territory Governments, on a bilateral basis, the option of conferring their petroleum regulatory responsibilities. States and Territories would also have the option of conferring responsibility for regulating cross-jurisdictional onshore pipelines to this body.
 - The National Offshore Petroleum Safety Authority should remain a separate entity with an exclusive focus on occupational health and safety regulation, with its remit extended to offshore pipelines, subsea equipment and wells. Its geographical coverage should include all Commonwealth, State and Territory waters (including islands).

Many of the recommendations for 'best practice' regulation in this report repeat recommendations made by previous, yet for the most part, unimplemented, reviews. This simply reinforces that strong political will and leadership will be essential if meaningful improvement in the way this sector is regulated across multiple jurisdictions is to be successfully implemented, and sustained.

Overview

Upstream petroleum (oil and gas) projects bring substantial economic benefits to the Australian economy — contributing around 2 per cent of GDP. However, they inevitably pose complex, often multi-jurisdictional, environmental, safety and other challenges that must be managed. As for any industry, regulation of upstream petroleum projects ideally should be designed and implemented to promote community wellbeing without imposing unnecessary burdens.

In an international context, Australia’s regulatory regime for oil and gas projects generally is regarded as good, although performance varies noticeably across jurisdictions. Nonetheless, there seems to be considerable room to expedite project approvals and to streamline regulatory requirements while at the same time delivering the policy intent of governments. This report outlines a number of measures to improve regulatory institutions, design and enforcement. If implemented, they would reduce unnecessary regulatory burdens and could deliver significant returns to Australian shareholders and the community more broadly through increased tax receipts. They should also improve Australia’s attractiveness to investors in increasingly uncertain times.

About the study

This study is one of a number of reviews of regulatory burdens stemming from the report of the Regulation Taskforce in 2006. It reflects widespread concerns about delays and uncertainties in obtaining approvals for oil and gas projects, duplication of compliance requirements, and inconsistent administration of regulatory processes across jurisdictions.

The Commission has been asked to examine Australia’s regulatory framework for upstream petroleum (oil and gas) projects involving more than one jurisdiction. It has been asked to identify ways to reduce *unnecessary* regulatory burdens on the sector — those burdens that could be reduced without sacrificing achievement of the policy intent of the regulation. It was also asked to consider options for a national regulatory authority to manage all regulatory approvals for the upstream petroleum sector, to address issues of regulatory duplication and inconsistency.

The Australian upstream petroleum sector

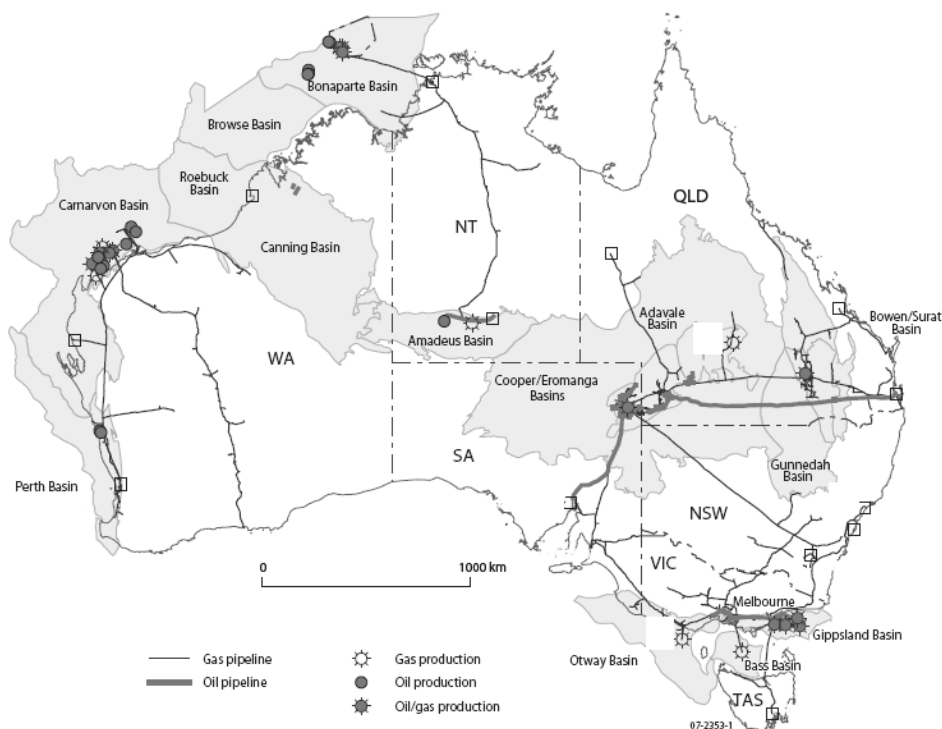
The upstream petroleum (oil and gas) sector encompasses exploration and appraisal, development and construction, and production. For natural gas and liquefied natural gas (LNG), the definition of upstream includes processing and delivery to export terminals or to the intakes of domestic gas transmission pipelines.

Over 80 per cent of Australia's gas reserves and over 95 per cent of oil reserves are offshore, with reserves concentrated in the Bonaparte, Browse, Carnarvon and Gippsland basins (figure 1).

The sector is dominated by international companies, including Apache, BHP Billiton, Chevron, ConocoPhillips, ExxonMobil, Santos, Shell and Woodside. The industry is also characterised by joint ventures; most onshore and offshore production licences are issued to multiple parties. For example, the North West Shelf Venture involves Woodside, BHP Billiton, BP, Chevron, Japan Australia LNG and Shell.

Projects in the upstream petroleum sector are often very large — an LNG development in Commonwealth waters with onshore processing can involve capital expenditure of \$10 billion or more.

Figure 1 Identified Australian oil and gas reserves, 2007



Source: Geoscience Australia (pers. comm., 27 October 2008).

Current regulatory arrangements are complex

The regulatory framework governing the upstream petroleum sector reflects Australia's federal system, with powers shared between the Australian and the State and Territory Governments.

- The Offshore Constitutional Settlement established the States' rights over coastal and internal waters, and established joint regulatory authority over the Commonwealth waters adjacent to each State and the Northern Territory.
- The joint regulatory authority for each adjacent area consists of a 'Designated Authority' (DA) and a 'Joint Authority' (JA). The DA is the relevant State or Territory Minister and the JA is made up of the State or Territory Minister and the responsible Commonwealth Minister.

In addition to 22 petroleum and pipeline laws applying at both the Commonwealth and State and Territory levels, there are more than 150 statutes governing upstream petroleum activities in areas such as occupational health and safety (OHS), environmental and heritage protection, development, native title and land access (table 1). Well over 50 agencies at the Australian, State and NT Government levels regulate upstream petroleum activities.

Pipelines are subject to particular regulatory complexities, given their often cross-jurisdictional nature. They are likely to face significant regulatory overlap across jurisdictions and potential duplication, in some cases having to gain approval from four different authorities for the same pipeline.

The regulatory environment for the upstream petroleum sector has been undergoing reform — such as the consolidation of Commonwealth regulations under the *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cwlth) (OPGGSA). Many reviews of regulation affecting the sector are currently being (or have already been) undertaken.

Unnecessary regulatory burdens impose significant costs

There is solid evidence that the current regulatory framework imposes a significant burden on the upstream petroleum sector. Although compliance costs are large (sometimes amounting to millions of dollars for a project), they are typically modest relative to the total project cost. *Delays* impose far more significant burdens, because they can increase project costs, reduce flexibility in responding to market conditions, impede financing of projects, and defer production and revenues.

Table 1 Legislation affecting the upstream petroleum sector^{a,b,c}

Scope of legislation	Offshored ^d	
	Onshored ^d	Commonwealth waters
Petroleum and pipelines	State onshore petroleum legislation (8)	Petroleum (Timor Sea Treaty) Act 2003 (Cwlth)
	State pipeline-specific legislation (4)	
	Barrow Island Act 2003 (WA) ^e	
Occupational health and safety	Occupational Health and Safety Act 1991 (Cwlth)	Offshore Petroleum and Greenhouse Gas Storage Act 2006 (Cwlth)
	State OHS or major hazard facilities legislation (13)	
Environment, heritage and development		Petroleum (Submerged Lands) Act 1982 or equivalent (7)
		Environment Protection and Biodiversity Conservation Act 1999 (Cwlth)
		Aboriginal and Torres Strait Islander Heritage Protection Act 1984 (Cwlth)
		other Commonwealth environment- and heritage-specific legislation (4)
		State environment-, heritage- and development-specific legislation (57)
Native title and land rights	Local government legislation (7)	
		Native Title Act 1993 (Cwlth)
		Aboriginal Land Rights (Northern Territory) Act 1976 (Cwlth) (NT only)
		State native title, land rights and other land access legislation (24)

^a Although legislation is grouped according to primary scope, some laws may have a broader scope. ^b The numbers shown in brackets indicate the number of relevant statutes. ^c In this table, the use of the term 'State' also applies to the Northern Territory. ^d In this table, as most onshore legislation also applies to State and Territory internal waters, onshore includes State and Territory internal waters and offshore excludes such waters. ^e The Barrow Island Act 2003 (WA) enables the State agreement — Gorgon Gas Processing and Infrastructure Project Agreement.

Sources: ComLaw; State and NT legislation databases; various departmental websites.

Consequently, reducing unnecessary approval delays can have significant payoffs. Some participants have suggested that cutting the time taken to gain approval for a major project by 50 per cent is possible. The Victorian Government considered a national offshore regulator could reduce the time taken for approving a production licence by about 50 per cent to around 6–12 months. If this regulator also regulated pipelines connecting offshore developments to onshore facilities, the Victorian Government considered approval times for pipeline licences and suspension and extension of pipelines (currently 3–6 months and 3–9 months, respectively) could also be reduced by 50 per cent. The Commission considers such reductions in approval times are a reasonable objective. Since the draft report, a number of regulators and industry proponents have also confirmed this objective, albeit noting that its achievement will depend on significant changes that eliminate many of the current iterative approval processes between the JA and DA.

The Commission estimates that expediting the regulatory approval process for a major project by one year could increase the net present value of returns by 10–20 per cent simply by bringing forward income streams (the approach used is summarised in box 1). Estimates of the benefits from reducing delays obviously are sensitive to the number of projects being delayed unnecessarily and the additional costs incurred as well as other parameters (such as the discount rate). But given the size of individual projects and the pervasiveness of regulatory delays, the potential benefits will be significant.

Box 1 Estimating the economic cost of approval delay

The Commission applied cash-flow discounting techniques to estimate the economic cost associated with approval delay. A delay was represented by a backward shift in the time distribution of cash flows from petroleum projects. The economic cost of delay was calculated as the difference between the net present value estimates obtained for a delay scenario and the base case (without the simulated delay).

The distribution of cash flows over the project life was estimated using aggregate data for all economic petroleum fields discovered in Australia up to 1987. By drawing on a comprehensive database, the model captures the ‘average’ characteristics of all petroleum operations in Australia — particularly their project sizes, cost structures and hydrocarbon prospectivities.

A discount rate of 10 per cent was used in calculating the present value of a stream of cash flows. This represents the weighted average cost of capital for the sector, comprising a risk-free rate and an equity risk premium commensurate with non-diversifiable project risks.

The Australian Petroleum Production and Exploration Association estimates that around \$80 billion could be invested in new gas projects in the Pilbara and the

Kimberley alone in the next decade, and that \$200 billion worth of projects are either in production, under construction or being planned in Australia's north-west or central Queensland. Given the significance of these projects, an 'across the board' one year reduction in total approval time for major projects — which many participants considered feasible — could generate future national income gains in the billions of dollars each year (some of which will accrue to foreign shareholders).

Not included in these calculations are losses from otherwise marginal projects where delays and other unnecessary regulatory costs have tipped the balance against them proceeding. Market uncertainty driven by recent falls in resource prices and escalation of capital costs will likely make regulatory imposts and delays even more critical in the future.

Identifying and reducing unnecessary regulatory burdens

There is no simple answer to the regulatory issues faced by the upstream petroleum sector. Oil and gas projects typically are large and complex, giving rise to unique and substantial environmental and other issues. Consequently, in addition to sector-specific petroleum and pipeline legislation, from the community's perspective it is important that these projects meet reasonable requirements relating to the environment, heritage, development, land access, and OHS.

In addition, most projects span multiple jurisdictions, adding a further layer of complexity. For example, Inpex's Browse Basin development (Ichthys) extends across Commonwealth waters, WA and NT coastal waters and will either come onshore in the Northern Territory or Western Australia (depending on final project arrangements). Woodside's Sunrise LNG development will extend into yet another jurisdiction, the Joint Petroleum Development Area (jointly managed by the Governments of Australia and East Timor).

Selected participants' views on the current overall regulatory system and scope for reform are summarised in box 2. Participants in this study also identified specific sources of unnecessary regulatory burdens in resource management and land access, environment and heritage, and OHS regulation, which are discussed in detail below.

The Commission has made over 40 findings and 30 specific recommendations on the current arrangements and possible improvements, so it is impractical to discuss each in this overview. Instead, key issues are highlighted. A full list of recommendations immediately follows the overview, and these are discussed in detail in the relevant chapters. Many of the issues raised and proposed solutions are not new. Various worthwhile recommendations have also been proposed in previous

reviews of the regulatory arrangements affecting the upstream petroleum sector, but many have yet to be implemented.

Resource management

Resource management regulation (under Commonwealth, State and Territory legislation) occurs throughout the upstream petroleum production process — from acreage release to exploration, extraction and transport of the resource. Proponents

Box 2 Participants' views

Many participants saw regulatory duplication and inconsistency as creating problems:

Under the current JA–DA model there is substantial duplication in the administration and assessment processes for permit/licence grants. This duplication arises from the iterative processes carried out by both the Commonwealth and DAs for the same assessments ... improvements in the efficiency of approvals processes have the potential to deliver real benefits to the sector. (Victorian Government, sub. 7, p. 4)

There is a consistent lack of consistency in decision making between the regulatory authorities. (Nexus, sub. 3, p. 7)

While Federal and State responsibilities individually dictate the extensive approval requirements in each respective jurisdiction, given the multi-jurisdictional nature of most petroleum projects the result is that there are multiple duplicated approvals processes and many opportunities for each regulator within the separate jurisdictions to take issue with a given proposal. (ExxonMobil, sub. 13, p. 4)

While the development of the individual approval requirements may have been appropriate at the time, the compounding result is that proponents are frequently now required to navigate their way through hundreds of decision points and approvals required. In the eyes of investors, this translates into hundreds of opportunities for regulatory failure. (APPEA, sub. 16, p. 7)

There was also widespread support for reform:

A centralised upstream petroleum regulator has potential to increase consistency and timely decision making. Real gains in efficiency of the approvals process will only be gained if decisions are made by the one authority. (Nexus, sub. 3, p. 8)

As well as improving the efficiency of regulatory and approvals processes, more fundamental reform is required to recognise the unique circumstances of the oil and gas industry in Australia, where a single project can often cross three regulatory jurisdictions. (APPEA, sub. 16, p. 7)

The Victorian Government supports in-principle the establishment of a national petroleum regulator for offshore activities. Further opportunities to improve efficiency through a nationally consistent model for regulating pipelines connecting offshore petroleum developments with onshore facilities should be explored. (Victorian Government, sub. 7, p. 2)

must apply to hold relevant titles including exploration permits, retention leases and production, pipeline and infrastructure licences. Title holders are subject to data reporting obligations at each stage in the process. In addition, regulators must approve various plans and give numerous consents to operate.

In its draft report, the Commission noted an absence of policy clarity and recommended that governments articulate the objectives of resource management regulations and periodically assess their benefits and costs.

Despite mixed, but mainly negative, reaction from participants across industry and government to its draft report recommendations relating to resource management, the Commission remains of the view that upstream petroleum resource management regulation falls short of best practice. To the best of the Commission's knowledge, the overall policy intent of governments in resource management has never been clearly articulated, and suggested rationales are often in tension.

While there are several legitimate roles for government in managing oil and gas resources — for instance, to provide information about the geology of an oil or gas field, and how one company's drilling proposal might affect another's operations — stated rationales, which go to overriding or second-guessing decisions of professionally-managed, for-profit businesses, appear less robust.

Provided they meet community environmental and other objectives, private companies generally will have appropriate incentives to extract oil and gas resources efficiently, such that profit maximisation and the community's interests coincide. Consequently, the basis for overriding commercial decisions — that is, the reason why commercial and public interests might diverge — should be clearly stated and the costs and benefits of intervening transparently assessed.

For instance, it has been suggested that governments seek to *maximise* rather than *optimise* resource extraction. Without proper account of the additional costs of doing so, intervention to maximise resource extraction would likely reduce profits and community welfare, and potentially discourage future exploration.

It has been put to the Commission that in the vast majority of cases, extraction plans proposed by companies are approved. If the ultimate justifications for intervention are spillover effects, or that there are some rare outlier cases where unprofessional or unethical companies can behave inappropriately to the community's detriment, to minimise unnecessary costs and delays it would seem better that, in the absence of spillovers, government intervention were focused on such outliers.

A particularly vexed issue is that of retention leases. Retention leases attempt to balance the need to give explorers some certainty of title over discoveries against

the desire of governments to encourage development of oil and gas reserves. Retention leases are not awarded or renewed if a discovery is deemed to be commercial. In this case, the lease holder must commence production or sell the lease to a company that will.

There has been some pressure to make commerciality tests more rigorous, especially for gas reserves, in order to increase domestic gas supplies. In the extreme, lease holders might be compelled to commence production or lose the resource title, regardless of differing views about commerciality (a strict ‘use it or lose it’ test).

Yet various reviews have not found any significant market failure justifying action to compel lease holders to sell or develop gas reserves — for example, competition was found adequate to ensure that individual businesses do not have an incentive to hoard reserves in order to influence prices. So it could be expected that companies generally will develop or on-sell their discoveries when they see the prospect of an adequate commercial return.

In the Commission’s assessment, to minimise unnecessary regulatory burdens arising from the retention lease renewal process, and the commerciality test in particular, governments should clearly articulate the criteria they will apply and demonstrate how application of these criteria will promote the public interest. Compared with a bureaucratic assessment of commerciality (and competing claims of both leaseholders and rival businesses seeking to gain lease rights), market mechanisms, such as auctions with appropriately informed bidders, have the potential advantage of eliciting truthful valuations and reducing the risk of expropriation of exploration investments. Auctions could be considered as an option where there is disagreement between leaseholders and government.

But a more direct approach that could assist would be to remove impediments to voluntary, mutually beneficial lease transactions, including the current registration fee for transfers and dealings imposed on lease transactions. Equally effective would be a reduction in unnecessary regulatory burdens imposed by environmental and other regulations, which by reducing anticipated commercial returns, act to discourage field development.

Land access

Land access approvals are required prior to the undertaking of onshore petroleum exploration, and production and construction of onshore pipelines and onshore facilities. While there are no native title rights to minerals, petroleum or gas, land access must in many cases be negotiated with Indigenous people.

Under the *Native Title Act 1993* (Cwlth) there are two main avenues to deal with ‘future act’ (project) applications — the ‘right to negotiate’ (RTN) procedure and Indigenous land use agreements (ILUAs). The suitability of using the RTN procedure (which applies to a particular future act) or an ILUA (which applies to the use and management of an area of land) depends upon the circumstances.

There is evidence of delays in the processing by State Governments of future act applications through the RTN procedure. The RTN procedure can also take longer if parties cannot reach agreement and the National Native Title Tribunal is asked to arbitrate and determine the outcome of an application.

ILUAs provide a flexible alternative to negotiating land access approvals. They appear to have the potential to streamline the approval process, reduce the resources required for successive negotiations, take less time, and reduce costs in the long run for some large, complex projects, or where there are likely to be many future act applications in one area. Such agreements have been used successfully in South Australia. Governments should investigate whether greater use of such agreements is feasible, particularly as reducing unnecessary processing delays should lead to better outcomes for all parties.

Environment and heritage

Environmental regulation of petroleum activities covers petroleum-specific environmental approvals, and environmental and planning approvals that are required for any development activity. Upstream petroleum activities are potentially subject to four main areas of regulation:

- environmental regulation of offshore petroleum activities under OPGGSA regulations
- national environmental and heritage regulation under the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) (EPBC Act)
- State and Territory environmental, conservation and planning regulations
- Commonwealth, and State and Territory Indigenous heritage Acts.

Industry and other stakeholders raised various concerns about the design and administration of environment-related regulations required for the approval of petroleum activities. Significant efforts have been made to improve the operation of the EPBC Act. However, some concerns remain, including insufficient access to pre-existing information from government departments on relevant significant environmental risks prior to the release of new acreage. Also concerns were expressed about the interaction and overlap of environmental approvals by different governments, uncertainty about strategic assessment processes and alleged

inconsistency and increased intervention in decisions about seismic surveys under the EPBC Act.

Of greater concern to study participants were delays in State, Territory and local government approvals, particularly due to:

- inadequate resourcing of agencies responsible for approvals in some jurisdictions
- a lack of clear administrative arrangements between relevant agencies in some jurisdictions
- a lack of statutory or firm approval timelines
- insufficient public access to environmental data obtained either in previous assessment processes, or as a condition of previous approvals.

Some participants also considered the current process for establishing some environmental offsets (which are used by most jurisdictions as a condition of approval for some projects) to be arbitrary, open-ended and lacking in transparency.

A summary of recommendations to improve environmental and heritage regulation is presented in box 3.

Emerging issues include carbon capture and storage (CCS), greenhouse and energy consumption reporting, the proposed carbon pollution reduction scheme, and decommissioning of petroleum facilities. In order to establish a consistent framework for CCS regulation, the Australian and the State and Territory Governments have developed and apparently agreed on a common set of guiding principles. Despite this, each State and Territory now appears to be developing their own (differing) detailed CCS legislation, in some cases citing further principles that they consider important in their jurisdiction. Participants have expressed concern about the developing inconsistencies in CCS requirements. State and Territory Governments should mirror amendments resulting from the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008 in coastal waters, and consider implementing a nationally consistent framework for onshore carbon capture and storage.

Occupational health and safety

Regulatory arrangements for OHS differ for offshore and onshore 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. Although

Box 3 Improving environmental and heritage approvals

Unnecessary regulatory burdens on the upstream petroleum sector would be reduced by:

- improving the operation of the *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth) through:
 - ensuring the Department of Environment, Water, Heritage and the Arts manages and provides available information (such as information from previous assessments and relevant scientific studies) on significant relevant environmental risks to the Department of Resources, Energy and Tourism to be reported with new acreage releases and to proponents seeking approval for a new project (such as pipelines as well as associated onshore processing facilities)
 - expanding use of assessment bilateral agreements with States and Territories where a State or Territory has adequate local expertise and knowledge
 - where strategic assessments are used for particular regions, conducting these early according to clear timeframes
- identifying scope for streamlining onshore processes and associated regulations related to petroleum activities through the Environmental Assessors Forum
- governments appropriately managing and releasing information obtained by proponents as a condition of environmental approvals to enhance the public stock of environmental information and to assist in streamlining future approvals
- requiring that the Australian Government, in considering Indigenous heritage applications, take into account previous State and Territory government assessments and decisions about the same heritage site. The Commonwealth Act should also allow accreditation of State regimes that comply with a national set of minimum standards and should allow approvals under heritage Acts to be transferred with the title to a resource
- all governments introducing more transparent and timely environment offset processes to avoid the potential for arbitrary and inconsistent requirements, and open-ended negotiation processes. There may also be merit in introducing nationally consistent principles.

the establishment of NOPSA in 2005 significantly improved the efficiency and effectiveness of offshore petroleum regulation, study participants raised concerns about the unnecessary duplication arising from shared responsibility between NOPSA and the DAs in some areas. Particularly in Western Australia, there remains a complex position in regard to powers not being conferred on NOPSA for State internal waters and some islands (which in some cases contain upstream petroleum facilities that are contiguous with coastal waters that are the responsibility of NOPSA). This increases the risk of interface problems between safety regulators and can contribute to unnecessary regulatory burdens. Some also

raised concerns about a drift away from the desired objective-based regulation towards greater prescription in some OHS areas, such as through the release of prescriptive guidelines.

The Commission agrees with the views of most participants that the move to establish NOPSA and the use of safety cases has been a useful step forward, albeit that further improvements are possible and desirable. Such improvements include that the legislated coverage of NOPSA be extended to include the integrity of offshore pipelines, subsea equipment and wells.

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 to regulate OHS on NOPSA for all State and Territory waters seaward of the low tide mark, including islands in those waters. NOPSA should remain a focussed independent safety regulator.

Improving clarity and timeliness

The scope and complexity of most upstream petroleum developments inevitably makes the approval process complex and time consuming. Delays have been exacerbated by resourcing issues within agencies, regulatory ‘creep’ and uncertain timelines. Nonetheless, the Commission is also aware of cases where companies are responsible for project delays.

The Commission proposes a suite of changes that should help reduce the unnecessary delay in approval decisions, although none of them individually represent a ‘cure all’ solution:

- setting statutory timelines both for individual stages in decision making (with clear and transparent stop-the-clock provisions) and for overall timelines
- requiring agencies to report publicly on performance against these timelines can provide further incentives to improve timeliness
- ensuring legislative objectives are clear
- ensuring clear guidelines on information requirements and removing duplicated reporting requirements
- reviewing all the State and Territory petroleum regulations and, where necessary, revising them to be objective based and consistent with the conventions and definitions applying under the new OPGGSA
- ensuring that regulators are adequately resourced with appropriately experienced and skilled people
- exploring the feasibility of an electronic approvals tracking system

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- introducing a ‘lead agency’ approach for approvals within each jurisdiction.

Under a lead agency approach (sometimes referred to as a ‘one-stop-shop’), approval of most, if not all, aspects of an application would rest with the one agency. Primary Industries and Resources South Australia was widely seen as a model for other jurisdictions to emulate. A lead agency would manage all approval and licensing processes and provide companies with information on compliance requirements. It would maintain control of the process and, in most cases, would simply *consult* with other relevant agencies, such as an environmental agency, rather than formally refer the application to a separate agency for assessment.

Would a national regulator reduce unnecessary burdens?

Under the terms of reference, the Commission was asked to consider options for a national regulatory authority to manage all regulatory approvals associated with upstream petroleum activities. Desirable objectives for an institutional model that would minimise unnecessary regulatory burdens are summarised in box 4. Desirable characteristics for a national regulator are independence, accountability and clear objectives. These characteristics promote focus and are likely to reduce scope for the regulator to be captured by industry or other interests. The proposed suite of reforms also would allow responsibility for developing policy to be separated from regulatory approval and compliance functions. This is likely only to be practical if there is a rationalisation of the regulators currently involved. Another overarching issue is the need to weigh benefits from greater harmonisation against the benefits of diversity reflecting local conditions and preferences.

The main options for an expanded national upstream petroleum regulator include (figure 2):

- a *national petroleum regulator* with responsibility for both onshore and offshore petroleum regulation in all jurisdictions
- a *national offshore petroleum regulator (NOPR)* with responsibility for resource management, pipeline and environmental regulation in all offshore areas
- a *national offshore petroleum regulator in Commonwealth waters (NOPR-CW)* with responsibility for resource management, pipeline and environmental regulation in Commonwealth waters, with opt-in arrangements for States and Territories, on a bilateral basis.

Box 4 Desirable objectives for an institutional model

- Separating policy formulation and advice from regulatory administration, where practicable given issues of scale and capacity.
- Minimising multiple approvals or duplicate assessment requirements.
- Minimising overlapping administration by multiple agencies, or having clear administrative arrangements where multiple agencies are involved.
- Minimising inconsistencies in legislative requirements and decision making.
- Ensuring regulators have:
 - independence
 - accountability
 - clear regulatory objectives and do not face unnecessary conflicts of interest.
- Consolidating specialist expertise, efficiently using resources and enhancing the ability to retain specialist expertise. Adequate resourcing can reduce the potential that project approvals at peak times are at the expense of compliance monitoring.

The Commission also considered a *national pipeline authority* with responsibility for approving cross-jurisdictional pipelines or coordinating such approvals, to be pursued separately or in conjunction with the above options.

These options presented relate to changing the institutions regulating the upstream petroleum sector and regulation. None of the options are intended to imply there should be any changes to existing resource rent tax and royalty arrangements imposed by the Australian, and State and Territory Governments.

A national petroleum regulator?

A national petroleum regulator for both onshore and all offshore areas would, in theory, provide cross-jurisdictional consistency, reduce duplication of regulatory requirements and potentially benefit from economies of scale. However, such a model would also appear to have significant weaknesses. Specifically, for activities located wholly onshore and within one jurisdiction, local agencies would appear better placed to undertake regulation due to their knowledge of local factors, issues and community concerns. On balance, and given the cost and difficulty of implementing this model, the Commission considers this approach not to be a practical option.

Figure 2 Regulator options

	Onshore	Coastal waters	Commonwealth waters	Onshore	Coastal waters	Commonwealth waters	Onshore	Coastal waters	Commonwealth waters	Onshore	Coastal waters	Commonwealth waters
Pipeline regulation ^a	National Pipeline Authority ^b			National Pipeline Authority ^b			National Pipeline Authority ^b			National Pipeline Authority		
Resource management	National Petroleum Regulator ^{b,c}			National Offshore Petroleum Regulator (NOPR) ^{b,d,e}			National Offshore Petroleum Regulator – Commonwealth waters (NOPR-CW) ^{b,d,f}					
Environment												
Occupational health and safety	NOPSA ^c			NOPSA			NOPSA			Expanded NOPSA ^c (Onshore sections of integrated facilities)		
	Current JA–DA arrangements removed			Current JA–DA arrangements removed			Current JA–DA arrangements removed			Current JA–DA arrangements retained		

^a Includes all aspects of pipeline regulation (including environmental and occupational health and safety aspects) in offshore areas, as well as onshore pipelines that cross two or more jurisdictions. ^b The National Pipeline Authority could be incorporated into the National Petroleum Regulator, NOPR or NOPR-CW. ^c In this model, the National Offshore Petroleum Safety Authority's (NOPSA's) responsibilities could be extended onshore to make it the national upstream OHS regulator. ^d In this model, the States and Territories retain responsibility for onshore petroleum regulation (excluding pipelines). ^e Ministerial reporting based on NOPSA model. ^f In this model, the States and Territories retain responsibility for regulation in coastal waters.

A national offshore petroleum regulator?

A national offshore petroleum regulator (NOPR) could undertake resource management, pipeline and environmental regulation in all waters seaward of the low tide mark, including islands in those waters, and administer both the OPGGSA

and its ‘mirror’ State and Territory petroleum Acts. Ideally, NOPR would perform the following functions in both Commonwealth and State and Territory waters seaward of the low tide mark, including islands in those waters:

- administration of exploration permits, production and pipeline licensing
- administration and approval of production, well construction and drilling, and pipeline consents (with NOPSA providing necessary approvals for safety-related issues)
- environmental approvals and compliance.

In its draft report, the Commission noted that under this model, NOPSA (preferably expanded as discussed earlier) could remain as a separate safety regulator with responsibility for OHS regulation in offshore areas or it could be brought within the umbrella of NOPR, but as a discrete structural unit. The Commission accepts the view put by participants that NOPSA should be retained as a separate independent entity, to maintain its exclusive focus on and accountability for OHS, avoiding any potential or perceived conflicts in regulatory objectives. Nonetheless, there should be good communication and information sharing between NOPSA and NOPR.

The effectiveness and efficiency of the NOPR model depend on the States and Territories agreeing to give NOPR responsibility for petroleum regulation in State and Territory waters seaward of the low tide mark, including islands in those waters (currently performed by petroleum and other agencies in each jurisdiction), with respective powers of the Commonwealth and State and Territory Ministers being similar to those applying to NOPSA. With such agreement, there are potentially useful economies of scale and reduced complexity.

The Commission proposes a staged approach to establishing a national regulator, given the limited likelihood of all States simultaneously agreeing to give NOPR responsibility for petroleum regulation in State and Territory waters seaward of the low tide mark, including islands in those waters and conferring final decision-making power on the Commonwealth Minister.

- As a first step, the Australian Government should establish a new national offshore petroleum regulator in Commonwealth waters (NOPR-CW), which would administer exploration permits, production and pipeline licensing, environmental approvals and compliance, and administer and approve production, well construction and drilling, and pipeline consents (with NOPSA’s approval of relevant safety and integrity related issues). Even if reform only went this far, the Commission considers it would yield significant net benefits and should be pursued.

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- The Australian Government should then provide State and Territory Governments, on a bilateral basis, the option of conferring existing petroleum-related regulatory responsibilities in State and Territory waters seaward of the low tide mark, including islands in those waters on this new regulator. To participate, the relevant State or Territory petroleum legislation would need to fully mirror the OPGGSA and its subordinate regulations (including provisions relating to pipelines) for such waters and islands. Under this model, NOPR and NOPSA would both regulate the same geographical limits.

The national regulator should be funded under a full cost recovery model, as for NOPSA.

There also appears to be a strong case for a more harmonised approach to cross-jurisdictional pipelines, following the Canadian example. Where States and Territories agree to confer their responsibilities for State and Territory waters seaward of the low tide mark, including islands in those waters (including pipelines) on the national offshore petroleum regulator, they should also have the option to confer responsibility for the regulation of cross-jurisdictional onshore upstream pipelines on this regulator. To participate, legislative provisions applying to pipelines onshore would need to be harmonised with the offshore OPGGSA regulations (as appears to be the case now in Victoria).

Although institutional and associated regulatory reform towards a ‘national regulator’ may provide a useful way forward, of itself, it will not remove all unnecessary regulatory burdens. Improving the regulatory framework requires political commitment from governments to implement best practice regulation and administration. Without this commitment, there is a risk of regulatory burdens persisting or even increasing.

Regardless of whether governments agree to implement a national offshore regulator for the upstream petroleum sector, implementing other recommendations should reduce the regulatory burden on the sector (table 2). Implementing a national offshore regulator, introducing a lead agency for petroleum approval processes and improving the transparency and accountability around approval process timelines and decision making are likely to achieve the greatest reduction in unnecessary regulatory burdens.

Many of the proposed solutions are not new, and have been raised in previous reviews. As elsewhere in the economy, reducing unnecessary regulatory burdens provides community benefits and is becoming increasingly important given the challenges facing the Australian economy.

Table 2 A summary of the Commission’s proposals^a

<i>Current problem</i>	<i>Proposed response</i>	<i>Main benefits of change</i>
Difficult, complex and time consuming approval processes	<ul style="list-style-type: none"> • Separate policy advice from regulation where practicable • Promote objective-based legislation where feasible • Make legislation consistent with the updated OPGGSA • Ensure approval processes are best practice and clearly defined • Provide clear guidelines on information requirements 	<ul style="list-style-type: none"> • Promotes only that regulation necessary to achieve policy objectives • Improves the efficiency and effectiveness of approval processes • Reduces demands on government resources
Lack of clear and accountable processes and timelines	<ul style="list-style-type: none"> • Set statutory timelines for decision making • Measure and disclose performance against timelines • Implement an electronic approvals tracking system for individual regulatory areas and overall approval process 	<ul style="list-style-type: none"> • Provides incentives to improve timeliness of decisions • Improves transparency and accountability of approval processes
Regulatory ‘creep’	<ul style="list-style-type: none"> • Ensure that the intent of legislation is clearly defined at the parliamentary level • Clearly define the intent of guidelines and the powers of regulators to develop them 	<ul style="list-style-type: none"> • Removes uncertainty regarding intent • Removes regulators’ power to introduce overly prescriptive requirements
Multiple, overlapping and duplicative regulatory responsibilities	<ul style="list-style-type: none"> • Lead agency for petroleum approval processes 	<ul style="list-style-type: none"> • Potential to improve timeliness
Overlapping local government laws, regulations and approvals	<ul style="list-style-type: none"> • State and Territory Governments should clarify the scope of local government’s role 	<ul style="list-style-type: none"> • Reduces duplication and overlap • Most appropriate agencies undertake regulatory tasks
Resource management		
Governments’ role in managing the method and rate of extracting petroleum resources is unclear and needs to be articulated together with the totality of the resource management policy	<ul style="list-style-type: none"> • Clearly articulate the objectives of intervention and periodically assess benefits and costs. Ensure that this component of the resource management policy is administered in a manner consistent with the overall objectives of the policy 	<ul style="list-style-type: none"> • Reduces costs and reduces chances of unintended consequences
Unnecessary burdens in reviewing retention leases	<ul style="list-style-type: none"> • Clearly articulate the objectives of intervention • Improve the clarity and transparency of the retention lease process 	<ul style="list-style-type: none"> • Reduces costs and uncertainties and reduces chances of unintended consequences

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Table 2 (continued)

<i>Current problem</i>	<i>Proposed response</i>	<i>Main benefits of change</i>
Resource management (continued)		
Unnecessary burdens in reviewing retention leases (continued)	<ul style="list-style-type: none"> • Where there is disagreement over commerciality, consider options such as auctions • Remove registration fee for transfers and dealings 	<ul style="list-style-type: none"> • Reduces regulatory error • Reduces impediments to lease sales
Lack of consistency in carbon capture and storage requirements	<p>State and Territory Governments should:</p> <ul style="list-style-type: none"> • mirror amendments from the Offshore Petroleum Amendment (Greenhouse Gas Storage) Bill 2008 in coastal waters • implement nationally consistent legislation for onshore carbon capture and storage 	<ul style="list-style-type: none"> • Reduces costs
Complexity of the JA–DA model	<ul style="list-style-type: none"> • Establish a national regulator 	<ul style="list-style-type: none"> • Reduces delays, duplication, iterations, inconsistency between DAs and gaming by proponents and government
Delays in updating ‘mirror’ legislation	<ul style="list-style-type: none"> • Update State and Territory legislation to mirror Commonwealth offshore legislation 	<ul style="list-style-type: none"> • Minimises delays in approval processes and reduces costs to the sector
Land access		
Delays in processing future act applications for access to land subject to native title	<ul style="list-style-type: none"> • Investigate whether Indigenous land use agreements could be used more frequently 	<ul style="list-style-type: none"> • Streamlines approval process, reduces resources for successive negotiations and takes less time
Environment		
<p>Concerns about the operation of the EPBC Act:</p> <ul style="list-style-type: none"> • Insufficient statutory timelines • Duplication from interaction with other environmental approvals • Limited information on environmental issues related to new acreage releases and development • Inconsistency in decisions • Uncertainty during strategic assessments 	<ul style="list-style-type: none"> • Provide information from previous assessments and studies during acreage release and for new approvals • Use bilateral assessment agreements • Conduct strategic assessments early and according to timeframes 	<ul style="list-style-type: none"> • Reduces approval uncertainty within new acreage and in areas of proposed development • Reduces duplication of assessment and approval processes • Streamlines assessment processes in regions with significant potential development activity

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Table 2 (continued)

<i>Current problem</i>	<i>Proposed response</i>	<i>Main benefits of change</i>
Environment (continued)		
Unclear environmental offset policies and processes	<ul style="list-style-type: none"> • Introduce transparent and timely environmental offset processes • Relate offsets directly to damage where possible • Where damage cannot be offset, explore other mechanisms such as an offset 'fund' 	<ul style="list-style-type: none"> • Increases transparency • Reduces scope for time-consuming and ad hoc offset negotiation processes
Lack of public access to environmental data	<ul style="list-style-type: none"> • Actively manage and release information obtained as a condition of prior environmental approvals 	<ul style="list-style-type: none"> • Streamlines approvals • Reduces risks and uncertainties for companies
Duplication between Indigenous heritage legislation at Commonwealth, and State and Territory levels	<ul style="list-style-type: none"> • Require consideration of previous decisions made by other jurisdictions • Amend Commonwealth Act to accredit State and Territory processes • Allow heritage approvals to be transferred to another operator 	<ul style="list-style-type: none"> • Reduces duplication and delays
Lack of clear guidelines	<ul style="list-style-type: none"> • Enhance transparency of the Environmental Assessors Forum and provide it more support • Provide consolidated and consistent guidelines for cross-jurisdictional activities 	<ul style="list-style-type: none"> • Enhances transparency and consistency of decision making
Complex and inconsistent administrative arrangements between environmental and petroleum agencies	<ul style="list-style-type: none"> • Review onshore environmental regulation to identify scope for streamlining onshore approval processes 	<ul style="list-style-type: none"> • Reduces complexity of State and Territory environmental approvals • Reduces overlap between and within jurisdictions
Occupational health and safety		
Shared responsibility for regulation of offshore pipelines, subsea equipment and wells	<ul style="list-style-type: none"> • Extend the legislated coverage of NOPSAs to include offshore pipelines, subsea equipment and wells 	<ul style="list-style-type: none"> • Removes ambiguity • Expands specialist knowledge • Increases efficiency
Duplication of regulation of vessels under the maritime and petroleum regulatory regimes	<ul style="list-style-type: none"> • Amend OHS regulations to ensure only necessary petroleum-related functions of vessels are regulated under the safety case regime 	<ul style="list-style-type: none"> • Reduces duplication and ambiguity • Reduces compliance costs • Improves vessel choice for non-petroleum tasks

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Table 2 (continued)

<i>Current problem</i>	<i>Proposed response</i>	<i>Main benefits of change</i>
Occupational health and safety (continued)		
Not all State and Territory waters or islands within those waters are regulated by NOPSA giving rise to potential interface problems	<ul style="list-style-type: none"> • Confer powers in State and Territory waters and islands to allow NOPSA to regulate entirety of offshore facilities for safety and integrity 	<ul style="list-style-type: none"> • Removes ambiguity • Increases efficiency • Improves safety
Differing safety standards for equipment between jurisdictions	<ul style="list-style-type: none"> • Greater efforts to harmonise safety standards and their interpretation across jurisdictions • Provide appropriate recognition of compliance with international standards 	<ul style="list-style-type: none"> • Reduces regulatory inconsistency • Reduces compliance costs • Increases equipment choice (improved cost and safety outcomes)
A national regulator		
Multiple approvals are required for cross-jurisdictional projects	Establish a national offshore petroleum regulator for Commonwealth waters (NOPR-CW) and allow an opt-in by States and Territories for State and Territory waters and islands. It should be responsible for the regulation of resource management, pipelines and environmental impacts.	Main benefits of NOPR-CW model:
Inconsistencies in legislation and decision making across jurisdictions	It should have the following functions:	<ul style="list-style-type: none"> • Reduces administrative inconsistencies • Removes the iterative and duplicative role between JAs and DAs • Improves governance arrangements by separating policy from regulatory roles • Some increase in administrative economies of scale and consolidates specialist resources and staff • Maintains local agency regulation of onshore, single-jurisdiction projects
Under-resourcing of regulators	<ul style="list-style-type: none"> • Administration of exploration permits, production and pipeline licenses • Administration of, and authority to, approve production, well construction and drilling, and pipeline consents (in conjunction with NOPSA for safety and integrity) • Retain NOPSA as a separate entity • Use a full cost recovery model to fund any new regulatory agency • Subject cost recovery models to regular review and appropriate governance 	<ul style="list-style-type: none"> • Benefits if States and Territories opt-in for State and Territory waters and islands: • Reduces inconsistencies between approvals in Commonwealth and coastal waters • Takes full advantage of harmonised arrangements • Increases economies of scale
		Full cost recovery model:
		<ul style="list-style-type: none"> • Improves funding arrangements for registration, monitoring compliance and issuance of exclusive rights

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Table 2 (continued)

<i>Current problem</i>	<i>Proposed response</i>	<i>Main benefits of change</i>
A national regulator (continued)		
Duplication and overlap caused by multiple jurisdictions and regulators for pipeline licensing and regulation	<ul style="list-style-type: none"> • Give NOPR-CW responsibility for regulating cross-jurisdictional onshore pipelines where States and Territories agree to confer their responsibilities and where they harmonise their onshore pipeline regulations with the OPGGSA regulations where relevant. 	<ul style="list-style-type: none"> • Streamlines regulatory processes • Reduces duplication of licensing and other requirements
Shared responsibility for regulation of facilities and pipelines	<ul style="list-style-type: none"> • Continue State and Territory regulation of onshore production facilities and onshore pipelines 	<ul style="list-style-type: none"> • Allows local conditions and community preferences to be considered

^a Acronyms are as follows — DA: Designated Authority; EPBC Act: *Environment Protection and Biodiversity Conservation Act 1999* (Cwlth); JA: Joint Authority; NOPR-CW: National offshore petroleum regulator for Commonwealth waters. NOPSA: National Offshore Petroleum Safety Authority; OHS: Occupational health and safety; OPGGSA: *Offshore Petroleum and Greenhouse Gas Storage Act 2006* (Cwlth).