Options to improve gas pipeline regulation

COAG Regulation Impact Statement for consultation

October 2019

COAG
Energy Council

Disclaimer

This consultation Regulation Impact Statement (Consultation RIS) has been prepared for consultation only and should not be read as a settled or final view of participating jurisdictions, the Senior Committee of Officials (SCO) or the Council of Australian Governments (COAG) Energy Council on gas pipeline regulation. This Consultation RIS has been prepared solely to assist with the determination of an appropriate course of action and to facilitate stakeholder feedback. Stakeholder consultations are being used to inform the policy decision on the preferred approach. The content of submissions will be considered, and where appropriate, incorporated into the regulatory impact assessment (also known as an impact analysis) for the Decision RIS.

Contents

Abbreviations

Term	Definition
2015-16 East Coast Review	The AEMC's 2015-16 Eastern Australian Wholesale Gas Market and Pipelines Framework Review
2015-16 Inquiry	The ACCC's 2015-16 Inquiry into the eastern and northern Australian gas markets
2017-18 Economic regulation review	The AEMC's 2017-18 Review into the scope of economic regulation applied to covered pipelines
AA	Access arrangement
ACCC	Australian Competition and Consumer Commission
AEMC	Australian Energy Market Commission
AEMO	Australian Energy Market Operator
AER	Australian Energy Regulator
BB	Natural Gas Services Bulletin Board
CBA	Cost benefit analysis
CCA	*Competition and Consumer Act 2010*
CEA	Competitive effects analysis
COAG	Council of Australian Governments
CRBM	Commonwealth Regulatory Burden Measure
COAG	Council of Australian Governments
CTP	Competitive tender process
Examination	Dr Michael Vertigan's Examination of the current test for the regulation of gas pipelines (December 2016)
Energy Council	COAG Energy Council
ERA	Economic Regulation Authority (Western Australia)
Gas Code	National Third Party Access Code for Natural Gas Pipeline Systems
GMRG	Gas Market Reform Group
Greenfield exemption	A 15-year exemption from coverage that can be obtained by a pipeline prior to commissioning
GSA	Gas Supply Agreement
NCC	National Competition Council
NGL	National Gas Law
NGO	National Gas Objective
Non-scheme pipeline	A pipeline that is not a scheme pipeline (i.e. because it has not been subject to the coverage test or has been found not to satisfy the coverage test).
NGR or Rules	National Gas Rules
OGW	Oakley Greenwood
Part 23	The information disclosure and arbitration framework applied to non-scheme pipelines.
RCV	Recovered capital value
Regulations	Regulations made under the National Gas Law
Relevant regulator	The AER for pipelines in eastern and northern Australia and the ERA for pipelines in Western Australia.
Scheme pipeline	A pipeline that has been found to satisfy, or deemed to satisfy, the coverage test and is therefore subject to full or light regulation.
SCO	COAG Energy Council - Senior Committee of Officials
Shippers	This term is used to refer to both prospective and existing shippers.
SP	Service provider
Vision	COAG Energy Council's Australian Gas Market Vision (December 2014)

Executive Summary

Gas pipelines are infrastructure that is often subject to regulation. In applying regulation to pipelines, reference is often made to the monopoly nature of pipelines giving rise to market power. This market power can be exercised in a number of different ways over both existing capacity (e.g. by engaging in monopoly pricing, restricting or denying access or favouring affiliates in related markets) and new capacity (e.g. by blocking competition from other potential pipelines). Irrespective of the form it takes, exercises of market power can have a detrimental effect on the efficient operation of the market and the broader economy, and consumers more generally. In economic terms, this is referred to as a 'market failure' because the market does not work to allocate resources in a manner that maximises total welfare.

To address this market failure, the Council of Australian Governments (COAG) agreed to implement an industry specific regulatory framework for gas pipelines, which came into effect in 1997. In the intervening period the regulatory framework has been subject to a number of significant reviews and refinements. For example, in 2016 concerns were raised by both the Australian Competition and Consumer Commission (ACCC) and the Australian Energy Markets Commission (AEMC) about the threat of regulation not posing a constraint on the behaviour of service providers because the test for regulation (the coverage test) was not directed at the right market failure. Concerns were also raised about the information available to shippers seeking access to pipelines. To address this concern, a new information disclosure and arbitration framework (referred to as 'Part 23') was introduced. The regulatory framework now provides for all pipelines that are providing third party access to be subject to some form of regulation.

While the introduction of Part 23 addressed many of the problems identified in 2016, a recent review of the regulatory framework conducted by the AEMC found, amongst other things, that the current order and construction of tests used to determine the form of regulation may result in either under-regulation or over-regulation of pipelines.[1] The AEMC also identified problems with the governance arrangements and processes used to determine the form of regulation to apply to pipelines.[2] The COAG Energy Council agreed therefore in mid-2018 to examine the options to improve gas pipeline regulation and directed its Senior Committee of Officials to prepare a Regulation Impact Statement (RIS).

In the intervening period a number of other potential problems with the regulatory framework have been identified by the ACCC,[3] Brattle Group[4] and shippers that participated in a survey conducted by Oakley Greenwood (OGW)[5] for this RIS.

Further detail on the problems that have been identified with the current regulatory framework is provided below, along with an overview of the objectives of Energy Council action, the policy options that have been identified and regulatory impact assessment and consultation that will be conducted as part of the RIS.

1 AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, p. iv.

2 ibid.

3 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019.

4 Brattle Group, Financial Information Disclosed by Gas Pipelines in Australia Under Part 23 of the National Gas Rules, August 2019.

5 OGW, Gas Shippers Survey, September 2019.

What are the potential problems?

Despite recent interventions to improve aspects of the regulatory framework, recent reviews indicate that there are still a number of potential problems with the framework that may be having a detrimental effect on the efficient operation of the gas market, economic efficiency in upstream and downstream markets and the broader economy, and consumers more generally.

Table 1 provides a summary of the potential problems that have been identified with the regulatory framework, which principally relate to:

(a) the threshold that has been adopted for economic regulation and other aspects of the regulatory framework that determine when a pipeline should be regulated and how such decisions are made (i.e. the test for regulation and governance arrangements);

(b) the forms of regulation that can be applied to a pipeline once a decision is made that it should be regulated and how form of regulation decisions are made;

(c) the information disclosure obligations that service providers are subject to under the various forms of regulation; and

(d) the negotiation frameworks and dispute resolution mechanisms applying under the various forms of regulation.

Table 1: Summary of potential problems

Focus area	Potential problems
When a pipeline should be subject to regulation and how decisions to regulate are made	The potential problems identified with this aspect of the regulatory framework are that: ▪ the threshold adopted for economic regulation (i.e. all pipelines providing third party access) may result in over-regulation and give rise to unnecessary costs and risks; ▪ the application of regulation to pipelines with a greenfield exemption may distort the incentives service providers have to invest in new pipelines; ▪ the use of the coverage test for third party access decisions may result in under-regulation and inefficient investment in and use of pipelines; and ▪ the governance arrangements associated with the test for regulation may give rise to unnecessary costs and delays.
Form of regulation and movements between the alternative forms of regulation	The potential problems identified with this aspect of the regulatory framework are that: ▪ the use of the coverage test as a gateway from Part 23 to full regulation could result in under-regulation and, as a result, leave shippers more exposed to exercises of market power by service providers; ▪ the inconsistencies and overlap between some forms of regulation could increase the complexity and administrative burden and impose unnecessary costs on regulators, shippers and service providers; and ▪ the current forms of regulation may not effectively deal with potential exercises of dynamic market power (i.e. blocking competition from other potential service providers), which could further entrench the incumbent service providers' market power.
Information disclosure requirements	The potential problems identified with this aspect of the regulatory framework are that the limited information available to shippers negotiating access to non-reference services and other deficiencies in the information reported by pipelines subject to Part 23 and light regulation may give rise to additional search and transaction costs, hinder their ability to negotiate access to services and make them more susceptible to exercises of market power.

Focus area	Potential problems
Negotiation frameworks and dispute resolution mechanisms	The potential problems that have been identified with this aspect of the regulatory framework are that: ▪ differences in the negotiation frameworks applying under the various forms of regulation may impose unnecessary costs and delays on negotiating parties and hinder the ability of shippers to negotiate effectively with service providers; ▪ the threat of arbitration by smaller shippers may not be viewed as credible by service providers, which may make this group of shippers more susceptible to exercises of market power by service providers; and ▪ various aspects of the dispute resolution mechanism applying under full and light regulation may not be as effective or efficient as they could be and may undermine the credibility of the threat of arbitration and the constraint it is intended to impose on service providers of these pipelines.

Further detail on these potential problems is provided in Chapters 6 to 10. As noted in these chapters, it is difficult to know in some cases how significant the problems are. SCO is therefore seeking feedback from stakeholders on the problems that have been identified and how significant they are perceived to be.

What are the objectives of Energy Council action?

Any action taken by the Energy Council to address the matters outlined in Table 1 will be guided by the National Gas Objective (NGO). Consideration will also be given to the Energy Council's Vision for the Australian Gas Market (Vision). In keeping with the NGO and Vision, the objectives of any Energy Council action will be to:

- support the efficient operation of the gas market and the long-term interests of gas users; and
- ensure the regulatory framework is fit for purpose, targeted and proportionate to the issues it is intended to address.

Chapter 6 provides further detail on the objectives of Energy Council action.

What are the policy options?

This Consultation RIS identifies four policy options that could be put in place to address the problems outlined above. These policy options differ across a number of dimensions as shown in Table 2, but for ease of reference have been named on the basis of the pipelines that would be subject to regulation under each option:

- Option 1: Maintain the status quo.
- Option 2: Regulation of pipelines that have substantial market power.
- Option 3: Regulation of all pipelines providing third party access plus those pipelines not providing third party access that satisfy the test for regulation.
- Option 4: Regulation of all pipelines.

Chapter 11 provides further detail on these four policy options, which have been developed having regard to the potential problems and solutions outlined in Chapters 7-10. It is worth noting that these options do not provide an exhaustive list of potential solutions to addressing the problems that have been identified. Stakeholders who wish to propose other options are encouraged to do so in their feedback to this Consultation RIS.

Table 2: Policy Options 1-4

Problem		Option 1 (Status quo)	Option 2	Option 3	Option 4
When should pipelines be regulated	**When to regulate**	Maintain the current approach, with: ▪ all pipelines providing 3rd party access subject to some form of regulation ▪ a mechanism available to require those not providing 3rd party access to do so.	Amend framework to allow pipelines providing 3rd party access to obtain an exemption from regulation (but not from the basic information disclosure requirements – see below) if: ▪ the service provider can demonstrate the pipeline does not have substantial market power (this exemption could be revoked if conditions change and the service provider can no longer demonstrate it does not have market power) ▪ the pipeline has obtained a 15-year greenfield exemption. Maintain the current approach for seeking access to pipelines that are not providing 3rd party access.	Maintain the current approach, with: ▪ all pipelines providing 3rd party access subject to some form of regulation ▪ a mechanism available to require those not providing 3rd party access to do so if they pass the test for regulation.	Require <u>all</u> pipelines to provide 3rd party access on a non-discriminatory basis.
	Test for regulation	Retain the existing coverage test.	Replace the coverage test with the hybrid market power-NGO test that would require the decision-making body to be satisfied (see Box 7.6): ▪ the pipeline has substantial market power ▪ regulation will or is likely to contribute to the achievement of the NGO.		n.a.
	Governance arrangements	Retain the existing governance arrangements (NCC/Minister).	Accord a single organisation (either the ACCC or the AER/ERA) responsibility for deciding when a pipeline should be regulated or exempt from regulation.		n.a.
Forms of regulation and the movement between the alternative forms	**Forms of regulation**	Retain the existing forms of regulation (i.e. full, light and Part 23).	Adopt the following forms of regulation: ▪ Heavier handed regulation - based on the existing full regulation approach (i.e. negotiate-arbitrate with reference tariffs set by the relevant regulator and a regulatory-oriented dispute resolution mechanism) ▪ Lighter handed regulation – based on a strengthened Part 23 (i.e. negotiate-arbitrate with a commercially-oriented dispute resolution mechanism plus the safeguards currently available under light regulation).		Adopt the following forms of regulation: ▪ Heavier handed form of regulation based on direct price/revenue control ▪ Lighter handed regulation – based on a strengthened Part 23. All pipelines would also be required to: ▪ comply with interconnection principles that would be set out in the NGR ▪ use incremental pricing where the cost of new capacity would otherwise result in the price of existing capacity increasing.
	Monitoring and referral functions	Retain the existing approach (i.e. the relevant regulator can monitor light regulation negotiations only and is treated like any other interested person in terms of being able to apply for a form of regulation assessment).		Require the relevant regulator to monitor the behaviour of service providers (e.g. by monitoring service providers' prices, service quality, financial information, the outcome of access negotiations and, where relevant, dealings with associates and ring fencing arrangements) and refer pipelines for a form of regulation assessment if it suspects market power is being exercised.	
	Form of regulation test	Retain existing structure of tests, with coverage test acting as a gateway to full and light regulation.	Remove the coverage test and use the existing form of the regulation test for form of regulation decisions.		

Problem		Option 1 (Status quo)	Option 2	Option 3	Option 4
	Governance arrangements	Retain the exiting governance arrangements (NCC).	Accord a single organisation (either the ACCC or the AER/ERA) responsibility for making form of regulation decisions.		
Information disclosure requirements	**Information to be disclosed by <u>non-exempt</u> service providers**	Retain the existing information disclosure requirements across the forms of regulation.	All non-exempt service providers to publish: ▪ pipeline information, pipeline service information and service availability information ▪ standing terms (i.e. standard terms and conditions, standing prices and the method used to calculate standing prices) ▪ information on the prices paid by other shippers in the form set out in the next row ▪ historic financial information and historic demand (service usage) information.		
			Information on the prices paid by other shippers to be based on the weighted average price and the minimum and maximum prices paid for each service.	Information on the prices paid by other shippers to be based on the individual prices (including key terms and conditions) paid by shippers.	
			n.a.	The disclosure requirements would be amended in the manner set out in Box 11.1 to address the information deficiencies that have been identified with the pricing methodologies and financial information and to improve the quality, reliability, accessibility and usability of the information.	
	Exemptions from the disclosure requirements and information to be disclosed by <u>exempt</u> service providers	Retain the existing exemptions from disclosure under Part 23 and light regulation.	▪ No exemptions from the disclosure requirements would be available for regulated pipelines. ▪ Pipelines that obtain an exemption from regulation (see above) but are providing 3rd party access would still be required to publish the basic information set out in Box 11.1.	Exemptions from the requirement to publish financial information would be available to: ▪ single shipper pipelines ▪ small pipelines with a nameplate capacity less than 10 TJ/day These pipelines would still, however, be required to publish the basic information set out in Box 11.1.	Exemptions from the requirement to publish financial information would be available to: ▪ pipelines with no 3rd party shippers ▪ single shipper pipelines ▪ small pipelines with a nameplate capacity less than 10 TJ/day. These pipelines would still, however, be required to publish the basic information set out in Box 11.1. In the case of pipelines that have no 3rd party shippers, the obligation to publish basic information would only commence once a prospective shipper seeks access.
Negotiation frameworks and dispute resolution mechanism*	**Negotiation framework**	Retain the existing negotiation frameworks.	Implement a single negotiation framework that applies to both the lighter and heavier handed forms of regulation based on the hybrid model (see Box 11.2).		Use negotiation framework in Box 11.2 for the lighter handed form of regulation.
	Threat of arbitration for small shippers	Retain the existing arrangements (i.e. no specific measures to strengthen the threat for smaller shippers).	Strengthen the credibility of the threat of arbitration for small shippers by changing the dispute related cost provisions.	Strengthen the credibility of the threat of arbitration for smaller shippers on pipelines subject to the negotiate-arbitrate model by: ▪ changing the dispute related cost provisions ▪ allowing user bodies to be joined to arbitral proceedings involving smaller shippers ▪ allowing the smaller shipper to elect to have the dispute heard by the relevant regulator rather than a commercial arbitrator.	
	Dispute resolution mechanisms	Retain the existing dispute resolution mechanisms.	Maintain the Part 23 dispute resolution mechanism for the lighter handed regulation and the full regulation mechanism for the heavier handed regulation.		Maintain the Part 23 dispute resolution mechanism for lighter handed regulation.
			Implement the amendments to full regulation dispute resolution mechanism set out in Box 11.2.		n.a.

What regulatory impact assessment will be conducted?

The purpose of a RIS is to identify whether there is a need for government action, and if so, what form it should take, which should be based on the option that yields the greatest net benefit for the community. To help identify the policy option that will yield the greatest net benefit, the following analyses will be undertaken:

- A risk analysis, which will involve an assessment of the risks associated with the status quo and the extent to which risk is reduced under each policy option.
- A cost-benefit analysis (CBA), which will involve comparing the costs and benefits associated with each policy option. The CBA will be incremental in that it will look at the additional costs and benefits associated with the policy options over and above the status quo (i.e. if there was no intervention).
- A regulatory burden analysis, which will involve an assessment of the incremental compliance costs associated with each option. This analysis will be carried out using the Commonwealth Regulatory Burden Measure (CRBM) compliance costing tool.
- A competition effects analysis (CEA), which will involve a qualitative assessment of the impact of each policy option on competition, with particular emphasis placed on the effect the options have on bargaining power, search and transaction costs, barriers to entry and the potential for collusive behaviour.

The key stakeholder groups that will be considered as part of these analyses include gas pipeline service providers, shippers, gas users, producers, regulators, government agencies and potential market entrants.

A preliminary risk analysis has already been conducted to identify the risks (including the likelihood of the risk and the consequences if they do transpire) associated with the status quo and the other three policy options. The results of this analysis are set out in Appendix A. The other three forms of analyses will be carried out by Price Waterhouse Coopers (PwC).

Chapter 12 provides further detail on the analyses that will be undertaken and the key inputs to these analyses, which SCO is seeking feedback on. The results of the assessments will be set out in the Decision RIS.

Consultation

The purpose of this consultation RIS is to identify and evaluate the options to deliver a more efficient, effective and well-integrated regulatory framework for gas pipelines and to assess how effective Part 23 has been in meeting its objectives.

Stakeholders are encouraged to make submissions in response to this Consultation RIS by **5pm (AEST) 20 December 2019** using the template set out in **Attachment A**. In addition to providing a written submission, stakeholders will have an opportunity to attend public forums. Further detail on the consultation process is provided in section 1.3.

1. Introduction

On 10 August 2018, the Council of Australian Governments' (COAG) Energy Council asked its Senior Committee of Officials (SCO) to prepare a Regulation Impact Statement (RIS) to examine options to improve gas pipeline regulation. This request was made in response to concerns about whether the existing regulatory framework is fit for purpose and provides a coherent and proportional response to the problems it seeks to address.

1.1 Scope of the RIS

The purpose of this RIS process is to identify and evaluate options to deliver a more efficient, effective and well-integrated regulatory framework for gas pipelines. In keeping with the terms of reference that was approved by the Energy Council on 19 December 2018,[6] this will involve examining:

- the existing forms of regulation that may be applied to scheme pipelines (i.e. full regulation or light regulation), non-scheme pipelines (i.e. the information disclosure and arbitration framework) and greenfield pipelines, alternatives to these forms of regulation and possible improvements;
- the existing tests used to determine whether regulation should apply and, if so, what form of regulation should apply, including the coverage test, the form of regulation test, the 15-year no-coverage test for greenfield pipelines and the exemption regime under the information disclosure and arbitration framework; and
- related institutional, governance and process arrangements, including whether the process for applying for and determining whether regulation should apply and the form of regulation to apply to a pipeline are fit for purpose, timely, accessible, low cost and conform with best practice regulation.

This RIS process also incorporates a review of the new information disclosure and arbitration framework set out in chapter 6A of the National Gas Law (NGL) and Part 23 of the National Gas Rules (NGR) (for ease of reference this new framework is referred to as Part 23), implemented in August 2017. When it decided to implement Part 23, the Energy Council agreed that a review of the new framework should be conducted two years after the commencement of its operation. This RIS process will therefore also involve an assessment of how effective Part 23 has been in meeting its objectives and if it remains appropriate.

To inform the development of this Consultation RIS, SCO has obtained advice from a number of independent experts, including:

- NERA Economic Consulting (NERA), who was retained to carry out an international review of gas pipeline regulation;
- Oakley Greenwood (OGW), who was retained to conduct a survey of shippers to get their views on how effective Part 23 has been and whether any improvements may be required; and
- the Brattle Group, who was retained to carry out a review of the financial information recently reported by those service providers that are subject to Part 23.

[6] SCO, Terms of Reference - Regulation Impact Statement on Gas Pipeline Regulation Reform, 19 December 2018.

SCO has also had regard to the findings of various reviews and inquiries that have been conducted by the Australian Competition and Consumer Commission (ACCC), the Australian Energy Market Commission (AEMC) and the Gas Market Reform Group (GMRG) over the last four years.

1.2 RIS process and assessment of any regulatory changes

Regulatory impact assessments are carried out by governments when considering whether action is required to address a specified problem. The manner in which a RIS is to be conducted for the purposes of Energy Council decision making and the principles that must be employed are set out in COAG's *Best Practice Regulation Guide.*[7]

In keeping with this guide, when conducting a RIS, consideration must first be given to whether there is a problem that warrants action. If the case for action is established, consideration must then be given to the objectives of this action and the set of feasible options that could be implemented to address the identified problem(s). The costs and benefits of each option must then be assessed having regard to stakeholder feedback and the results of the regulation impact assessment, with the option that yields the greatest net benefit for the community being selected.

The purpose of the Consultation RIS is to facilitate consultation on the problem, the policy options for addressing the problem and the costs and benefits that are likely to be associated with each option. The purpose of a Decision RIS, on the other hand, is to identify the option that yields the greatest net benefit for the community (having regard to the results of the regulatory impact assessment and the consultation process) and to set out how the identified option will be implemented, monitored and reviewed.

Further detail on the requirements for this RIS can be found in the *Best Practice Regulation Guide*, which will act as guide for this RIS process.

1.3 Consultation process

Stakeholder feedback is sought on the problems and policy options identified in the Consultation RIS (Chapters 7-11) and how the regulatory impact assessment will be conducted (Chapter 12). Feedback is also sought on how effective Part 23 has been in meeting its objectives (Chapter 5). This feedback is sought by 20 December 2019.

Submissions should be sent via email to gas@environment.gov.au and include the subject, "Consultation RIS – Gas Pipeline Regulation Reform", or posted to:

Gas and Governance Branch
Department of the Environment and Energy
GPO Box 787
CANBERRA ACT 2601

All submissions received will be published on the Energy Council's website unless a specific request for confidentiality is made. In this case, please indicate which parts of your submission you wish to keep confidential (including your identity, if you wish to

[7] COAG, Best Practice Regulation – A Guide for Ministerial Councils and National Standard Setting Bodies, October 2007.

remain anonymous). To protect the privacy of individuals, personal contact details will not be published.

To assist stakeholders, a response template has been prepared (**Attachment A**) that stakeholders can use to provide their feedback on the questions set out in this Consultation RIS. Stakeholders are strongly encouraged to use the response template. Stakeholders should not feel obliged to answer each question or comment on each option, but rather address those issues of particular interest or concern.

Feedback received in response to this Consultation RIS will inform the Decision RIS and SCO's recommendations to the Energy Council on a preferred course of action.

1.4 Next steps

The outputs to be delivered to support this RIS process and indicative timeframes for their delivery are set out in the table below:

Table 1.1: Indicative timeframes

Output	Indicative timeframe
Consultation RIS published on the COAG Energy Council website for consultation.	October 2019
Stakeholder workshops	November/December 2019
Decision RIS published on the COAG Energy Council website.	First half 2020

1.5 Structure of this Consultation RIS

The remainder of this Consultation RIS is structured as follows:

- Chapter 2 outlines the rationale for regulating gas pipelines.
- Chapter 3 provides an overview of the regulatory framework that currently applies to gas pipelines in Australia and how gas pipelines are regulated in other jurisdictions.
- Chapter 4 sets out the findings of a number of reviews of the regulatory framework carried out by the ACCC, AEMC, GMRG and NERA.
- Chapter 5 outlines the findings of the recent reviews of various elements of Part 23 that have been conducted by OGW, the Brattle Group and ACCC.
- Chapter 6 provides an overview of the problems that have been identified with the gas pipeline regulatory framework and the objectives of any Energy Council action.
- Chapters 7-10 provide further detail on the potential problems with the current regulatory framework and the ways in which these problems could be addressed, with:
    - Chapter 7 focusing on when a pipeline should be subject to economic regulation and how decisions to regulate are made (including the test for regulation and associated governance arrangements);
    - Chapter 8 focusing on the form of regulation that should be applied to a pipeline if a decision is made that it should be regulated and how form of regulation decisions are made;
    - Chapter 9 focusing on the information disclosure requirements for pipelines that are subject to regulation; and

    - Chapter 10 focusing on the negotiation framework and dispute resolution mechanisms that apply under the various forms of regulation.
- Chapter 11 provides an overview of the policy options that are being considered to address the problems identified in chapters 7-10 and the costs, benefits and risks that are likely to be associated with each option.
- Chapter 12 outlines how the regulatory impact assessment will be conducted for the Decision RIS.
- Chapter 13 describes how the preferred option will be identified, implemented, monitored and reviewed.
- Appendix A contains the results of the risk analysis that has been carried out.
- Appendix B provides a summary of the changes to the Financial Reporting Guideline for Non-Scheme Pipelines and associated reporting template that the ACCC and Brattle Group have recommended.

Attachment A (a separate document) contains the template that SCO encourages stakeholders to use when responding to the questions in this Consultation RIS.

2. Rationale for regulating gas pipelines

Gas pipelines are infrastructure that is often subject to regulation. In applying regulation to pipelines, reference is often made to the monopoly nature of pipelines giving rise to market power, the exercise of which can have a detrimental effect on economic efficiency (allocative, productive and dynamic efficiency) and consumers more generally.

In economic terms, this is referred to as a 'market failure' because the market does not work to allocate resources in the most efficient manner across the gas transportation market, upstream, downstream and related markets. In such circumstances, there may be scope for government to intervene to improve efficiency. The term 'may' is used in this context because the presence of a market failure is a necessary, but not sufficient condition, for government intervention. Intervention should only occur if it leads to a better outcome than that which would occur in its absence, after accounting for the costs of implementing the intervention.

In its *International Review of Pipeline Regulation,* NERA identified a number of potential ways in which a service provider of an existing pipeline may exercise its market power, which can broadly be categorised as follows:

1. Existing pipelines may be able to exert market power over existing capacity by, for example, engaging in monopoly pricing, restricting or denying access, or in the case of vertically integrated service providers, favouring an upstream or downstream affiliate through discriminatory terms of access (referred to as 'static market power').
2. Existing pipelines may be able to exert market power over new capacity and block competition from other pipelines over time by, for example, restricting or denying interconnections or pricing new capacity below the incremental cost (referred to as 'dynamic market power').
3. Existing pipelines may be able to restrict competition from shippers for the supply of secondary capacity by, for example, restricting or prohibiting capacity trading.

In 2018, the Energy Council agreed to implement a range of reforms to address the latter of these issues, which came into effect in eastern Australia and the Northern Territory[8] in November 2018. These reforms provide for, amongst other things, the introduction of a capacity trading platform, a day-ahead auction of contracted but un-nominated capacity and a number of other measures that are designed to make capacity more fungible and to facilitate more capacity trading.

The remainder of this chapter therefore focuses on the first two forms of market power and why regulation may be required to address the market failures associated with these forms of market power.

[8] Note that the Energy Council agreed, at the request of the Northern Territory Government, to implement a derogation that will delay the application of the day-ahead auction on facilities located wholly or partly in the Northern Territory.

2.1 Exercises of static market power

Gas pipelines tend to exhibit natural monopoly[9] characteristics as a result of three factors: investments in pipelines are indivisible; economies of scale exist;[10] and sunk costs are large. Because of these characteristics, access to an existing pipeline is often more economically efficient than constructing a new pipeline. Further, these natural monopoly characteristics can create a high barrier to entry for prospective competitors, which enhances the market power of existing gas pipelines.

A service provider can exercise its market power in a number of ways. It can, for example, charge monopoly prices for its services, restrict or deny access to the pipeline, reduce the quality of services, impose unreasonable terms and conditions on shippers and/or engage in discriminatory behaviour. All of these behaviours can have an adverse effect on economic efficiency and consumers more generally, because they can result in prices being set above, and the supply of services below, what would otherwise be achieved in a competitive market.

While there are a number of different ways in which market power may be exercised, the two most commonly cited ways are monopoly pricing and the restriction or denial of access (see Box 2.1 for more detail on these two forms of market power). In its 2015-16 Inquiry into the east coast gas market (the '2015-16 Inquiry'), the ACCC examined the prevalence of these two forms of market power and found that monopoly pricing was far more prevalent than the restriction or denial of access. Elaborating on this further, the ACCC noted that the majority of pipelines in Australia are vertically separated and operating on an open access basis and do not therefore have an incentive to discourage access.[11]

Box 2.1: Monopoly pricing and the restriction or denial of access

Monopoly pricing

The term 'monopoly pricing' is defined as prices that significantly exceed the long-run average cost of supply for a sustained period, or more simply prices in excess of what would prevail in a workably competitive market. Monopoly pricing can adversely affect consumers because it can:

- result in higher delivered gas prices being paid by users and/or lower ex-plant gas prices being received by producers; and
- cause significant transfers of wealth from producers and consumers to service providers.

Monopoly pricing can also have adverse consequences for the efficient operation of the gas market and economic efficiency in upstream and downstream markets and the broader economy, because it can result in:

- lower than efficient levels of gas use and investment in downstream facilities;
- lower than efficient levels of gas production and investment in exploration and reserves;
- inefficient utilisation of and investment in pipelines; and
- potential distortions in gas flows across the market, which can prevent gas from flowing to where it is valued most.

9 The term 'natural monopoly' is used to refer to a situation where a single firm can supply a market at a lower overall cost than if it were supplied by multiple firms.

10 Economies of scale exist when there are large fixed costs (costs that are invariant to the volume of output) and low marginal costs (costs that do vary with output). As a consequence, the average cost of producing output (total cost divided by volume) declines as output expands, and a firm producing a large volume can do so at a lower average cost than firms producing smaller volumes.

11 ACCC, Inquiry into the east coast gas market, April 2016, p. 102.

Restriction or denial of access and discriminatory behaviour

Similar inefficiencies to those described for monopoly pricing can arise if a service provider restricts or denies access to a pipeline. The other concern that is usually associated with this type of behaviour is that if it is engaged in by a vertically integrated service provider, it may limit competition in the upstream or downstream market in which the service provider competes.

Even if a vertically integrated service provider does provide access to the pipeline, it may still use its market power to limit competition in the upstream or downstream market in which it competes by favouring its affiliate through discriminatory pricing and other anti-competitive behaviours.

In principle, a service provider's ability and/or incentive to exercise market power may be constrained in some way. It may, for example, be constrained by the countervailing power[12] held by shippers, or competition from either another pipeline (see Box 2.2) or an alternative energy source. The strengths of these constraints were examined by the ACCC as part of its 2015-16 Inquiry. In short, the ACCC found that the countervailing power of shippers and competition from other pipelines and alternative energy sources, were not posing an effective constraint on service providers in the east coast.[13]

Similar views appear to have been reached in other jurisdictions, such as New Zealand, the United States, Canada, Great Britain and the European Union. In these jurisdictions gas pipelines are regulated by default through sector specific legislation and while some jurisdictions provide for exemptions to be obtained if a pipeline lacks market power (or for smaller or single user dedicated pipelines), there are few, if any, examples of major transmission pipelines being unregulated because they do not have market power.[14]

Box 2.2: Competition from other pipelines

A pipeline can potentially face two types of competition from other gas pipelines:

- direct competition, which involves two or more independently owned pipelines transporting gas from the same gas field to the same destination, or
- indirect competition, which involves two or more independently owned pipelines competing to supply gas from different fields to the same destination.

Both direct and indirect pipeline competition can create conditions for competition in the market, depending on factors such as geographic location of supply and demand centers. The mere presence of alternative routes for the source of supply or connections to the same demand point of alternative supply sources does not in and of itself imply that pipeline competition is effective (i.e. will eliminate market power).

The extent of this constraint will depend on the relative costs of the gas supply sources involved, the distance it must be transported and the capacity of the pipeline and gas field in question. Furthermore, if competition comes from alternate routes or sources of supply, it may not result in competition for any offtakes along the route.

While the ACCC found that there were few constraints on the behaviour of *existing* pipelines, it did note the potential for the market power of *new* pipelines to be constrained for a period of time where there has been competition *for* the market. Provided there is

12 Countervailing power arises when buyers have characteristics (e.g., size or commercial significance) that enable them to credibly threaten to bypass the pipeline (e.g. by building their own pipeline or sponsoring new entry).

13 ACCC, Inquiry into the east coast gas market, April 2016, p. 98.

14 NERA Economic Consulting, International Review of Pipeline Regulation: Vol. 1 – Synthesis and Reform Options, 28 June 2019, p. 60.

effective competition to develop and build the new capacity, then shippers should, as the ACCC noted, be able to use the competitive tension between prospective service providers to negotiate the construction and operation of the pipeline as well as long-term transportation contracts that are not affected by the exercise of market power.[15]

Although competition for the market is possible, once it has occurred and the investment made, the service provider may be able to exercise its static market power when entering into new contracts (or varying existing contracts) with shippers. That is, while foundation shippers may be protected in relation to the services they have procured for the term of the contract, other shippers that were not a party to the original competitive process may still be exposed to exercise of market power. Foundation shippers may also be exposed to market power when procuring additional services, or when entering into new contracts. Competition for the market cannot therefore be relied upon to constrain the exercise of static market power over the longer term.

As noted above, exercises of market power by a service provider can have an adverse effect on economic efficiency and consumers more generally. Regulation may therefore be required where the market itself does not provide sufficient limits on the incentive and/or ability of service providers to exercise market power. The way in which this currently occurs in Australia and in other jurisdictions is outlined in the following chapter.

2.2 Exercises of dynamic market power

In addition to exercising market power over its shippers, service providers may be able to use their market power over time to block efficient competition from new pipelines or future rounds of competition for the market and, in so doing, further entrench their static market power. The service provider could, for example, block the entry of a new pipeline by:

- not allowing other service providers to interconnect to their pipeline, or by charging excessive prices for doing so;[16] and/or
- pricing extensions or expansions below the incremental cost of providing the new capacity.

Regulation may therefore be required to limit a service provider's ability to use its market power to restrict competition from other pipelines over time and the productive, allocative and dynamic efficiency benefits that could flow from this competition. Regulatory intervention may also be required to facilitate future rounds of competition for the market so that the service provider of an existing pipeline does not become the de-facto sole builder of all pipelines connected to that existing pipeline. The way in which this currently occurs in Australia and in other jurisdictions is outlined in the following chapter.

15 ACCC, Inquiry into the east coast gas market, April 2016, pp. 96-97.

16 This problem was exhibited on the Wilton to Horsley Park section of the EGP, which may not have been necessary if EGP had been able to gain the type of transportation access rights it sought from the NSW Gas Distribution Network, which at the time was owned by AGL.

3. How gas pipelines are currently regulated in Australia and other jurisdictions

This chapter provides an overview of how gas pipelines are currently regulated in Australia and in other jurisdictions.

3.1 Regulation of gas pipelines in Australia

The national gas access regime was originally implemented by state and territory governments in 1997 through the *Gas Pipeline Access (South Australia) Act 1997* (GPAL) and the National Third Party Access Code for Natural Gas Pipeline Systems (the Gas Code). The stated objective of the Gas Code was to:[17]

> *"…establish a framework for third party access to gas pipelines that:*
> *(a) facilitates the development and operation of a national market for natural gas; and*
> *(b) prevents abuse of monopoly power; and*
> *(c) promotes a competitive market for natural gas in which customers may choose suppliers, including producers, retailers and traders; and*
> *(d) provides rights of access to natural gas pipelines on conditions that are fair and reasonable for both Service Providers and Users; and*
> *(e) provides for resolution of disputes."*

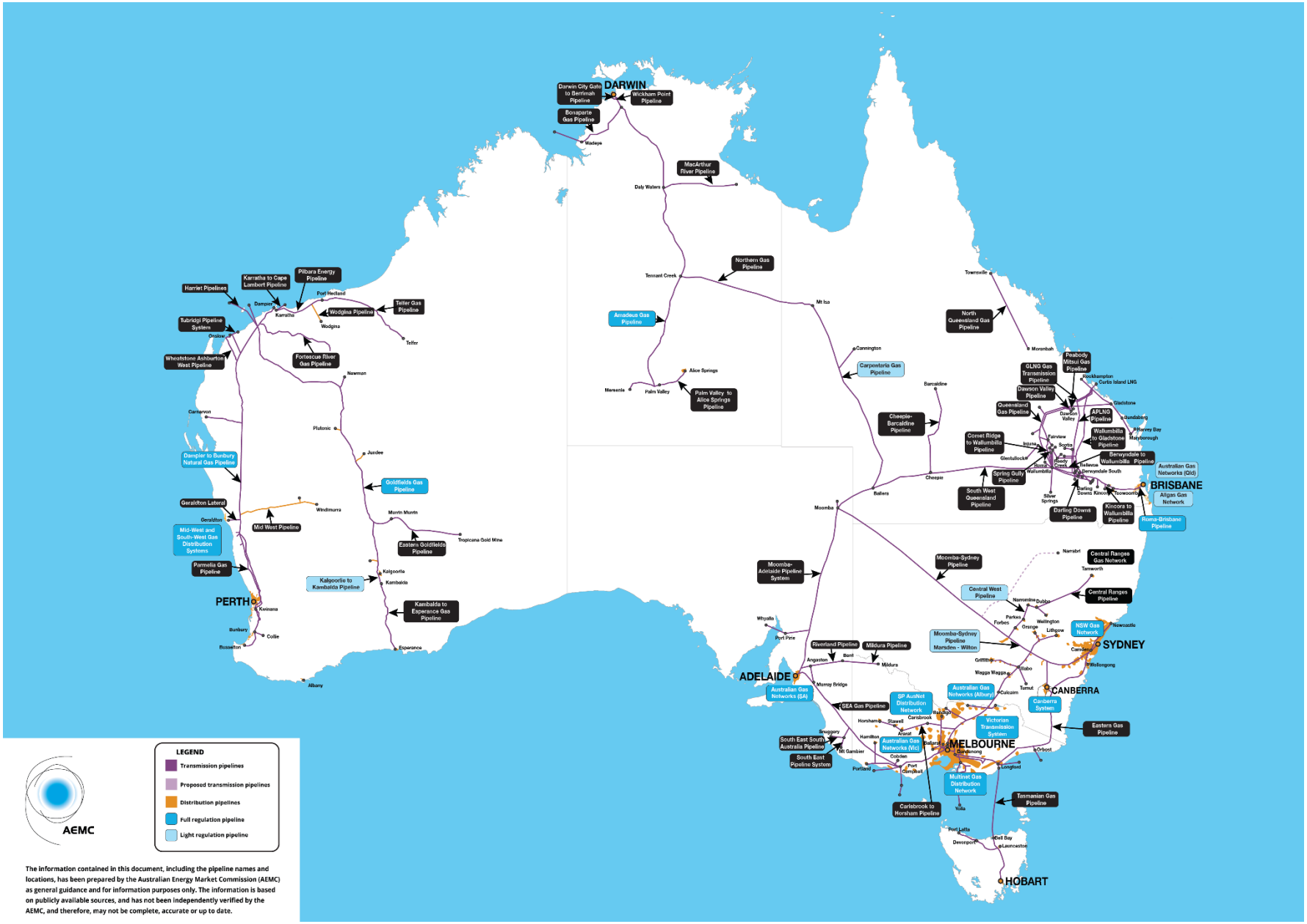
Following a number of reviews in the early 2000s, the Energy Council (formerly the Ministerial Council on Energy) decided to implement a new legal, governance and regulatory framework. This framework commenced on 1 July 2008 and was given effect through Chapters 3-6 of the National Gas Law (NGL) and Parts 4-12 of the National Gas Rules (NGR). While many of the original aspects of the regime were retained, a number of refinements were made, including the adoption of a lighter handed form of regulation.

In 2017, the Energy Council agreed to amend the regulatory framework to implement a new information disclosure and arbitration framework for non-scheme pipelines. This was given effect through the inclusion of Chapter 6A in the NGL and Part 23 in the NGR. The introduction of this new form of regulation has, in effect, resulted in all pipelines that are providing third party access being subject to some form of economic regulation.

There are now three forms of regulation that can apply to pipelines that are providing third party access: full regulation, light regulation and Part 23. The map on the following page shows the regulatory status of the major pipelines in Australia.

[17] Gas Code, November 1997, p. 1.

Figure 3.1: Regulatory status of major gas pipelines in Australia



Source: AEMC.

Table 3.1 provides further detail on the number of pipelines that are subject to each form of regulation and those that are not subject to any form of regulation.

Table 3.1: Breakdown of pipelines

	Full regulation	Light regulation	Part 23	Not subject to regulation
Eastern Australia and Northern Territory	10	4.5	51.5	37
Western Australia	3	1	30	18
Total	**13**	**5.5**	**82**	**55**
Transmission	*5*	*3.5*	*63*	*51*
Distribution	*8*	*2*	*19*	*4*

As this table shows, there are currently:

- 5 transmission pipelines and 8 distribution pipelines subject to full regulation;[18] and
- 3.5 transmission pipelines and 2 distribution pipelines subject to light regulation.[19]

With the exception of the Northern Gas Pipeline,[20] all other transmission and distribution pipelines in Australia that are providing third party access are subject to Part 23. This includes a number of major transmission pipelines, such as the South West Queensland Pipeline, the Eastern Gas Pipeline, the Moomba to Sydney Pipeline (between Moomba and Marsden), the Port Campbell to Adelaide Pipeline, the Moomba to Adelaide Pipeline System, the Tasmanian Gas Pipeline and the Queensland Gas Pipeline.

While not shown explicitly in Table 3.1, there are also four transmission pipelines that have obtained a greenfield exemption, which means they cannot be subject to full or light regulation for 15-years from the commissioning date of the pipelines.[21] They can, however, be subject to Part 23 if they are providing third party access, which one of the pipelines is doing. This pipeline is therefore included in the count of Part 23 pipelines while the other three pipelines are included in the 'Not subject to regulation' counts.

The remainder of this section provides further detail on:

- how a pipeline can currently become subject to regulation;
- the alternative forms of regulation; and
- the provisions that have been included in the regulatory framework to encourage investment.

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18 The pipelines include:
- APA's Roma to Brisbane Pipeline, Victorian Transmission System and Amadeus Gas Pipeline;
- Goldfield Gas Transmission Joint Venture's Goldfields Gas Pipeline;
- AGIG's Dampier to Bunbury Pipeline, Victorian gas distribution networks (including the distribution network previously owned by Multinet), Albury gas distribution network and South Australian gas distribution network;
- ATCO's Mid-West and South-West gas distribution network;
- AusNet's Victorian Distribution System;
- Evoenergy's ACT gas distribution network; and
- Jemena's NSW gas distribution network.

19 The pipelines include: APA's Moomba to Sydney Pipeline between Marsden and Sydney, Carpentaria Gas Pipeline, Central West Pipeline, and Kalgoorlie to Kambalda Pipeline; AGIG's Queensland gas distribution network; and Allgas' Queensland gas distribution network.

Note that in 2008 a derogation was implemented in Queensland, which resulted in the Carpentaria Gas Pipeline being subject to light regulation until May 2023. National Gas (Queensland) Regulation 2008.

20 The Northern Gas Pipeline is subject to a 15 year derogation from Part 23 under the NGR.

21 The four pipelines include: APA's Wallumbilla to Gladstone Pipeline; APLNG's Surat Basin to Curtis Island pipeline; and GLNG's Comet Ridge to Wallumbilla Pipeline Loop and Surat Basin to Curtis Island pipeline.

3.1.1 How a pipeline can currently become subject to regulation

Under the current regulatory framework, a pipeline can become subject to:

- full or light regulation if the pipeline has been classified as a scheme (covered) pipeline; or
- Part 23 if the pipeline is a non-scheme pipeline and is providing third party access.

A pipeline can be classified as a scheme (covered) pipeline if:

- the pipeline was deemed to be a covered pipeline when the Gas Code came into effect and coverage has not subsequently been revoked;
- a coverage application is made to the National Competition Council (NCC) and the relevant Minister,[22] having regard to the NCC's recommendation, is satisfied the pipeline meets all the coverage criteria set out in s. 15 of the NGL (see Box 3.1);
- a service provider voluntarily submits a full access arrangement (AA) for the pipeline to the relevant regulator;[23] or
- the pipeline is developed through a competitive tender process (CTP) that is approved by the relevant regulator.[24]

The regulatory framework also provides for coverage to be revoked if the relevant Minister, having regard to the NCC's recommendation, finds that at least one of the coverage criteria is not satisfied.

In addition, the regulatory framework provides for the following greenfield pipeline exemptions:

- a 15-year exemption from coverage can be obtained by a pipeline prior to commissioning if the relevant Minister, having regard to the NCC's recommendation, finds the pipeline does not satisfy one or more of the coverage criteria (note the exemption is from full and light regulation only and that Part 23 may be applied if the pipeline provides third party access);[25] and
- a 15-year exemption from price regulation (and a 15-year exemption from coverage) can be obtained by an international pipeline prior to commissioning, if the relevant Minister, having regard to the NCC's recommendation finds the benefits to the public of granting the exemption outweigh the detriments.

The regulatory framework also provides for the coverage status of a pipeline to change over time (except in those cases where a 15-year greenfield exemption has been granted) if circumstances change.

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22 The identity of the 'relevant Minister' will depend on whether the pipeline is a transmission or distribution pipeline and if the pipeline crosses jurisdictions. For example, if the pipeline is a cross boundary transmission pipeline, the relevant Minister is the Commonwealth Minister but if the transmission pipeline is situated wholly within a jurisdiction, the relevant Minister will typically be the State or Territory Minister (the one exception is Queensland where the relevant Minister is the Commonwealth Minister). See definitions section of NGL.

23 See s. 127 of the NGL.

24 See s. 126 of the NGL.

25 Of the four greenfield pipelines, there is currently only one that is providing third party access: the Wallumbilla to Gladstone Pipeline (WGP). The remainder are not subject to any form of regulation.

Box 3.1: Coverage test

The coverage criteria in the NGL require the NCC and relevant Minister to consider whether:

- access (or increased access) to the services provided by means of the pipeline would promote a material increase in competition in at least one other market (criterion (a));
- it would be uneconomic to develop another pipeline to provide the services provided by means of the pipeline (criterion (b));
- access (or increased access) to the services provided by means of the pipeline can be provided without undue risk to human health or safety (criterion (c)); and
- access (or increased access) to the services provided by means of the pipeline would not be contrary to the public interest (criterion (d)).

In deciding whether or not the coverage criteria are satisfied, the NCC and Minister are required to have regard to the National Gas Objective (NGO).

If a pipeline is a scheme pipeline and it has been classified as a 'designated' pipeline in the Regulations or in the application Act of a participating jurisdiction,[26] it will be subject to full regulation. For all other scheme pipelines, the pipeline may be subject to full or light regulation.

Under the current regulatory framework, the NCC is responsible for deciding what form of regulation should apply to a pipeline that becomes a covered pipeline.[27] The NCC is also responsible for determining whether full or light regulation should apply to other scheme pipelines that are not 'designated' if an application is made for the form of regulation to change. [28] When making its determination, the NCC is required to consider:[29]

- the likely effectiveness of full and light regulation in promoting access to the services provided by the pipeline, and
- the effect of full and light regulation on the costs that may be incurred by an efficient service provider, efficient users and prospective users, and end-users.

In doing so, the NCC must have regard to the form of regulation factors (see Box 3.2), the NGO and any other matters it considers relevant. Like a coverage decision, the form of regulation applied to a particular pipeline can change over time if conditions change.

[26] A designated pipeline is a pipeline classified by the Regulations, or designated in the application Act of a participating jurisdiction, that cannot be subject to light regulation. The pipelines that are designated include APA's Victorian Transmission System, AGN's SA Distribution Network, ATCO's Western Australian gas distribution system and the three Victorian gas distribution systems. See National Gas (South Australia) Regulations 2009, National Gas Access (WA) (Part 3) Regulations 2009, Schedule 1 and Victorian Government Gazette No. S222m, 30 June 2009.

[27] See s. 110 of the NGL.

[28] Provisions in the NGL currently allow service providers to apply the NCC for a determination that the services provided by the pipeline be subject to light regulation (see s. 110 of the NGL). If a pipeline is subject to light regulation, then service providers can advise the NCC that they wish to be subject to full regulation. Other interested parties can also apply to the NCC for a light regulation determination to be revoked (see ss.112-118 of the NGL).

[29] Section 122 of the NGL.

Box 3.2: Form of regulation factors

The form of regulation factors require consideration to be given to:

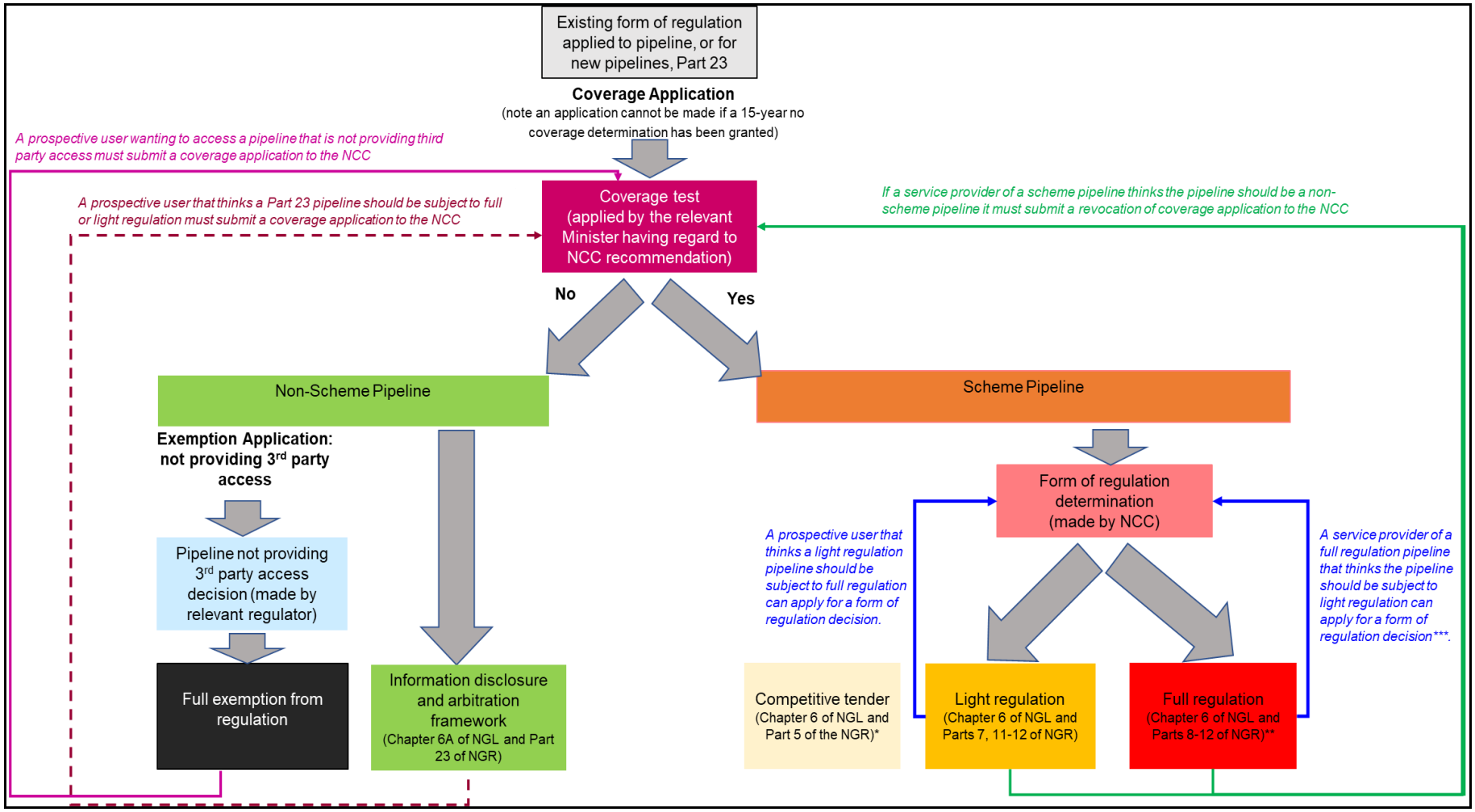
- the presence and extent of any barriers to entry in a market for pipeline services;
- the presence and extent of any network externalities (i.e. interdependencies) between a service provided by the service provider and any other natural gas services it provides, or any other service it provides in other markets;
- the extent to which any market power possessed by a service provider is, or is likely to be, mitigated by any countervailing market power possessed by a user or prospective user;
- the presence and extent of any substitute, and the elasticity of demand, in a market for a pipeline service in which a service provider provides that service;
- the presence and extent of any substitute for, and the elasticity of demand in a market for, electricity or gas (as the case may be); and
- the extent to which there is information available to a prospective user or user, and whether that information is adequate, to enable the prospective user or user to negotiate on an informed basis with a service provider for the provision of a pipeline service.

Pipelines that are not classified as a scheme pipeline are referred to as 'non-scheme' pipelines (this includes greenfield pipelines that have obtained a 15 year no coverage determination) and are subject to Part 23. Exemptions from Part 23 are available, on application to the relevant regulator, to pipelines that are not providing third party access.

Figure 3.2 provides a summary of how a pipeline can become a scheme pipeline or non-scheme pipeline and how scheme pipelines can become subject to either full or light regulation. As this figure shows, the coverage test has a dual purpose under the current regulatory framework, with the test used to determine whether:

- a pipeline that is not providing third party access should be required to do so, and
- a non-scheme pipeline that is subject to Part 23 should become a scheme pipeline and subject to either full or light regulation and vice versa.

Figure 3.2: Current framework for becoming a scheme or non-scheme pipeline



Notes:
* A pipeline can become a scheme pipeline if it is developed through a competitive tender process approved by the relevant regulator
** If a service provider of a non-scheme pipeline or light regulation pipeline wants the pipeline to be subject to full regulation it may submit a voluntary AA.
***If a pipeline is a designated pipeline, then it cannot apply to have the form of regulation changed.

3.1.2 Alternative forms of regulation

As noted above, there are currently three forms of regulation that may be applied to a gas pipeline in Australia: full regulation, light regulation and Part 23, all of which are variants of the negotiate-arbitrate model. Further detail on these three forms of regulation is provided below. Note the regulator for scheme pipelines is the Australian Energy Regulator (AER) for all states and territories except Western Australia, where the Economic Regulatory Authority (ERA) is the regulator.

3.1.2.1 Full regulation

The service provider of a pipeline that is subject to full regulation must periodically submit a 'full' AA to the relevant regulator for approval. An AA is a document that sets out the reference service(s) to be provided by the pipeline and the price and non-price terms and conditions applicable to each reference service, which must be approved by the regulator on an *ex ante* basis. An AA must also set out the pipeline's queuing,[30] extension and expansion[31] and capacity trading requirements,[32] as well as the terms on which receipt and delivery points can change.[33]

A proposed AA is assessed by the regulator through a multi-stage public consultation process. When assessing the proposed AA, the regulator must have regard to the matters set out in Parts 8-12 of the NGR, the revenue and pricing principles in the NGL and the NGO. The outcome of the regulatory process is an approved full AA.

Although regulatory approval of an AA is required, provision has been made in the NGL for service providers and shippers to negotiate alternative arrangements either for reference services or for non-reference services (in practice negotiations only seem to occur on contract carriage transmission pipelines).[34,35]

To ensure that shippers (prospective or existing) have some degree of protection if they decide to negotiate an alternative arrangement, provision has been made in the NGL for either party to trigger the regulatory-oriented dispute resolution mechanism in Chapter 6 of the NGL and Part 12 of the NGR if an access dispute arises. The dispute resolution body in eastern Australia and the Northern Territory is the AER, while in Western Australia it is the Energy Disputes Arbitrator. The dispute resolution mechanism has not been triggered on any full regulation pipelines to date.

In addition to this safeguard, service providers of full regulation pipelines are required to: comply with the facilitation of, and request for, access rules in Part 11 of the NGR. They are also prohibited from:

- bundling services unless it is "reasonably necessary"; [36]

[30] This policy is used to determine the order of priority for access to spare and developable capacity (rule 103).

[31] See rule 104 of the NGR.

[32] See rule 105 of the NGR.

[33] See rule 106 of the NGR.

[34] In the Victorian Transmission System (VTS) it is not possible to negotiate an alternative transportation service because it is operated on a simple injection / withdrawal basis. All users of the VTS therefore pay the reference tariff.

[35] See s. 322 of the NGL.

[36] See rule 109 of the NGR.

- engaging in conduct that would prevent or hinder access to pipeline services;[37] and
- adversely affecting competition in related markets, by carrying on a related business or by conferring an advantage on an associate that takes part in a related business (i.e. through the ring-fencing and associate contract provisions in the NGL).[38]

Following recent amendments to the NGR, all full regulation transmission pipelines in eastern and northern Australia are now classified as Bulletin Board pipelines and are therefore subject to the reporting obligations in Part 18 of the NGR.

3.1.2.2 Light regulation

Under light regulation, there is no *ex ante* regulatory approval of prices for reference services. Greater emphasis is therefore placed on commercial negotiations. To facilitate these negotiations, service providers of light regulation pipelines are required to publish:

(a) the price and non-price terms and conditions of access to light regulation services[39] and the methodology used to calculate prices;[40]

(b) a range of service and access information (i.e. pipeline information, pipeline service information, service usage information and service availability information);[41,42] and

(c) financial and weighted average price information (the obligation to publish this information commences in 2020).[43]

Service providers are also required to comply with the facilitation of, and request for, access rules in Part 11 of the NGR and must also report to the relevant regulator on access negotiations (at least annually).[44]

The service provider of a light regulation pipeline also has the option under s. 116 of the NGL to develop a 'limited' AA for approval by the relevant regulator, but this option has not been used to date.[45] The key difference between a limited and full AA is that the limited version does not need to include reference tariffs.

If negotiations between the service provider of a light regulation pipeline and a shipper fail, then either party can trigger the regulatory-oriented access dispute mechanism in Chapter 6 of the NGL and Part 12 of the NGR, which is administered by the AER and Energy Disputes Arbitrator in WA.[46] The dispute resolution mechanism has not yet been triggered on any light regulation pipelines.

Like full regulation pipelines, the service providers of light regulation pipelines are prohibited from bundling (unless it is reasonably necessary), preventing or hindering

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37 See s. 133 of the NGL.

38 Sections 137-148 of the NGL. These provisions are referred to as 'ring fencing' and associate contract obligations.

39 See rule 36 of the NGR.

40 See rule 36(1)(c) of the NGR.

41 See rule 36C of the NGR.

42 Note that these obligations only apply to distribution pipelines and, in some cases, they only apply to large distribution pipelines. Similar but not identical obligations apply to transmission pipelines through the Natural Gas Services Bulletin Board reporting obligations in Part 18 of the NGR for pipelines located in the Northern Territory and eastern Australia.

43 See rules 36D and 36E of the NGR. Note that exemptions are currently available from the obligation to publish weighted average prices for each service if there are less than three shippers using a particular service.

44 See rule 37 of the NGR and AER, Annual Compliance Order, 2008.

45 Where the option is used, and the limited access arrangement is in force and is accessible on the service provider's website, the terms and conditions of access (other than price) need not be separately published on the service provider's website.

46 Chapter 6 of the NGL and Part 12 of the NGR.

access and adversely affecting competition in related markets. Service providers of light regulation pipelines are also prohibited from engaging in price discrimination, unless it is conducive to efficient service provision.[47]

In a similar manner to full regulation, all light regulation transmission pipelines in eastern and northern Australia are now classified as Bulletin Board pipelines and subject to the reporting obligations in Part 18 of the NGR. Recent amendments to parts 7 and 11 of the NGR have also resulted in light regulation pipelines being subject to similar information disclosure obligations as those applying under Part 23 (albeit with some differences in reporting for larger distribution systems).

3.1.2.3 Part 23

Non-scheme pipelines that are providing third party access are subject to the information disclosure and arbitration framework set out in Chapter 6A of the NGL and Part 23 of the NGR, the objective of which is to:[48]

> *"…facilitate access to pipeline services on non-scheme pipelines on reasonable terms, which … is taken to mean at prices and on other terms and conditions that, so far as practical, reflect the outcomes of a workably competitive market".*

As noted in rule 546, Part 23 is intended to contribute to the attainment of this objective through:

> *"(a) requirements for the publication and exchange of information to facilitate timely and effective commercial negotiations in relation to access to non-scheme pipelines;*
> *(b) a commercially-orientated arbitration process to resolve access disputes in a cost-effective and efficient manner; and*
> *(c) principles that the arbitrator must have regard to when determining access disputes, which are consistent with the outcomes of a workably competitive market."*

The key elements of this framework include:

- **An information disclosure regime** that requires service providers to publish a user access guide and a range of other information that shippers can use to make an informed decision about whether to seek access and to carry out a high level assessment of the reasonableness of a service provider's offer, including:
  (a) the standing terms for each pipeline service (including the standing price) and the methodology used to calculate the standing price;
  (b) a range of service and access information (i.e. pipeline information, service information, service usage information and service availability information); and
  (c) financial and weighted average price information.[49]
- **An access request and negotiation framework** that is intended to facilitate timely and effective commercial negotiations and minimise the reliance on arbitration.
- **A commercially-oriented arbitration mechanism** that can be triggered by either party if agreement cannot be reached during negotiations. To enable disputes to be resolved in a timely manner, Part 23 requires the arbitration to be conducted using the information exchanged in negotiations and to be completed within 50 business days (or 90 business days if the parties agree to extend). Part 23 also sets out the pricing and other principles the arbitrator (a commercial arbitrator selected from a panel of

[47] See s. 136 of the NGL.

[48] See rule 546 of the NGR.

[49] Note that exemptions are currently available from the obligation to publish weighted average prices for each service if there are less than three shippers using a particular service. See rule 556(3).

arbitrators established by the relevant regulator) must have regard to when determining access disputes.

As noted above, a service provider can apply to the relevant regulator for a full exemption from Part 23 if it is not providing third party access. Exemptions from some or all of the obligations to publish the information set out in (a)-(c) above can also be sought for pipelines that:

- **supply a single shipper**: In this case the service provider can obtain an exemption from the obligation to publish all of the information in (a)-(c); and
- **fall below a specified size threshold** (i.e. pipelines with an average daily injection for the preceding 24 months of less than 10TJ/d): In this case the service provider is required to publish pipeline and pipeline service information, but can obtain an exemption from the obligation to publish all of the other information in (a)-(c).

These exemptions were implemented to address the concerns that were raised during the development of Part 23 that the costs associated with publishing some of the information may outweigh the benefits on small pipelines and on pipelines supplying a single shipper.[50] While exemptions from the obligation to publish information are available to these pipelines, prospective shippers can still request the same information from service providers in negotiations.

Table 3.1 sets out the number of exemptions from Part 23 that have been obtained by pipelines that are not providing third party access and the number of exemptions from the information disclosure requirements that have been obtained by other pipelines.

Table 3.2: Exemptions granted under Part 23 (as at July 2018)

	Full exemption	Exemption from some or all of the obligations to publish information		
	Pipeline not providing third party access	Single shipper pipelines	Pipelines below size threshold	**Total**
Eastern Australia and Northern Territory	37	22	17	**76**
Western Australia	18	19	6	**43**
Total	**55**	**41**	**23**	**119**
Transmission	*51*	*35*	*10*	***96***
Distribution	*4*	*6*	*13*	***23***

Source: AER and ERA Public registers.

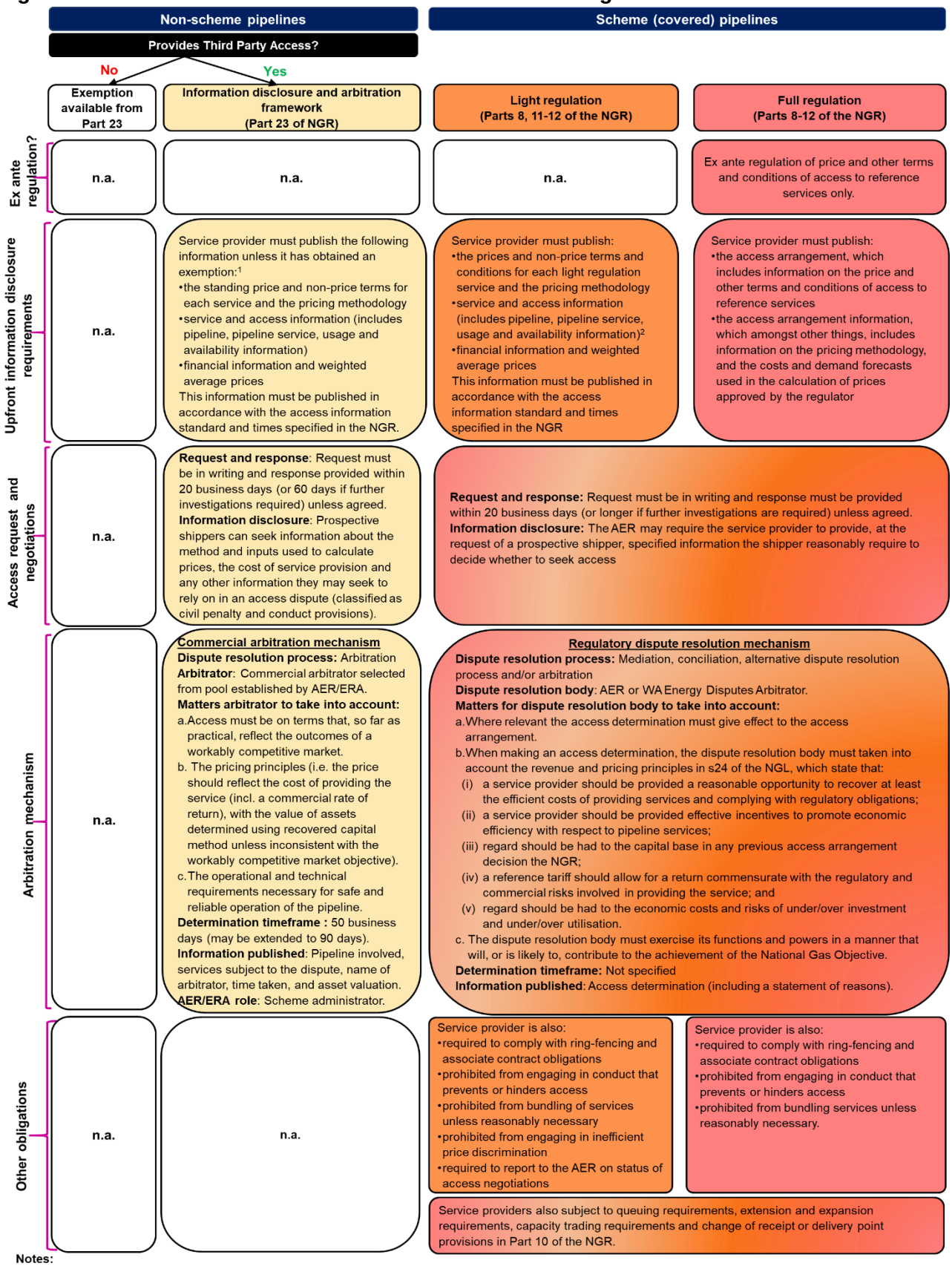
As this table shows, a large number of pipelines that are not providing third party access have obtained an exemption from Part 23. In eastern Australia and the Northern Territory, the pipelines that are not providing third party access are predominantly dedicated pipelines owned and operated by gas producers, LNG producers and gas fired generators, while in Western Australia a large number are owned by mining companies. The majority of single shipper pipelines are also used by gas fired generators and mining companies, although some pipelines that are servicing demand centres that have been fully contracted by a single retailer and are therefore considered a single shipper pipeline.

3.1.2.4 Summary of differences between the alternative forms of regulation

Figure 3.2 summarises the key differences between full regulation, light regulation and Part 23. Chapters 9-10 provides further detail on the differences between the information disclosure requirements and negotiation and dispute resolution mechanisms applying under these forms of regulation.

[50] GMRG, Final Design Recommendation: Gas Pipeline Information Disclosure and Arbitration Framework, June 2017, pp. 52-53.

Figure 3.3: Differences between the alternative forms of regulation



Notes:

1. Exemptions from the publication of upfront information are available if:
   - the service provider only supplies a single user – in this the service provider is exempt from publishing all of the information; or
   - the average daily injection rate is less than 10 TJ/day over the immediately preceding 24 months – in this case the service provider is exempt from publishing all of the listed information except the pipeline and pipeline service information.

   Note that while a service provider may be exempt from publishing this information, prospective shippers may still request this information during the negotiation process.
2. The information to be reported differs for distribution pipelines depending on whether or not they constitute a 'large distribution pipeline' (i.e. with MDQ > 10TJ/day and maximum pressure capability of > 4MPa.

3.1.3 Investment

The regulatory framework currently includes the following mechanisms, which were implemented to counter the adverse effects that regulation may otherwise have on pipeline investments:

- The greenfield provisions in Chapter 5 of the NGL, which enable pipelines (including major extensions of existing non-scheme pipelines) that are yet to be commissioned to obtain a 15-year exemption from coverage if one or more of the coverage criteria are not met (see section 3.1.1 for more detail).[51, 52] If such an exemption is granted, the pipeline will be exempt from full and light regulation but not from Part 23. To date, four pipelines have been granted such an exemption, one of which is subject to Part 23.[53]
- The competitive tender provisions in Part 5 of the NGR, which allow the proponents of new pipelines[54] (e.g. prospective users or government bodies) to apply to the relevant regulator to have a proposed tender approved as a competitive tender process. If the tender is approved by the relevant regulator, then the successful tenderer must submit an AA proposal to the relevant regulator for approval. If the regulator is satisfied the proposed AA reasonably reflects[55] the price and non-price terms and conditions established through the tender, then it must approve the AA. In effect, these provisions allow the price and non-price terms and conditions established through the competition for the market to be locked in for the period specified in the tender. To date, only two pipelines have been developed using these provisions.[56]

A number of provisions have also been included in the regulatory framework applying to full regulation pipelines to reduce the regulatory related investment risks and to ensure that investments can still occur in a timely and efficient manner. These provisions include:

- Sections 321 and 322 of the NGL, which protect pre-existing contractual rights and allow parties to reach alternative arrangements to those set out in an AA. These provisions, in effect, allow investments to be underwritten by shippers through medium-to long-term GTAs, irrespective of whether or not they have been approved by the regulator.[57]
- Rule 80 of the NGR, which allows service providers to seek an advance determination from the relevant regulator on whether capital expenditure it proposes to undertake within an AA period will meet the conforming capital expenditure criteria.[58] This rule, in effect, allows investments that were not approved at the time the AA decision was

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51 These provisions also enable the operators of greenfield international pipelines to seek a 15-year exemption from price regulation.

52 The four pipelines include: APA's Wallumbilla to Gladstone Pipeline; APLNG's Surat Basin to Curtis Island pipeline; and GLNG's Comet Ridge to Wallumbilla Pipeline Loop and Surat Basin to Curtis Island pipeline. The Wallumbilla to Gladstone Pipeline is subject to Part 23.

53 These pipelines include, the APLNG Pipeline, the GLNG Pipeline, the Comet Ridge to Wallumbilla Pipeline Loop and the Wallumbilla to Gladstone Pipeline.

54 Rule 21(1)(b) of the NGR currently limits the application of these provisions to new pipelines.

55 The terms and conditions in the successful tender may be amended, with the regulator's approval, by agreement between the proponent and the service provider prior to the submission of the access arrangement.

56 These pipelines include, the Central Ranges Pipeline and the Central Ranges Gas Network. Another CTP process was also approved under the Gas Code for the Loddon Murray Region System but the tender did not attract any bids.

57 See ss. 321 and 322 of the NGL.

58 Conforming capital expenditure is defined in rule 79(1) as capital expenditure that would be incurred by a 'prudent service provider acting efficiently, in accordance with accepted good industry practice, to achieve the lowest sustainable cost of providing services' and is 'justifiable' on a specified ground

made to still be carried out within the regulatory period and for the service provider to have some certainty as to how the investment will be treated.[59]

- Rule 51 of the NGR, which allows an AA to be reviewed at an earlier date if a trigger event specified in the approved AA occurs. The trigger event could, for example, include a significant investment in the pipeline (e.g. an expansion, extension or interconnection of the pipeline with another pipeline).
- Rule 65 of the NGR, which allows a service provider to seek the approval of the regulator to vary its AA during the regulatory period.
- Rules 81-84 of the NGR, which enable service providers that decide to undertake capital expenditure that has not been approved by the regulator to either:
    - recover that expenditure, or a portion thereof, through a surcharge approved by the relevant regulator or a capital contribution; or
    - include the investment (or a portion thereof) in a 'speculative capital expenditure account', which may be rolled into the regulated asset base at a later point in time if the investment is later found to be conforming capital expenditure.

These provisions have been used to varying extents by service providers.[60]

3.2 Regulation of gas pipelines in other jurisdictions

As noted in Chapter 1, NERA was retained to conduct a review of the way in which gas pipelines are regulated in New Zealand, the United States, Canada, the European Union and Great Britain. The results of this review are summarised in Table 3.3, with particular emphasis placed on what is regulated and the way in which monopoly pricing, denial of access and dynamic market power issues are dealt with in each of these jurisdictions.

[59] Rule 80, for example, was recently used by AGIG to have a major extension of the network approved by the AER within the regulatory period. This provision was also used in 2005 when the owner of the VTS submitted an intra-period application to have its forecast expenditure on the Corio Loop approved as meeting the relevant capital expenditure criteria. See https://www.aer.gov.au/networks-pipelines/determinations-access-arrangements/gasnet-access-arrangement-2008-12-2005-application-on-forecast-new-facilities-investment-corio-loop

[60] https://www.aer.gov.au/networks-pipelines/guidelines-schemes-models-reviews/australian-gas-networks-future-capital-expenditure-determination-mount-barker-gas-network-extension

Table 3.3: Regulation of gas pipelines in other jurisdictions

	New Zealand	USA	Canada	European Union	Great Britain
Regulatory coverage					
Regulator	Commerce Commission	Federal Energy Regulatory Commission (FERC)	National Energy Board (NEB)	National regulators	Ofgem
Test for whether regulation applies	All gas pipelines (transmission and distribution) are regulated by default unless the pipeline: ▪ is small (< 75 TJ per annum) ▪ transports gas to a production facility; and ▪ does not have a substantial degree of market power.	All transmission pipelines regulated. FERC has the ability to grant pipelines "market-based rate authority" (i.e. deregulate) if they lack market power, but has never done so.	All transmission pipelines regulated. The degree of regulation differs depending on whether the pipeline is a: ▪ Group 1 company (a co. that operates large pipeline systems and has many shippers): full regulation ▪ Group 2 company (all other companies): light-handed, complaint-based regulation	All transmission pipelines regulated unless specifically exempted new infrastructure or developed for a single user: ▪ Interconnector Points (IPs) between entry-exit systems subject to EU directives. ▪ Transmission pipelines within entry-exit systems subject to national regulators which operate within EU directives.	Regulation applies to all onshore gas transmission.
Regulatory exemptions for new infrastructure?	▪ No specific exemptions, all pipelines are regulated subject to exemptions above.	▪ None	▪ None.	▪ Third Party Access exemptions in EU Directive No 715/2009. To qualify: – "the investment must enhance competition in gas supply and enhance security of supply; – the level of risk attached to the investment must be such that the investment would not take place unless an exemption was granted; – the infrastructure must be owned by a natural or legal person which is separate at least in terms of its legal form from the system operators in whose systems that infrastructure will be built; – charges must be levied on users of that infrastructure; and – the exemption must not be detrimental to competition or the effective functioning of the internal natural gas market, or the efficient functioning of the regulated system to which it is connected."	
Regulatory approach to monopoly pricing and denial of access					
Price controls for primary capacity	▪ Revenue cap + pricing principles	▪ Cost of Service including regulated rate of return.	▪ Cost of service including regulated rate of return.	▪ Varies across countries. Commonly, based on an ex-ante revenue/price cap set by relevant regulator. EU legislation requires price controls to set tariffs in line with costs of "efficient operator".	▪ National Grid (NGG) sets entry and exit charges based on the revenue cap formulae set out in its licence at periodic price controls by Ofgem (RIIO-T1). ▪ NTS transportation charges should be set to recover 50% of allowed revenues from entry charges and 50% from exit charges.
Constraints on negotiation/ flexibility around regulated primary capacity prices	▪ Regulatory regime does not limit pricing flexibility, other than through pricing principles and associated information disclosure requirements. New transmission code permits "non-standard" agreements, which are expected to cover ~22% of 2019/20 revenue.	▪ Shippers free to negotiate different rates with pipelines, but negotiated rates must be disclosed. ▪ Cost-based reference price available.	▪ Shippers free to negotiate different rates with pipelines, but negotiated rates must be disclosed. ▪ Cost-based reference price available.	▪ Standardised products sold in primary capacity auctions. ▪ Common products across customers.	▪ Standardised products sold in primary capacity auctions. ▪ Common products across customers.

	New Zealand	USA	Canada	European Union	Great Britain
Use of binding arbitration or negotiated settlements as alternative to determinations	n.a.	▪ Binding arbitration does not exist. FERC rate cases can be "settled". Negotiated settlements result in the regulator approved reference rate being made available to all users.	▪ Binding arbitration does not exist. NEB rate cases can however be "settled". Negotiated settlements result in the regulator approved reference rate being made available to all users.	n.a.	n.a.
Role of information disclosure	▪ Information disclosure is intended to allow interested persons to assess the effectiveness of the regime in achieving the statutory purpose. Principles such as cost allocation and asset valuation are relatively prescriptive. ▪ Metrics include operational and financial performance.	▪ To promote competition in pipeline development and allow regulators and shippers to review costs. ▪ All negotiated rates are disclosed to allow shippers to determine if they are being unduly discriminated against.	▪ Regulatory accounts similar to US but information disclosure looser because the NEB has not mandated that pipelines provide information to the market.	▪ Varies across countries and national regulators. ▪ Information disclosure intended to allow interested persons to assess the effectiveness of the regime in achieving the regulatory purpose.	▪ Information disclosure is intended to allow interested persons to assess the effectiveness of the regime in achieving the regulatory purpose. ▪ Annual reports on gas transmission are released by Ofgem as part of the RIIO regime. ▪ Details performance across 'key areas of delivery' and financial performance.
Price discrimination amongst shippers permitted?	▪ Standard tariffs available to all shippers on an open access basis. Non-standard agreements also allowed, so price discrimination permitted. ▪ Commerce Commission's pricing principles non-binding but First Gas must disclose compliance with principles.	▪ Undue price discrimination barred by statute and monitored through information disclosure and reference tariffs are available.	▪ Availability of cost based reference tariffs limits price discrimination. Undue price discrimination barred.	▪ No: EU rules require that transmission system operator (TSO) provide Third Party Access to their infrastructure, such that they are required to flow gas across their networks at published and access terms that do not discriminate between network users.	▪ No: NGG is required to flow gas across its network at terms that do not discriminate between network users.
Vertical integration between transmission and upstream/ downstream allowed?	▪ Vertical integration is not specifically prohibited and has existed throughout the history of the industry.	▪ Prohibited with exceptions for special cases.	▪ Prohibited with exceptions for special cases.	▪ EU Third Energy Package specifies three models of unbundling, one of which must be followed by regulator (Ownership unbundling, independent system operator, independent TSO).	▪ No: Unbundling rules apply preventing companies from operating in the competitive (wholesale/retail) and network business (transmission/distribution) without strict ringfencing obligations.
Regulatory approach to address dynamic market power					
Approaches to encourage new pipeline competition?	▪ No explicit systems to encourage competition. ▪ Move to a form of common carriage under GTAC will likely preclude competition.	▪ Incremental pricing, FERC licensing of capacity, and open season processes create competitive process for signing of contracts. ▪ FERC will not license capacity if a non-discriminatory open season has not occurred.	▪ Similar to the US, the NEB licensing process fosters a competitive process for signing contracts.	▪ The entry-exit system in EU largely rules out pipeline competition by de-linking transport from physical paths. ▪ Interconnectors between entry-exit market areas may be provided by the market in principle, although are frequently sponsored by TSOs in neighbouring member states (and central funding for "Projects of Common Interest").	▪ Within the NTS, competition is essentially crowded out by centrally planned investment decision-making and regulatory regime which provides returns on those investments. ▪ Interconnectors between GB and Europe have historically been provided by the market, with some regulatory exemptions being provided as discussed above.

	New Zealand	USA	Canada	European Union	Great Britain
Approach to interconnection / denial of access by pipeline competitors	▪ Access codes generally allow for interconnection on an open access basis subject to meeting technical specifications	▪ Pipelines cannot deny interconnection if shipper pays and the connection does not impair the pipeline's ability to serve FERC-licensed capacity contracts	▪ If a pipeline refuses an application for interconnection, the applicant can apply to the regulator to force interconnection as long as such interconnection does not place an undue burden on the pipeline.	▪ EU rules require that TSOs provide Third Party Access to their infrastructure, such that they are required to flow gas across their networks at published and access terms that do not discriminate between network users. ▪ EU authorities mandated entry-exit charging in the Third Package, which created a system of interconnected systems largely within national borders, within which all gas was fungible.	▪ Existing or new users of transmission network may request an entry or exit or storage connection to the NTS through NGG's Application to Offer process. ▪ The shipper must have obtained sufficient NTS entry or exit capacity and the contractual rights to use that capacity; ▪ The physical connection to the NTS must be completed and commissioned, with the required metering equipment; and ▪ The shipper must have entered the relevant operational agreement with NGG. ▪ NGG charges users upfront fees for the provision of exit connections.
Are investment needs signalled to the market?	▪ Previous contract carriage regime provided limited signals to the market due to lack of secondary trading. ▪ New GTAC regime will conduct auctions for priority when the pipelines are physically congested.	▪ Yes. Liquid secondary capacity market, information disclosure and competitive process to get contracts signed result in transparency around investment needs.	▪ Competitive process to sign contracts and some transparency in financial and operation information disclosure.	▪ For interconnectors, differences in spot prices between entry-exit market areas provide a signal for new investment, but long-term price signals do not exist. ▪ Within country signals for new investment are not strong, or if they exist, investment by alternative providers is crowded out through centrally planning.	▪ NGG is required under its licence to respond to signals from NTS users through long-term capacity auctions for additional ("incremental") capacity. ▪ Market-based investments have occurred for gas interconnectors that connect GB to other European markets.
Can shippers force expansion of a congested pipeline?	▪ S.43F of the Gas Act allows regulations to be made "requiring expansions, upgrades, or service quality improvements to gas transmission pipelines including specifying how those will be paid for". This provision has never been triggered.	▪ FERC has no power to compel pipelines to expand.	▪ NEB has no power to compel pipelines to expand.	▪ Incremental capacity at interconnectors is reviewed at least every two years. This can lead to funded incremental capacity (pipeline investment) if criteria are met (see above on how new investment is funded).	▪ Shippers can, at any time, submit a PARCA, which can lead to funded incremental capacity (pipeline investment) at entry or exit points if criteria are met. ▪ Provision has never been followed and approved such that investment has occurred.
Pricing principles for new capacity	▪ The Commerce Commission's pricing principles state that prices must be within incremental and stand-alone cost, though these principles are not binding.	▪ Incremental pricing based on costs and return for extensions or expansions. New pipelines are priced using at the cost of service, including regulated rate of return.	▪ Cost of service including regulated rate of return for new pipelines. ▪ Rolled-in or incremental pricing for extensions or expansions reviewed on a case-by-case basis.	▪ Primary gas transmission capacity is allocated through an auction system in line with the EU Network Code on Capacity Allocation Mechanisms in Gas Transmission Systems. ▪ Entry-exit prices are set. The proportional recovery of revenues from entry and exit prices varies across countries.	▪ The reference prices used to set reserve prices for entry capacity auctions and exit capacity charges currently reflect the estimated Long Run Marginal Cost of developing the system to meet a sustained increase in demand and supply. ▪ Gas transmission charging in Great Britain is currently under review and is likely to shift away from the current LRMC model to a Capacity Weighted Distance approach to setting reference prices for capacity rights.

Source: NERA Economic Consulting, International Review of Pipeline Regulation: Vol. 1 – Synthesis and Reform Options, 28 June 2019.

As the results of this review highlight, the coverage test, which is a key element of the regulatory framework in Australia, is unique, with other jurisdictions regulating gas pipelines by default through sector specific legislation rather than through the application of a test. While exemptions are available in some jurisdictions if there is a lack of market power (or for small or single user dedicated pipelines), there are few, if any, examples of major transmission pipelines becoming unregulated because they do not have market power.

Some of the other interesting points to note from this review are that:

- There is not a test for 'third party access' in other jurisdictions, because pipelines are generally already vertically separated and sector specific regulation applies. In the US and Canada, third party access on non-discriminatory terms is also mandated.
- The negotiate-arbitrate model is not used outside Australia. While the US and Canadian systems allow for negotiated settlements, they always have a reference tariff available (similar to full regulation in Australia) that shippers can access.
- In contrast to the Australian regulatory framework, the prices for all primary capacity services are typically regulated (either through a revenue cap or directly setting prices or reference tariffs) and access is generally provided on non-discriminatory terms, which is achieved by either:
    - directly controlling prices and requiring all gas to be transported on the same terms (GB/EU), or
    - information disclosure and a ban on 'undue' discrimination, to enable shippers to determine if discrimination is occurring (US, Canada and, to a lesser extent, NZ).

4. Recent reviews of the regulatory framework

The gas pipeline regulatory framework has been subject to a number of reviews over the last five years, including by:

- the ACCC through its 2015-16 Inquiry*;*
- the AEMC through its 2015-16 East Coast Wholesale Gas Market and Pipeline Frameworks Review (2015-16 East Coast Review) and 2017-18 *Review into the scope of economic regulation applied to gas pipelines* (2017-18 Review into the scope of economic regulation)*;* and
- Dr Michael Vertigan AC through the *Examination of the current test for the regulation of gas pipelines* (Examination) and the Gas Market Reform Group (GMRG) through the subsequent development of Part 23 and preparation of a joint report with the ACCC on measures to improve the transparency of the gas market.

The key findings of these reviews are outlined below.

4.1 ACCC 2015-16 Inquiry

One of the key findings of the ACCC's 2015-16 Inquiry was that while the service providers had responded well to the changes underway in the market, there was evidence that a large number of existing pipelines were engaging in monopoly pricing to the detriment of economic efficiency and consumers more generally.[61] The ACCC also found that the ability and incentive for service providers to engage in this behaviour was not being effectively constrained by the countervailing power of shippers, or by competition from other pipelines or energy sources. [62] Similarly, the ACCC found that: [63]

- the threat of regulation was failing to impose an effective constraint on service providers because the coverage test was not directed to the right market failure (i.e. monopoly pricing that results in economic inefficiencies with little or no effect on competition in dependent markets) and was unlikely therefore to be met by most pipelines;
- other gaps in the regulatory framework[64] and limitations with the dispute resolution mechanism[65] were allowing pipelines subject to full and light regulation to continue to engage in monopoly pricing; and
- the limited publicly available information on the costs incurred by service providers and the relationship between these costs and the prices charged for services were limiting the ability of shippers to readily identify any exercise of market power and to negotiate effectively with service providers.

To address these issues, the ACCC recommended that the Energy Council:[66]

61 ACCC, Inquiry into the east coast gas market, April 2016, pp. 8-9.

62 ibid, p. 18.

63 ibid, Chapter 7.

64 The gaps in the framework that the ACCC identified were the limited number of reference services subject to ex ante approval by the relevant regulator and the ability for pipelines to exclude expansions from the covered pipeline.

65 The ACCC noted that market participants had informed it that the costs and resources associated with an access dispute, coupled with the uncertainty surrounding the final outcome, discouraged shippers from triggering these provisions.

66 ACCC, Inquiry into the east coast gas market, April 2016, p. 20.

1. Replace the coverage test with a new test for regulation that would be triggered if the relevant Minister, having regard to the NCC"s recommendation, was satisfied that:
    - the pipeline in question has substantial market power and the market power was likely to continue in the medium term; and
    - coverage would, or would likely, contribute to the achievement of the NGO.
2. Ask the AEMC to conduct a review Parts 8-12 of the NGR and make any amendments that may be required to:
    - address the concern that pipelines subject to full regulation may still be able to exercise market power; and
    - make the dispute resolution mechanism more accessible to shippers, so that it poses a more effective constraint on the behaviour of service providers.
3. Ask the AEMC to consider expanding the scope of the information disclosure requirements to require all pipelines providing third party access to publish financial information that shippers can use to determine whether or not the prices they are offered are cost reflective and to readily identify any exercise of market power.

The ACCC also noted the importance of maintaining the existing investment related safeguards in the NGL and NGR (e.g. the 15-year exemption from coverage for greenfield pipelines and the protection accorded to commercially negotiated contracts) to minimise the risk of regulation distorting investment incentives.[67]

The Energy Council responded to these recommendations in August 2016 by directing:[68]

- the Independent chair of the GMRG, Dr Vertigan, to examine the test for regulation and to review the information disclosure requirements (see section 4.3), and
- the AEMC to conduct a review of Parts 8-12 of the NGR (see section 4.4).

4.2 AEMC 2015-16 East Cost Review

At the same time the ACCC was undertaking its inquiry, the AEMC was conducting its East Coast Review .

Like the ACCC, the AEMC examined the coverage test and found it may not be directed to the right market failure and, as a consequence, pipelines may not be subject to the appropriate level of regulation (see Box 4.1 for more detail): [69]

> *"…the Gas Access Regime is not a comprehensive regulatory instrument designed to solve a broad range of problems such as monopoly pricing and that if such behaviour was occurring pipelines may not be subject to the appropriate level of regulation. Unconstrained by competition or regulation, pipeline operators may be able to price capacity at a level higher than that which would be expected to prevail in a workably competitive market, which could have a detrimental effect on economic efficiency and consumers more generally, against the interests of the NGO.*
>
> *Given the ACCC's analysis and evidence of the problem, which is consistent with the AEMC's own analysis, the AEMC concurs with the ACCC's recommended approach to*

[67] ibid, p. 137.

[68] COAG Energy Council, Bulletin Two: Gas Market Reform Package, August 2016.

[69] AEMC, Stage 2 Final Report: East Coast Wholesale Gas Markets and Pipeline Frameworks Review, 23 May 2016, p. 112

progressing reforms to the Gas Access Regime. The AEMC further notes that moves to make a more industry specific access regime for gas in the manner envisaged by the ACCC is not inconsistent with the approach taken in some other sectors – indeed, the electricity sector is a clear example of an industry specific access regime."

Box 4.1: AEMC findings on the coverage test

The AEMC's findings on the coverage test, were informed by two independent economic experts that were engaged by the AEMC: Incenta and Castalia.

In its report to the AEMC, Incenta noted that:

> *"Rather than a problem of the denial of access, the issue with respect to gas pipelines is one of monopoly pricing. It is our view that criterion (a) is not centrally focused on this question, which in turn raises a prospect that price regulation may not be applied when it is justified."*[70]
>
> *"As demonstrated by the Hilmer Review, the national access regime was never intended to provide a regime for price regulation in instances of market power. By continuing to apply a form of test focused on providing regulated access to a circumstance where regulation should focus more on price, there is an increased risk that regulation is not applied in circumstances where it would otherwise be justified."*[71]
>
> *"It is our view that the potential risks of under or over-regulation that arise under the current regime for gas coverage can be addressed by asking a more straightforward question, namely: do the costs of regulation outweigh its benefits. In this case, this question can largely be answered by asking whether a gas pipeline owner possesses, and is able to apply, substantial and enduring market power."*[72]

Castalia formed a similar view, although it suggested that the test for regulation could be amended by replacing the term 'competition' in criterion (a) with the term 'efficiency'.[73]

The AEMC also formed a similar view to the ACCC on the need for greater information disclosure by service providers and recommended that further consideration be given to these requirements, including the publication of information on the prices paid by shippers for capacity.[74]

In addition to these primary capacity related recommendations, the AEMC recommended a range of reforms to facilitate more secondary capacity trading on transmission pipelines operating under the contract carriage model to improve the efficiency with which capacity is allocated and used on these pipelines (see Chapter 2). These recommendations were endorsed by the Energy Council at its August 2016 meeting,[75] and have recently been implemented in eastern Australia and the Northern Territory.[76]

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70 Incenta, Assessment of the coverage criteria for the gas pipeline access regime, September 2015, p. 24.

71 ibid, p. 30.

72 ibid.

73 Castalia, AEMC Gas Access Regime Advice, 10 August 2015, p. 16

74 AEMC, Stage 2 Final Report: East Coast Wholesale Gas Markets and Pipeline Frameworks Review, 23 May 2016, p. 112

75 COAG Energy Council, Bulletin Two: Gas Market Reform Package, August 2016.

76 Note that a derogation has been implemented that will delay the application of the day-ahead auction to transportation facilities located wholly or partly in the Northern Territory for a period of time.

4.3 Dr Vertigan's Examination of the test for regulation and other GMRG work

4.3.1 Examination and the development of Part 23

In response to a direction from the Energy Council, Dr Vertigan, as independent chair of the GMRG, conducted an examination of the test for regulation in the latter half of 2016.

In a similar manner to the ACCC, Dr Vertigan found:

- that operators of existing pipelines have market power and the exercise of this power in some instances was resulting in inefficient outcomes that did not promote the NGO, or facilitate the achievement of the Energy Council's Vision;[77] and
- the test for regulation did not appear to be posing a credible threat to pipelines.[78]

While a change to the coverage test was explored with stakeholders during the Examination, most shippers noted they were not looking for a traditional regulatory solution. Rather, they wanted to find a way to reduce the imbalance in bargaining power they can face in negotiations.[79]

Dr Vertigan therefore recommended that a new information disclosure and arbitration framework be introduced, to reduce the information asymmetry and imbalance in bargaining power shippers can face when negotiating with service providers. Specifically, Dr Vertigan recommended that the bargaining power of shippers be strengthened by:[80]

- requiring service providers to publish the information that shippers need to make an informed decision about whether to seek access to a pipeline service and to assess the reasonableness of an offer made by the service provider; and
- introducing a commercially oriented arbitration mechanism into the NGL that would be available to parties as a backstop if commercial agreement could not be reached.

Dr Vertigan recommended that this framework apply to all pipelines providing third party access, including those greenfield pipelines that had obtained a 15-year exemption from coverage but were providing third party access. In doing so, Dr Vertigan noted that "new shippers and existing shippers that want to negotiate access to new services are likely to face the same imbalance in bargaining power as shippers on other pipelines".[81]

Dr Vertigan also recommended that a post-implementation review be conducted and that as part of this review consideration be given to whether the test for regulation should be amended.[82] These recommendations were endorsed by the Energy Council in December 2016 and the new framework, which was developed by the GMRG in consultation with stakeholders, was implemented in August 2017.

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77 Vertigan, M., Examination of the current test for the regulation of gas pipelines, 14 December 2016, pp. 9-10.
78 ibid, pp. 12-13.
79 ibid, p. 78.
80 ibid, pp. 13-15.
81 GMRG, Final Design Recommendation: Gas Pipeline Information Disclosure and Arbitration Framework, June 2017, p. 53.
82 Vertigan, M., Examination of the current test for the regulation of gas pipelines, 14 December 2016, p. 16.

During the development of the new framework, the GMRG suggested that as part of the post implementation review consideration be given to whether:[83]

- the new information disclosure requirements have gone far enough to address the information asymmetries faced by shippers, or if greater transparency and information disclosure is required; and
- the arbitration mechanism is providing a credible threat and posing a constraint on the behaviour of the service providers, or if further changes need to be made to the mechanism or the test for regulation.

The GMRG also suggested that as part of this review, consideration be given to whether light regulation should be retained.

4.3.2 Light regulation

In late 2017, Dr Vertigan was asked by the Chair of the Energy Council for his view on whether light regulation should be retained. In response to this question, Dr Vertigan noted that while the objectives of light regulation and Part 23 are essentially the same, a number of elements of Part 23 are more rigorous than they are under light regulation. Elaborating on this further, Dr Vertigan noted that if light regulation was retained in its current form it could operate to the detriment of shippers because:

- the information disclosure requirements do not adequately address the information asymmetries shippers face and do not facilitate timely and effective negotiations;
- insufficient guidance is provided on how an arbitration would be conducted, which could discourage users from having recourse to it; and
- the regulatory-oriented arbitration mechanism does not provide for a timely and cost-effective process to resolve disputes.

While noting the potential for these shortcomings of light regulation to be addressed through amendments to the NGL and NGR, Dr Vertigan concluded that the differences that would remain after doing so were not sufficiently material to warrant the retention of light regulation.[84] Dr Vertigan therefore recommended that light regulation be removed and that refinements be made to Part 23 to:

- adopt some of the safeguards that currently apply to light regulation pipelines;[85] and
- allow for joint access dispute hearings to be held if two or more disputes about access arise at a particular time and there are one or more matters common to the dispute.

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83 GMRG, Final Design Recommendation: Gas Pipeline Information Disclosure and Arbitration Framework, June 2017, p. 13.

84 Dr Vertigan also noted the potential for the retention of light regulation to:
- increase the cost and complexity of the regulatory framework, without any clear corresponding benefit;
- cause confusion amongst users, which could be exploited by service providers; and
- increase the potential for forum shopping, particularly if one regime is perceived to be less onerous than the other.

85 The safeguards referred to in this context include the provisions in the NGL and NGR that prevent service providers from engaging in:
- conduct that would prevent or hinder access to the pipeline services;
- inefficient price discrimination;
- other behaviour that could adversely affect competition in a related market by carrying on a related business, or conferring an advantage on an associate; and
- bundling of services unless it is “reasonably necessary”.

4.3.3 Joint ACCC-GMRG transparency recommendations

In December 2018, the ACCC and GMRG provided the Energy Council with their joint recommendations on measures to improve the transparency of the gas market. While the recommendations spanned the entire gas supply chain, the ACCC and GMRG recommended a number of pricing related transparency measures for pipelines. Specifically, the ACCC and GMRG recommended that:[86]

- Scheme (full and light regulation) pipelines be subject to the same price and financial reporting obligations as non-scheme pipelines.
- SCO consider whether all non-scheme pipelines providing third party access should be required to publish standing prices.
- The ACCC examine the adequacy of the weighted average prices published by non-scheme pipelines in 2019 and provide advice on whether this metric should be retained in the NGR or replaced by a requirement to report individual prices. The results of this examination are set out in section 5.3.1

To facilitate more efficient planning and investment decisions, the ACCC and GMRG also recommended that entities proposing to develop new transmission pipelines with a nameplate capacity of 10TJ or more, be required to report on 'proposed' and 'committed' developments to AEMO for publication on the Bulletin Board.[87]

4.4 AEMC 2017-18 review into scope of economic regulation and subsequent rule change

In 2017-18 the AEMC conducted a comprehensive review into the scope of economic regulation applied to scheme pipelines and provided its final recommendations to the Energy Council in mid-2018.

Recommended changes to the NGL and NGR and subsequent rule change

One of the key recommendations emerging from the AEMC's review was that the negotiate-arbitrate model that underpins full and light regulation should be retained, but changes should be made to the NGL and the NGR to:

- support negotiations between shippers and service providers (i.e. through greater information disclosure and greater clarity around the negotiation process); and
- strengthen the credibility of the threat of arbitration (i.e. by clarifying the bases for determinations, improving the arbitration process and enhancing transparency).

The AEMC also recommended that light regulation be retained, but that it be strengthened by incorporating a number of aspects of Part 23. While the recommendation to retain light regulation was supported by the AER and a number of service providers and retailers, the ACCC, NCC and Major Energy Users had a number of reservations with the recommendation. The ACCC and NCC, for example, were concerned about the complexity, duplication and costs associated with retaining both light regulation and Part 23. The MEU, on the other hand, noted that the proposed changes to light regulation

[86] ACCC and GMRG, Joint recommendations: Measures to improve the transparency of the gas market, December 2018, p. 7.

[87] ibid, p. 6.

would result in the regulatory costs approaching that of full regulation and, in so doing, weaken the rationale for retaining light regulation.[88]

While acknowledging these issues, the AEMC noted that there were advantages to having multiple forms of regulation from which to choose and that removing light regulation would be a complex process, particularly given the need to decide what to do with the existing light regulation pipelines. The AEMC therefore recommended that an amended form of light regulation be retained but noted that the issue and the proposal by some stakeholders to incorporate some of the safeguards embodied in light regulation into Part 23 could be revisited as part of a broader review of the regulatory framework.[89]

The AEMC"s recommendations on how full and light regulation should be strengthened are summarised in Table 4.1. As this table shows, the AEMC recommended a number of changes to the investment related provisions applying to full regulation pipelines. This followed a detailed review of the capital expenditure provisions and the concerns that service providers raised about a number of specific provisions.[90]

To enable the recommendations set out in Table 4.1 to be implemented as quickly as possible, the AEMC suggested that they be implemented in two packages, with:

- package 1 focusing on changes to the NGR that were not dependent on changes to the NGL, and
- package 2 dealing with all the other changes to the NGL and NGR, including changes to the dispute resolution mechanism and the treatment of existing expansions.

These recommendations were considered by the Energy Council at its August 2018 meeting and at that time it agreed to implement most of the recommendations identified in Package 1.[91] The Energy Council subsequently submitted a rule change proposal to the AEMC, which was completed by the AEMC in March 2019.[92] Those recommendations that are still to be implemented are shaded in grey in Table 4.1.

88 AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, pp. 51-52.

89 ibid, pp. 53-58.

90 ibid, pp. 130-141.

91 The only recommendation that the Energy Council decided should not be considered at this time was the recommendation that asset values be determined for light regulation pipelines.

92 AEMC, Rule Determination: National Gas Amendment (Regulation of covered pipelines) Rule 2019, 14 March 2019.

Table 4.1: Summary of AEMC recommendations

	Full Regulation	Light Regulation
Information disclosure	Amend the NGR to require: ▪ all full and light regulation transmission pipelines in eastern and northern Australia to become Bulletin Board pipelines and subject to Bulletin Board reporting requirements (including capacity and usage information); and ▪ all distribution pipelines to publish capacity and usage information and large distribution pipelines subject to some additional reporting obligations.	
	n.a.	Amend the NGR to require: ▪ light regulation service providers to publish financial information and weighted average prices; and ▪ the relevant regulator to determine an initial capital base for those light regulation pipelines that do not already have one (using the same method applying to full regulation pipelines) and for the value to be published.
Negotiation process	Amend the NGR to provide more prescription on the negotiation process to be followed on full and light regulation pipelines and timeframes within which service providers must respond.	
Dispute resolution mechanism	Amend the NGL to: ▪ introduce a 50 business day fast-track dispute resolution process (with stop the clock provisions) for disputes that meet one or more of a set of criteria (i.e. the pipeline is a full regulation pipeline, the service is the same or similar to a reference service, an extension is not required); ▪ better facilitate joint dispute resolution hearings; ▪ establish a reference framework for the dispute resolution body that access determinations would be made with reference to (i.e. the NGO, the revenue and pricing principles, the applicable AA, previous AAs/determinations, pre-existing contractual rights and applicable provisions from Part 9 of the NGR); ▪ provide additional guidance on the role of the dispute resolution expert and the process for appointing and using the evidence of such an expert; and ▪ require the dispute resolution body to publish certain information about the dispute.	
Extensions-expansions	Amend the: ▪ NGR to require future expansions to form part of the covered pipeline and allow service providers to include existing extensions in the covered pipeline. ▪ NGL to require existing expansions to form part of the covered pipeline.	
Reference services	Amend the NGR to enable a greater number of reference services to be identified and to provide for greater engagement with users on the services that should be reference services.	n.a.
Non-price terms and conditions and tariff variations	Amend the NGR to require the regulator to consider the allocation of risks when making its decision on non-price terms and conditions and the reference tariff variation mechanism.	n.a.
Investment provisions and efficient costs	Amend the NGR to provide greater guidance on the matters the regulator must have regard to when making decisions on new capital expenditure, speculative capital expenditure and cost allocation.	n.a.
Other	Amend the NGR to: ▪ remove the current limitations on the exercise of regulatory discretion; ▪ provide more time for engagement on AA proposals; ▪ require service providers to use financial models developed by the regulator; ▪ clarify the operation of revenue caps and the interval of delay provisions; ▪ amend the definition of rebateable services and the rebate methodology; and ▪ remove the requirement to report KPIs.	n.a.

Source: AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018.

Further review of the regulatory framework

In addition to these recommendations, the AEMC suggested that a review of the framework for economic regulation be undertaken and that, as part of this review, consideration be given to: [93]

- the tests to be used to determine what form of regulation should apply;
- the number and types of forms of regulation that should be available; and
- related institutional, governance and process arrangements.

In doing so, the AEMC observed that:[94]

> *"…an unintended consequence of the introduction of Part 23 of the NGR is that in the case of pipelines that provide third party access, the coverage determination is no longer a test of whether regulation should be applied or not, but instead is a test of which form of regulation should be applied (full or light on the one hand, or Part 23 on the other). … The questions being asked by the test are designed for assessing whether regulation should apply, but are not the most appropriate for determining which form of regulation is applied.*
>
> *This may result in the inappropriate form of regulation applying to a particular pipeline. Both over-regulation and under-regulation could result, leading to additional costs that are ultimately borne by consumers…*
>
> *Secondly, as noted by the NCC, the practical effect of introducing Part 23 of the NGR has been to apply near-universal regulation regardless of whether a market failure has been identified on a case-by-case basis. Specifically, the market failure of service providers using market power is assumed.. The possible impact of this is unnecessary regulation of those pipelines where there is no or only limited or transient market power, with associated direct and indirect costs.*
>
> *Thirdly, as also noted by the NCC, applying economic regulation under Part 23 to those pipelines that have been granted a 15-year no-coverage determination under the greenfields pipeline incentive framework may risk regulatory over-reach, and may distort investment incentives for new pipelines….*
>
> *…*
>
> *In practice, the overarching effect of the introduction of Part 23 may be an appropriate increase in regulation to address previous concerns with the regime…without imposing unnecessary regulation given the widespread monopoly power found by the ACCC, nor having detrimental impacts on future investment. It may be practically more appropriate to apply some form of regulation to (nearly) all pipelines given the likelihood of market power, rather than risking the mis-application of the test for determining whether regulation should be applied (at all) and so under-regulating.*
>
> *Nevertheless, the introduction of the access regime for non-scheme pipelines has introduced the risk of over- or under-regulation on a case by case basis as a result of the coverage determination being used to determine which form of regulation should apply."*

It was on the basis of this recommendation that the Energy Council decided that a RIS should be conducted to examine options to improve the regulatory framework.

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93 AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, p. 12.

94 ibid, p. 54.

5. Recent reviews of Part 23

To help inform the review of the effectiveness of Part 23, SCO retained OGW to conduct a survey of shippers and the Brattle Group to carry out a review of the financial information reported by non-exempt non-scheme pipelines.[95] The ACCC has also recently conducted a review of the operation of key elements of Part 23, the findings of which are set out in its July 2019 Gas Inquiry Interim Report.

The remainder of this chapter provides an overview of the key findings of these reviews and sets out a number of questions on the operation of Part 23 that SCO is seeking stakeholder feedback on.

5.1 Oakley Greenwood survey of shippers

In June 2019, OGW conducted a survey of 33 existing and prospective shippers. Amongst other things, these shippers were asked for their views on:

- the information disclosure requirements in Part 23 (including the user access guide);
- the access request and negotiation provisions in Part 23;
- the arbitration process and pricing principles in Part 23; and
- the exemptions available under Part 23.

Table 5.1 on the following page provides a summary of the responses that were received on each of these issues. It is worth noting that because only a relatively small number of shippers were able to undertake the survey and a smaller number were able to express an opinion on Part 23, it was not possible to apply conventional statistical techniques to analyse the data.

[95] Copies of the OGW and Brattle Group reports can be found on the Energy Council's website.

Table 5.1: Summary of responses to OGW's shipper survey

Issue		Survey response
Information disclosure requirements in Part 23		The majority of respondents were generally satisfied with the information disclosure requirements and the user access guide. However, a reasonable number of respondents expressed some dissatisfaction with the: ▪ **standing terms and conditions**, with a number of respondents noting that the information published by service providers does not allow them to understand how that published pricing methodology has been used to generate the standing price. ▪ **service usage information**, with some respondents suggesting that the information be available on a daily rather than monthly basis. ▪ **service availability information**, with some respondents suggesting the outlook period should be longer than 36 months. ▪ **price information**, with one respondent suggesting that there be full disclosure of the prices paid under each contract, while another suggested that information on the range of prices paid by shippers on the pipeline would be useful. ▪ **financial information,** with a number of respondents expressing concerns about the lack of transparency surrounding some information (e.g. how the return on capital was calculated for the recovered capital value (RCV) estimates and, in particular, the rate of return assumed) and the volume of information. ▪ **ease with which the information can be used**, with a number of respondents noting that it was either difficult or very difficult to understand the information and that prospective shippers would have to undertake extensive modelling and analysis to use the information. ▪ **accessibility of information**, with some respondents noting that service providers present information in different ways and in different locations, which can make it difficult to access. Some respondents also noted the potential for information to be removed or changed by a service provider during negotiations. It was therefore suggested that the information be reported in a centralised and independent location (e.g. the AER's website or the Bulletin Board). Some respondents also expressed concerns with how the financial information gets translated into a tangible outcome (via the arbitration process), while others noted that a shippers' ability to undertake any analysis was limited by their internal resources. These respondents noted that anything that could be done to assist in this regard would make the framework more accessible, particularly for smaller shippers.
Negotiation framework in Part 23	Preliminary vs formal access request	Most respondents that had negotiated access to a non-scheme pipeline noted that they had done so outside the formal Part 23 arrangements through a preliminary enquiry, but stated that having the fall-back position of being able to negotiate under Part 23 assisted them in their informal negotiations. One respondent did, however, raise some concerns with the use of preliminary enquiries because in its case "the service provider required all terms and conditions to be agreed before they made an access offer, so negotiations did not occur within the access offer framework".
	Negotiations	Most respondents were satisfied with: (a) the requirement for parties to negotiate and exchange information in good faith; (b) the information to be provided by a service provider on request from a shipper; and (c) the timeframes for the provision of information by service providers.
Arbitration mechanism in Part 23	Use of arbitration	Of the 19 respondents that had negotiated or were negotiating with a non-scheme pipeline service provider, 47% had reached a mutually acceptable conclusion so did not proceed to arbitration, 11% didn't progress to arbitration because they were concerned about the cost, 5% were unsure why they didn't proceed to arbitration and the remainder were either still in negotiations or were considering arbitration. One respondent that was considering arbitration and had engaged lawyers to prepare for arbitration noted they were not confident they would get a reasonable outcome so were continuing to pursue commercial negotiations.
	Arbitration process	Respondents were generally supportive of the arbitration process, with a number noting it was critical to the success of framework. The majority of respondents also noted they were comfortable with the timeframes (i.e. 50-90 business days).
	Pricing principles	Respondents were supportive of the workably competitive market objective that underpins Part 23 and the pricing principles. However, only slightly more respondents than not were satisfied the pricing principles provided them with sufficient guidance as to what the arbitrator would hand down. When asked how they could be improved, some respondents suggested that the principles were too regulatory in nature and should be more commercially focused. Concerns were also raised about the asset valuation principles, with some respondents noting that more prescription should be provided because there was too much uncertainty under the current principles. Some also suggested more guidance was required on the rate of return and the treatment of shared costs and that the pricing principles should be amended to make it clear that service providers should not recover more than the cost of providing the service
	Publication of outcome	A number of respondents noted that there would be benefit in key elements of the arbitrator's decision being published, including how the tariff was calculated and the information the arbitrator had regard to, so that other shippers could leverage off those outcomes.
Exemptions under Part 23.		Most respondents thought the exemption criteria were reasonable, although one suggested the single shipper and small pipeline exemptions be removed.

Source: OGW, Gas Shippers Survey, September 2019.

As Table 5.1 shows, respondents were generally satisfied with most elements of Part 23, with those respondents that had negotiated access to a pipeline that was subject to Part 23 being satisfied:

- with the terms and conditions they had been able to negotiate and the ability of Part 23 to accommodate their specific requirements; and
- that the design of the arbitration process would result in fair and reasonable outcomes.

Some respondents also noted that the introduction of Part 23 had provided service providers an incentive to behave more commercially, as reflected in the following statement by one respondent:[96]

> *"In the absence of Part 23 there is little recourse available to contain monopoly power of the pipeline. Formal use of Part 23 is only required when there is a bonafide disagreement on some matters or the pipeline is not cooperating in providing reasonable access. Availability of Part 23 has incentivised the pipelines to behave commercially."*

While respondents were generally satisfied with Part 23, their responses do suggest that negotiating access under Part 23 is considered more costly than it is under full regulation. Respondents also suggest that a number of improvements be made to:

- the information disclosure requirements to make the information more accessible, usable and to address some of the perceived deficiencies with the information; and
- the arbitration principles to provide the arbitrator with more guidance on how the asset value, rate of return and shared costs should be calculated.

5.2 Brattle Group review of financial information

In early 2019, the Brattle Group was retained to conduct a review of the financial information reported by a sample of non-scheme pipelines under Part 23 of the NGR and to consider the usability of the information and a number of other matters.[97] The Brattle Group reviewed the information reported in relation to fourteen non-scheme pipelines for the period 1 January 2018 – 30 January 2018.

In short, the Brattle Group found that while the financial information could help shippers calculate some cost-based pricing benchmarks (see Box 5.1), there were some deficiencies with the information that could limit its usefulness.[98] Brattle, for example, found a number of inconsistencies in the financial information reported by service providers (see Box 5.2), which it noted could result in shippers having to dedicate more

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96 OGW, Gas Shippers Survey, September 2019.

97 The Brattle Group was also asked how the scope of financial information reported under Part 23 compares with the scope of the disclosure required by full regulation pipelines. Brattle found that the disclosure requirements differed in two key respects:

- First, non-exempt non-scheme pipelines are required to disclose historic information (with some information required to be reported for the entire history of the pipeline), while full regulation pipelines are required to disclose forecast information with some limited reporting of historic costs.
- Second, non-exempt non-scheme pipelines are required to report annually, while full regulation pipelines are only required to provide information every five years.

Brattle Group noted while there is some overlap with the reporting of historic costs the information that non-scheme pipelines and full regulation pipelines are required to report differs (for example, full regulation pipelines are not required to report on the actual revenues or returns earned) and to obtain the entire history of costs for a full regulation pipeline a shipper would have to compile regulatory determinations across different regulatory periods, and the information is typically more complicated to review and use.

98 Brattle Group, Financial Information Disclosed by Gas Pipelines in Australia Under Part 23 of the National Gas Rules, August 2019, pp. 113-114.

time and resources to understanding the reported information.[99] The Brattle Group also made the following observations:[100]

- given the nature of pipeline operations, it is to be expected that a range of cost-based pricing benchmarks that spans incremental cost, fixed cost, and investment cost will be wide; however, wide ranges of cost-based pricing benchmarks calculated from Part 23 financial information also result from a lack of clarity in the reported information;
- while the recovered capital value (RCV) is useful for shippers to understand the past performance of a pipeline, it is sensitive to the inputs and assumptions that service providers employ, and it also contributes to the wide ranges of pricing benchmarks that can be calculated;
- the information is historical in nature, which may or may not reflect the expected future costs of providing services and therefore the prices payable for those services; and
- the financial information provides shippers with an understanding of the costs of operating a pipeline, but not the value of pipeline capacity, which may be higher than the cost of providing the capacity if, for example, demand exceeds capacity.

To address these issues, the Brattle Group recommended:[101]

- a number of changes to the regulator's Financial Reporting Guideline for Non-Scheme Pipelines (Financial Reporting Guideline) and reporting template to address the issues it had identified and to improve the consistency, transparency and reliability of the reported information;
- that the regulator require service providers to indicate whether expected future capital maintenance requirements are likely to be in line with, significantly above or significantly below the recent history reflected in their RCV calculations; and
- that service providers be required to report on the amount of available capacity.

Further detail on the Brattle Group's recommendations is provided in Appendix B.

99 ibid, p. 103.

100 ibid, p. 106.

101 ibid, p. 116-120.

Box 5.1: Pricing benchmarks

Brattle identified a number of different cost-based pricing benchmarks and other matters that could be relevant to an assessment of a 'reasonable price' (i.e. a price that so far as practical reflects the outcomes of a workably competitive market) under Part 23, including:

(i) the incremental cost of providing an additional unit of pipeline service,

(ii) the fixed costs of operating the pipeline assets;

(iii) the capital investment required and the corresponding expected return on capital (including the tax implications); and

(iv) other matters, such as the whether or not the pipeline is capacity constrained.

Brattle also noted that:[102]

"Overall, short-run efficiency means access should be priced at levels that reflect incremental cost. Long-run efficiency, however, requires prices at levels above incremental cost to allow the pipeline service providers to also recover fixed and sunk costs. An access price that provides a return of actual investment and a reasonable rate of return on that investment should be sufficient for the purpose of incentivising investment in the pipeline assets. However, an increase above the level that provides a normal rate of return on actual investment can be appropriate in certain circumstances.

In particular, if the demand for pipeline services exceeds the capacity of the pipeline, the price would need to rise such that only shippers with the highest willingness to pay (ie, shippers that derive the highest value from obtaining access) would be given access. High prices due to excess demand also serve as a signal for pipeline expansion.

If there is no excess demand, but the access price is nevertheless set above the level required to provide a return of and on invested capital, the result can be sub-optimal use of the asset, and upstream and/or downstream inefficiencies."

Box 5.2: Brattle Group's findings on the consistency of reported information[103]

Through its review of the financial information reported by service providers, Brattle identified the following inconsistencies with the reported information:

- Service providers with multiple pipelines use different methods to allocate shared revenues and shared expenses across individual pipelines and do not always disclose the percentage that has been allocated or the calculations performed to implement the allocations.
- The information reported by some service providers is based on estimates, rather than the costs actually incurred by service providers or revenues actually earned.
- The inputs and assumptions used in service providers' RCV calculations differ, for example:
  - the opening asset value reported by some service providers is based on a depreciated optimised replacement cost rather than the original construction cost;
  - some service providers have assumed capital expenditure is incurred in the middle of the year and included an allowance for a half year's return, while others have not;
  - the rate of return assumed by service providers varies, with some using parameters set in prior regulatory decisions, while others used other approaches; and
  - the methods used by service providers to calculate net tax liabilities differs;
- The "catch-all" fields (such as "other direct revenue", "other direct cost", or "other shared cost") in the financial reporting template were being used by some service providers to report costs that were not referred to in the AER's Financial Reporting Guideline for Non-Scheme Pipelines and were not reported by other service providers.
- There were variations in the financial information reported across pipelines for the same line items, as well as across different tables in the reporting template for the same pipeline.

[102] ibid, pp. 19-20.

[103] ibid, pp. 103-105.

5.3 ACCC review of the operation of Part 23

In the first half of 2019, the ACCC undertook a review of the operation of Part 23. Using its compulsory information gathering powers, the ACCC obtained a range of information from the service providers of non-exempt non-scheme pipelines, which it used to assess:

- whether the information disclosure obligations, negotiation framework and arbitration mechanism under Part 23 were working as intended; and
- the effect the introduction of Part 23 has had on pipeline investment.

While the ACCC found that the contracting environment had improved following the introduction of Part 23[104] and there were signs Part 23 was having a positive effect on transportation prices, it expressed some concerns about:[105]

- the quality of information published and the potential non-compliance of some service providers with the information disclosure obligations in the NGR;
- the potential for the preliminary enquiry process to be used by service providers to avoid some of the rules in Part 23 regarding how they are to respond to access requests (including the timeframes for responses); and
- the potential for the threat of arbitration from smaller shippers to be viewed as less credible and for smaller shippers to therefore pay more for services.

Further detail on the ACCC's key findings and recommendations, which mirror some of the findings and recommendations from the OGW survey and Brattle Group review, are outlined below.

5.3.1 Information disclosure

Through its review of the information disclosed by service providers, the ACCC found a number of instances where service providers did not appear to be complying with the reporting obligations. The ACCC also found that some service providers were trying to exploit the information asymmetries faced by shippers by publishing inaccurate information.[106] The ACCC, for example, found:[107]

- A number of instances where service providers had not published standing prices for all the services they offer, as required by the NGR.
- The pricing methodologies published by most service providers did not allow shippers to determine whether the standing prices reflected the application of the method (as required by the NGR), or to assess the reasonableness of the prices.
- The RCVs published by a sample of seven pipelines[108] were overstated by up to 45% (with over half the sample overstated by more than 20%) as a result of errors and/or the adoption of inflationary measures. The RCVs were further overstated by the adoption of relatively high rates of return for some pipelines. When informed of the errors, a number of service providers noted that they did not consider the errors to be

[104] The ACCC, for example, found that since the introduction of Part 23, 126 GTAs have been negotiated or varied on the major Part 23 transmission pipelines in eastern Australia, with just one negotiation proceeding to arbitration.

[105] ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 128-129.

[106] ibid, p. 128.

[107] ibid.

[108] The pipelines included the South West Queensland Pipeline, the Moomba to Sydney Pipeline, the Moomba to Adelaide Pipeline System, the Eastern Gas Pipeline, the Port Campbell to Adelaide Pipeline, the Port Campbell to Iona Pipeline and the SESA Pipeline.

material (as required by the access information standard in Part 23) and did not therefore intend to publish revised estimates.

- The weighted average prices published by service providers did not provide a good representation of the prices actually paid by shippers and in some cases were not directly comparable to standing prices, because some service providers included other charges in the calculations (e.g. overrun and imbalance charges) that were not included in the standing price.

The ACCC expressed some concerns with this behaviour and noted that the publication of inaccurate or misleading information could undermine the efficacy of Part 23 and limit the reliance shippers could place on the information.[109]

In a similar manner to the OGW survey and the Brattle Group, the ACCC also expressed some concerns with quality, reliability, transparency, accessibility and usability of the financial information.[110] It also noted the concerns that had been raised by some shippers about the information asymmetries associated with the exemption that single shipper pipelines and pipelines falling below the size threshold have from the requirement to publish standing prices and standard terms and conditions.[111] A similar concern was raised by shippers when the ACCC and GMRG were preparing their joint report on measures to improve the transparency of the gas market, [112] and it was suggested that this was a gap in the disclosure requirements that should be addressed so that:[113]

- prospective shippers can readily assess whether to seek access to the pipeline; and
- gas users that procure gas from a retailer have greater transparency of the costs likely to be incurred by retailers, which are usually charged on a pass-through basis.

5.3.2 Access requests, negotiations and arbitration

Through its review of access requests and negotiations material provided by service providers, the ACCC found that shippers' requests were often treated as 'preliminary enquiries' by service providers, rather than formal access requests.[114] The ACCC noted that this was a potential limitation in the framework that could undermine the effectiveness of Part 23 because it meant that:[115]

- service providers could avoid some of the requirements in Part 23 regarding responses to access requests and negotiations (including response timeframes); and
- if negotiations fail and a shipper wants to proceed to arbitration, then it must submit a formal access request and go through the access offer and negotiations steps in Part 23 before it can trigger the arbitration mechanism, which could delay a shipper's access to arbitration.

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109 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 27-28.

110 ibid, pp. 137-155.

111 ibid, p. 132.

112 ACCC and GMRG, Joint recommendations: Measures to improve the transparency of the gas market, December 2018, p. 34.

113 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, p. 132.

114 As the ACCC noted, it is unclear whether service providers are encouraging shippers to make preliminary enquiries, or if shippers are choosing to seek access in this way. It is also unclear if shippers are aware of the consequences of their requests being treated in this manner.

115 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, p. 156.

The ACCC's review also revealed that while shippers are using the threat of arbitration in their negotiations, service providers may view the threat as less credible when it involves a smaller shipper[116] and as a consequence smaller shippers may pay more for transportation.[117] The ACCC noted there was some evidence of this in the access request and offer information it reviewed, with some small shippers unable to secure the same prices offered to large shippers.

5.3.3 Effect on investment

In relation to investment, the ACCC found that a large number of pipeline investments had been announced since the decision was made to implement Part 23. It also found no evidence in service providers' internal documents to suggest that Part 23 was deterring investment. Rather, the ACCC found that service providers were investigating a range of other pipeline investments that would be captured by Part 23 if they were developed.[118]

5.3.4 ACCC's recommendations

To address the issues identified in its review, the ACCC recommended a range of improvements to Part 23, the stated objectives of which are to:[119]

- pose more of a constraint on the behaviour of service providers, by, for example, providing for greater prescription and regulatory oversight of the information to be reported; and
- empower shippers in their negotiations with service providers by improving the quality, reliability and accessibility of the information they can have recourse to when negotiating and ensuring the threat of arbitration is credible for all shippers.

The ACCC's recommendations are set out in Table 5.2.

[116] This could occur because the shippers' demand may be relatively small and/or the shipper's use of gas may be a small input to the shipper's end-use requirements.

[117] ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, p. 157.

[118] ibid, pp. 159-160.

[119] ibid, pp. 160-164.

Table 5.2: Summary of ACCC recommendations

Area	Recommendations	How to progress
Standing prices and pricing methodologies	SCO should consider removing the exemption single shipper pipelines and pipelines with annual average gas flows of <10 TJ/day currently have from the obligation to publish standing prices and the standard terms and conditions of access on their website.	Pipeline RIS
	SCO should consider whether service providers should be required to publish the inputs used to calculate standing prices.	
	The AER should consider developing a non-binding guide that provides service providers with greater guidance on what, at a minimum, the pricing methodology should include and sets out the reporting requirements if an amendment is made.	Development of a new AER guide
Weighted Average Prices Information	SCO should consult with stakeholders on the following alternatives to the requirement for service providers to publish weighted average prices: 1. Reporting individual prices (plus key terms and conditions) paid by each shipper for services instead of weighted average prices. 2. Reporting the minimum and maximum prices shippers paid for each service, in addition to the weighted average prices. When consulting on the options, consideration should be given to any impacts publication may have on competition in other markets.	Pipeline RIS
Recovered Capital Method Asset Valuation	SCO should consider requiring greater regulatory oversight of service providers' financial information to impose more discipline on service providers and their auditors. Specifically, SCO should consider amending the NGR to: ▪ give the AER the power to require an independent review (this could take the form of an audit or a review by a regulatory expert) of a service provider's financial information (including the RCV) (the costs to be borne by the service providers) ▪ require service providers to provide the AER with the source material underpinning their RCVs.	
	The AER should consider reviewing the RCVs published by the six pipelines that were not reviewed by the ACCC to determine whether they have been afflicted by the same errors, inflationary measures and non-compliance issues. The AER should also consider assessing whether other aspects of the financial reports published by service providers comply with the Guideline.	AER review of financial reports
Requirement to republish	SCO should consider amending the access information standard in Part 23 to require service providers to republish information they are required to report, including the financial reporting template and/or basis of preparation, if it is no longer accurate.	Pipeline RIS
Improving the accessibility of information	To improve the accessibility of information, the AER should consider developing a non-binding guide on how the information service providers are required to disclose, should be reported. This non-binding guide could set out what the standing price methodology should include, and for example could require service providers to: • include a more prominent link on their website to where the information can be found and require all the relevant information for each pipeline to be included on a single page • report their standing prices and weighted average prices on a single page • escalate their standing prices to the relevant period so that shippers can quickly see the prices payable in that period. When developing this guide, the AER could also consider requiring links to the information reported by pipelines to be published on the AER's website so that shippers can more readily find the information.	Development of a new AER guide
Access requests	SCO should consider removing the distinction between preliminary enquiries and formal access requests in the NGR.	Pipeline RIS
Arbitration	SCO should consider whether the credibility of the threat of arbitration could be improved for smaller shippers.	

Source: ACCC, Gas Inquiry report 2017-20, Interim report, July 2019.

As the final column of Table 5.2 shows, the ACCC suggested that a number of recommendations be considered as part of this RIS. The ACCC has, for example, suggested that consideration be given to:[120]

- removing the exemption that single shipper pipelines and smaller pipelines currently have from the obligation to publish standing prices and terms and conditions;
- requiring service providers to publish more information on how standing prices have been calculated (including the inputs used in the calculation) so that shippers can understand how the standing price reflects the application of the methodology and assess the reasonableness of the prices and underlying assumptions;
- requiring greater regulatory oversight of service providers' financial information to impose more discipline on service providers and their auditors and to provide shippers with more confidence in the reported information;
- replacing the current requirement to publish weighted average prices, with a requirement to report either:
    a. the individual prices paid by each shipper and information on the key terms and conditions; or
    b. the minimum and maximum prices paid for each service along with the weighted average prices;
- amending the access information standard in Part 23 to require information to be republished if it is no longer accurate;
- removing the preliminary enquiry process from Part 23; and
- improving the credibility of the threat of arbitration for smaller shippers.

The ACCC also recommended that the AER:

- conduct a review of the RCVs published for those pipelines that did not form part of the sample that the ACCC reviewed; and
- publish a guide that would provide more guidance on how service providers should report information on their website and, as part of this process, consider requiring links to the reported information to be published on the AER's website, so that information is more accessible to shippers.

In addition to these recommendations, the ACCC recommended a number of specific amendments to the AER's Financial Reporting Guideline and associated reporting template to:[121]

- improve the quality of the weighted average price information if a decision is made to retain weighted average prices;
- require greater transparency of the inputs service providers use to calculate the RCVs (for example, the rate of return), limit service providers' discretion when calculating the RCVs, and improve the quality and accessibility of the RCV information;
- improve the standard of the basis of preparation that service providers are required to publish to provide more detail on the sources, methods of estimation and assumptions used to produce the financial and weighted average price information; and

120 ibid, pp. 160-164.

121 ibid.

- improve the accessibility and usability of the financial and weighted average price information.

Further detail on these recommendations can be found in Appendix B.

5.4 Questions for stakeholders

SCO is interested in hearing stakeholders' views on the findings and recommendations arising from these recent reviews of Part 23 and how effective stakeholders think Part 23 has been in terms of achieving its stated objective (see section 3.1.2.3). The box below contains a number of specific questions that SCO is seeking feedback on.

Box 5.3: Questions on the effectiveness of Part 23

1 If you are a shipper that has negotiated with the operator of a non-scheme pipeline since August 2017, or a service provider of a non-scheme pipeline, how effective do you think Part 23 has been in terms of:

   (a) enabling shippers to make more informed decisions about whether to seek access and to assess the reasonableness of a service provider's offer?

   (b) reducing the information asymmetries and imbalance in bargaining power that shippers can face in negotiations?

   (c) facilitating timely and effective commercial negotiations between shippers and service providers?

   (d) constraining the exercise of market power by service providers during negotiations by providing for a credible threat of intervention by an arbitrator?

   (e) enabling disputes that cannot be resolved through negotiations to be resolved in a cost-effective and efficient manner?

2 Do you agree with the observations and recommendations made by:

   (a) respondents to the OGW shipper survey (see section 5.1)?

   (b) the Brattle Group in its review of the financial information (see section 5.2)?

   (c) the ACCC in its review of the operation of Part 23 (see section 5.3)?

   If not, please explain why not.

3 Are there any changes that you think need to be made to Part 23 to make it more effective or efficient in terms of achieving its stated objective (i.e. to facilitate access at prices and on other terms and conditions that, so far as practical, reflect the outcomes of a workably competitive market)?

6. Overview of the potential problems and objectives of Energy Council action

Despite recent interventions to improve aspects of the regulatory framework applying to scheme and non-scheme pipelines, it would appear from the recent reviews carried out by the AEMC, ACCC, GMRG, Brattle Group and respondents to the OGW shipper survey that there are still a number of potential problems with the regulatory framework. The remainder of this chapter provides an overview of the problems that have been identified and the objectives of any Energy Council action that may be taken to address these problems.

6.1 What are the potential problems with the current framework?

As the discussion in the preceding chapters highlights, a number of potential problems have been raised with:

(a) the threshold for economic regulation adopted as a result of the implementation of Part 23 and other aspects of the regulatory framework that determine when a pipeline should be subject to regulation and how such decisions are made;

(b) the forms of regulation that can be applied to a pipeline once a decision is made that it should be regulated and how form of regulation decisions are made;

(c) the information disclosure obligations that service providers are subject to under the various forms of regulation; and

(d) the negotiation frameworks and dispute resolution mechanisms applying under the various forms of regulation.

A brief overview of the problems that have been identified, which are complex and interrelated, is provided below. Further detail on these potential problems, which are taken as a focus for reform (through regulation or other means) is provided in Chapters 7 to 11. As noted in these chapters, the problems that have been identified are expected to have a detrimental effect on economic efficiency and consumers more generally, although it is difficult in some cases to know how significant some of these effects are likely to be. SCO is therefore seeking feedback from stakeholders on the problems that have been identified and the effect they could have on shippers, service providers, the relevant regulator, consumers and other gas market participants.

When a pipeline should be regulated and how decisions to regulate are made

Under the current regulatory framework:

(a) all pipelines that are providing third party access (including pipelines that have obtained a greenfield exemption) are subject to some form of regulation;

(b) access to a pipeline that is not providing third party access can only be obtained if the Minister, having regard to the NCC's recommendation, finds that all the coverage criteria are satisfied (see Box 3.1); and

(c) a 15-year exemption from coverage (greenfield exemption) can be obtained by pipelines that are yet to be commissioned if the Minister, having regard to the NCC's recommendation, finds that one or more of the coverage criteria are not satisfied.

The concerns that have been identified in this case are that:

- the threshold for economic regulation (i.e. all pipelines providing third party access) may result in over-regulation because no assessment has been carried out on whether all of these pipelines have market power;
- the application of Part 23 to pipelines that have obtained a greenfield exemption but are providing third party access may distort the incentives service providers have to invest in new pipelines and result in inefficient investment in these pipelines;
- the use of the coverage test to determine whether a pipeline should be required to provide third party access may result in under-regulation and inefficient investment in and use of pipelines; and
- the governance arrangements associated with the test for regulation may be giving rise to unnecessary costs and delays.

How a pipeline should be regulated if a decision is made to regulate

The regulatory framework currently provides for three forms of regulation that a pipeline can be subject to if a decision is made that it should be regulated (full regulation, light regulation and Part 23), with the coverage test acting as the gateway for movements between Part 23 and full/light regulation and vice versa. The concern in this case is that:

- the use of the coverage test as a gateway from Part 23 to full regulation could result in under-regulation (i.e. because the coverage test is not directed to the right market failure – see sections 4.1-4.2), which could leave shippers more exposed to exercises of market power;[122]
- the inconsistencies and overlap between some forms of regulation (i.e. Part 23 and light regulation) could increase the complexity and administrative burden for regulators, shippers and service providers; and
- the current forms of regulation do not effectively deal with potential exercises of dynamic market power (i.e. blocking competition through restricting or denying interconnections and pricing new capacity below incremental costs), which could further entrench the incumbent service providers' market power.

Information disclosure requirements

Pipelines subject to full regulation, light regulation or Part 23 are (subject to some exceptions), required to publish a range of information that shippers can use to make a more informed decision about whether to seek access to a pipeline and to assess the reasonableness of a service provider's offer. While steps have been taken to improve the information that is made available to shippers, it would appear from recent reviews that:

- the limited information available to shippers negotiating access to non-reference services on full regulation pipelines may be hindering the ability of shippers to negotiate access to these services and imposing additional search and transaction costs on shippers; and
- the quality, reliability, accessibility and usability of the reported information, along with deficiencies in the information shippers are expected to rely on to assess the reasonableness of service providers' offers, may be limiting the reliance shippers can place on the information and making them more susceptible to exercises of market power.

[122] The term under-regulation is used to refer to a situation where the level of regulation applied does not limit a service provider's ability to exercise market power.

Negotiation frameworks and dispute resolution mechanisms

Full regulation, light regulation and Part 23 are all variants of the negotiate-arbitrate form of regulation. Like the information disclosure requirements, some improvements have recently been made to these aspects of the regulatory framework. Concerns have, however, been raised about:

- the potential for differences between the negotiation frameworks applying under the various forms of regulation, to give rise to unnecessary costs and delays and to hinder the ability of shippers to negotiate effectively with service providers;
- the threat of arbitration by smaller shippers that are negotiating access to pipelines not to be viewed as credible by service providers, which may make this group of shippers more susceptible to exercises of market power by service providers; and
- various aspects of the dispute resolution mechanism applying under full and light regulation that may be reducing the credibility of the threat of arbitration and the constraint it is intended to impose on service providers of these pipelines.

6.2 What are the objectives of Energy Council action?

Any action taken by the Energy Council to address the problems outlined above will be guided by the NGO, which is to:

> *"…promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of consumers of natural gas with respect to price, quality, safety, reliability and security of supply of natural gas."*

Consideration will also be given to the Energy Council's Vision for the Australian Gas Market (Vision), which is to: [123]

> *"…establish a liquid gas market that provides market signals for investments and supply, where responses to those signals are facilitated by a supportive investment and regulatory environment, where trade is focused at a point that best serves the needs of participants, where an efficient reference price is established, and producers, consumers and trading markets are connected to infrastructure that enables participants the opportunity to readily trade between locations and arbitrage trading opportunities."*

In keeping with the NGO and Vision, the objectives of any Energy Council action will be to implement a more efficient, effective and integrated regulatory framework that supports the efficient operation of the gas market and the long term interests of gas users and is fit for purpose, targeted and proportionate to the issues it is intended to address.

Some of the more specific objectives of Energy Council action will be to:

- provide an effective constraint on the exercise of market power by service providers;
- reduce the degree of information asymmetry and imbalance in bargaining power that shippers can face when negotiating with service providers;
- support efficient investment and innovation in the provision of pipeline services and provide for the safe, reliable, and efficient operation and use of pipelines;
- provide for a regulatory framework that:

[123] COAG Energy Council, Australian Gas Market Vision, December 2014
See http://www.coagenergycouncil.gov.au/sites/prod.energycouncil/files/publications/documents/COAG-Energy-Council-Australian-Gas-Market-Vision-Dec-2014-FINAL.pdf

- is as simple and well-integrated as possible, with different forms of regulation based on common principles and approaches, where appropriate;
- promotes clarity and consistency by providing clear objectives, rules and guidance for regulators and other decision-makers and support effective compliance monitoring and enforcement activities; and
- minimises administrative burdens and compliance costs; and

- support the current and future opportunities and challenges facing the gas and pipeline industries.

6.3 Questions for stakeholders

SCO is interested in stakeholders' views on the problems and objectives of action identified in this Chapter. It is also interested in whether there are any other problems that should be considered as part of the Decision RIS.

One such problem that does not neatly fall within the scope of this RIS but could potentially be considered, is the access to regional pipeline issue that the ACCC identified in its 2015-16 Inquiry[124] and again in its July 2019 report.[125] As the ACCC noted, the issue in this case is not that the service provider is exerting market power. Rather, it is the shipper that has contracted all the capacity that may be preventing or hindering access by other retailers or shippers to the pipeline, or engaging in monopoly pricing. While SCO understands that the ACCC intends to consider this issue further in the latter half of 2019, it is interested in hearing whether stakeholders think any changes should be made to the regulatory framework to address this recurring issue.[126]

Box 6.1: Questions on the potential problems and objectives of action

4 Do you agree with the problems that have been identified and what effect do you think they could have on shippers, service providers, the relevant regulator, consumers and/or other gas market participants?

5 Are there any other problems that you think should be considered as part of the RIS (e.g. access to regional pipelines)? If so, please set out what they are, what effect you think they could have on shippers, service providers, the relevant regulator, consumers and/or other gas market participants, and how you think the problem should be addressed.

6 Are there any other objectives that you think the Energy Council should be pursuing? If so, please set out what they are.

[124] ACCC, Inquiry into the east coast gas market, April 2016, pp. 153-154.

[125] ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, p. 116.

[126] In the ACCC's 2015-16 Inquiry, the ACCC noted that one way this issue could be addressed, would be to introduce a capacity surrender mechanism in the NGR that could be invoked if a regional pipeline was contractually but not physically congested and the unutilised capacity was not being made available by the primary shipper at competitive prices.

See ACCC, Inquiry into the east coast gas market, April 2016, p. 154.

7. Reform focus 1: When a pipeline should be subject to regulation and how decisions to regulate should be made

The focus of this chapter is on the more fundamental question of *when* a pipeline should be subject to economic regulation and how the decision to regulate a pipeline should be made (i.e. what test should be used and who should apply the test). The following chapter, on the other hand, considers *how* a pipeline should be regulated once a decision has been made that it should be regulated.

Prior to the introduction of Part 23, pipelines could become subject to economic regulation if they satisfied the coverage test, or were deemed to satisfy this test when the Gas Code came into effect.[127] As noted in Chapter 4, a number of concerns were raised with the coverage test in 2016, with both the ACCC and AEMC finding that it was unlikely to be met by most pipelines because it was not directed at the right market failure.[128,129] Dr Vertigan formed a similar view in his 2016 Examination.[130] However, rather than changing the coverage test, Dr Vertigan recommended a new form of regulation be introduced and applied to all non-scheme pipelines providing third party access (including pipelines that had obtained a greenfield exemption). This recommendation was endorsed by the Energy Council in December 2016[131] and Part 23 commence in August 2017.

The application of Part 23 to non-scheme pipelines, in effect, by-passed the coverage test for pipelines providing third party access and, in so doing, lowered the threshold for economic regulation on these pipelines. The coverage test now plays a relatively limited role in determining when a pipeline should be subject to economic regulation, with the test only being used to determine whether a pipeline that is not providing third party access should be required to do so, and whether a greenfield exemption should be granted. The coverage test also has a role to play in form of regulation decisions, which is discussed in detail in Chapter 8.

While the introduction of Part 23 addressed most of the problems identified in 2016, concerns have subsequently been raised about:

- the potential for the 'near universal' application of regulation to result in over-regulation and to distort investment incentives for greenfield pipelines; and
- the role the coverage test continues to play in determining whether third party access should be provided and the potential for this to result in under-regulation and inefficient use of and investment in pipelines.

Concerns have also been raised about the governance arrangements associated with decisions to regulate.

The remainder of this chapter provides further detail on how a pipeline can currently become subject to economic regulation, the potential problems that have been identified

127 As noted in section 3.1, a pipeline could also become subject to regulation if they decided to submit a voluntary full AA or if the pipeline was built through a CTP process approved under the Gas Code or the NGR and there was an approved CTP AA in place.

128 ACCC, Inquiry into the east coast gas market, April 2016, pp. 10-11 and AEMC, Stage 2 Final Report: East Coast Wholesale Gas Markets and Pipeline Frameworks Review, 23 May 2016, p. 112.

129 That is, monopoly pricing that results in economic inefficiencies but has little or no effect on competition in other markets.

130 Vertigan, M., Examination of the current test for the regulation of gas pipelines, 14 December 2016, pp. 12-13.

131 COAG Energy Council, Meeting Communique, 14 December 2016.

with these arrangements and how the problems could be addressed. It also sets out a number of questions that SCO is interested in obtaining stakeholder feedback on.

7.1 What is the current situation?

The regulatory framework currently provides for:

- all pipelines that are providing third party access to be subject to some form of economic regulation (i.e. full regulation, light regulation or Part 23); and
- pipelines that are not providing third party access to be required to do so (i.e. through the application of full or light regulation) if the relevant Minister, having regard to the NCC's recommendation, is satisfied the coverage test is met (see Box 3.1).

The regulatory framework also provides for a 15-year exemption from coverage to be obtained by a pipeline prior to commissioning (greenfield exemption) if the relevant Minister, having regard to the NCC's recommendation, finds the pipeline does not satisfy one or more of the coverage criteria. It is important to note that this exemption is from coverage only. A pipeline that has obtained a greenfield exemption will therefore be exempt from full or light regulation, but if it is providing third party access it will be subject to Part 23.

All coverage, revocation of coverage and greenfield exemption decisions made by the relevant Minister can be subject to judicial review.

Further detail on how a pipeline can currently become subject to economic regulation can be found in Figure 3.2 and Box 7.1.

Box 7.1: How a pipeline can become subject to regulation

Under the current regulatory framework, a pipeline can become subject to regulation if one of the following has occurred:

- the pipeline was deemed to be a covered (scheme) pipeline at the commencement of the Gas Code and the coverage status has not subsequently changed;
- the pipeline has been the subject of a decision by the relevant Minister to make it a covered (scheme) pipeline;
- the pipeline is a non-scheme pipeline that is providing third party access;
- the pipeline was built through a competitive tender process (CTP) conducted under the Gas Code or NGR and is subject to a CTP AA; or
- the pipeline has voluntarily submitted a full AA to the relevant regulator for approval and the AA is in place.

7.2 What are the potential problems?

As noted in the introduction, a number of potential problems have been identified with the arrangements outlined in section 7.1, with specific concerns raised about the potential for:

- the current threshold for economic regulation to result in over-regulation (with the increased costs of regulation flowing through to consumers);
- the application of Part 23 to pipelines with a greenfield exemption that are providing third party access to distort the investment incentives for greenfield pipelines;

- the use of the coverage test in third party access decisions to result in under-regulation and inefficient use of and investment in pipelines; and
- the governance arrangements associated with third party access and greenfield exemption decisions to give rise to unnecessary costs and delays.

The potential problems that have been identified are discussed below.

7.2.1 Potential risk of over-regulation

In its 2017-18 Economic regulation review, the AEMC noted that while the introduction of Part 23 appeared to have addressed the concerns that had been raised about monopoly pricing, there was a risk that the new regulatory framework could result in over-regulation, because there is no assessment of whether the pipelines have market power:[132,133]

> *"…the practical effect of introducing Part 23 of the NGR has been to apply near-universal regulation regardless of whether a market failure has been identified on a case-by-case basis. Specifically, the market failure of service providers using market power is assumed. The coverage determination process has in effect been bypassed. The possible impact of this is unnecessary regulation of those pipelines where there is no or only limited or transient market power, with associated direct and indirect costs.*
>
> *…*
>
> *The Commission acknowledges that the COAG Energy Council made a deliberate decision to implement near-universal regulation, including to pipelines subject to the coverage exemptions in response to the findings by the ACCC of widespread use of market power by transmission pipeline service providers, and Dr Vertigan's examination.*
>
> *In practice, the overarching effect of the introduction of Part 23 may be an appropriate increase in regulation to address previous concerns with the regime… without imposing unnecessary regulation given the widespread monopoly power found by the ACCC, nor having detrimental impacts on future investment. It may be practically more appropriate to apply some form of regulation to (nearly) all pipelines given the likelihood of market power, rather than risking the mis-application of the test for determining whether regulation should be applied (at all) and so under-regulating."*

As the last paragraph of this extract highlights, it is unclear how significant an issue the risk of over-regulation is, particularly given the relatively light handed nature of Part 23. That is, while the information disclosure element may impose some costs[134] on service providers, the costs and risks associated with arbitration are likely to be very low because arbitration is unlikely to be triggered if market power is not being exercised.

While the costs are likely to be low, SCO is interested in stakeholders' views on how significant an issue they think the risk of over-regulation is.

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132 AEMC, Final Report: Review into scope of economic regulation applied to covered pipelines, 3 July 2018, pp. 43-45.

133 A similar view was also expressed by the NCC in its submission to the AEMC's Economic regulation review. See, Submission to AEMC draft report – Review into the scope of economic regulation applied to covered pipelines, 10 April 2018, p. 5.

134 Note that for those pipelines that are already subject to Part 23 and have not received an exemption, the initial costs of setting up the systems to enable reporting to occur have already been incurred and the ongoing reporting costs should be relatively low.

7.2.2 Potential impact on greenfield investment incentives

In the 2017-18 Economic Regulation Review, the AEMC also noted the potential for the application of Part 23 to greenfield pipelines that are providing third party access to distort investment incentives for new pipelines and to result in inefficient investment in these pipelines.[135] At this stage, there is only one pipeline that falls into this category (the Wallumbilla to Gladstone Pipeline), but if any other pipelines that have a greenfield exemption are sold then they could also be subject to Part 23.

Like the risk of over-regulation, the effect on investment incentives is likely to be relatively low given the light handed nature of Part 23. Further support for this view can be found in the ACCC's recent review of service provider's internal documents, which found that Part 23 is not having any tangible effect on the incentive to develop new third party access pipelines.[136] SCO is nevertheless interested in hearing from stakeholders on the effect they think the application of Part 23 to greenfield pipelines has had, or could have, on investment incentives.

This issue is of particular interest because, while SCO is aware of the need to maintain appropriate investment incentives, it is also aware that prospective shippers and existing shippers seeking new services on greenfield pipelines can face the same imbalance of bargaining power as shippers on other pipelines (see section 2.1). SCO is also aware that:

- since its implementation in 2006, greenfield exemptions have only been sought by the LNG proponents in eastern Australia with a large number of other new pipelines having been developed without seeking such an exemption;[137] and
- in four out of the five cases where a greenfield exemption has been granted, the Minister's decision was made 1-4 years after the final investment decision was made by the proponents to develop the LNG facilities, which suggests these pipelines would have been developed irrespective of whether an exemption was granted or not.

The use of greenfield exemptions in this manner is not consistent with the original intent of these exemptions, which was, in the words of the Productivity Commission, to "reduce the potential chilling effect of regulation on greenfield investments".[138] SCO is therefore interested in understanding why greater use of the greenfield exemptions has not occurred and if stakeholders think it should be retained in the regulatory framework, or if refinements to this element of the regulatory framework are required.

SCO is also interested in why greater use has not been made of the CTP provisions in the NGR (see section 3.1.3). Like the greenfield exemptions, the CTP provisions are intended to reduce the risk that regulation may otherwise pose to greenfield investments, but rather than being used by service providers this tool is intended to be used by pipeline proponents (e.g. shippers, councils and governments). As noted in section 3.1.3, the CTP provisions recognise that where there is effective competition *for* the market (as assessed

135 AEMC, Final Report: Review into scope of economic regulation applied to covered pipelines, 3 July 2018, p. 44.

136 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 159-160.

137 Some of the pipelines that have been developed in this period include the QSN Link component of the South West Queensland Pipeline, the Northern Gas Pipeline, the Darling Downs Pipeline, the Berwyndale to Wallumbilla Pipeline, the Wallumbilla to Reedy Creek Pipeline, the SESA Pipeline, the Fortescue River Gas Pipeline and the Ashburton Onslow Gas Pipeline.

138 Productivity Commission, Review of the Gas Access Regime, June 2004, p. XXII.

by the relevant regulator), there is less of a role for regulation, with the outcome of the competitive tender forming the basis for the pipeline's AA for up to 15 years.

While this mechanism has many positive attributes, it has only been used on three occasions to date. It was first used by local councils in the Loddon Murray Region in 2001, but the tender process did not attract any bids. It was then used by local councils in the Central Ranges region of New South Wales in 2003 to solicit bids for the development of a new transmission pipeline and a new distribution pipeline in this area.

Like the greenfield exemptions, SCO is interested in whether stakeholders think the CTP provisions should be retained in the regulatory framework, or if refinements to this element of the regulatory framework are required. SCO is also interested in whether there are better options than the greenfield exemption and CTP provisions to safeguard investments in new pipelines and provide potential developers greater certainty as to how new pipelines will be treated from a regulatory perspective, whilst also protecting potential users of these pipelines from exercises of market power.

7.2.3 Potential for under-regulation of pipelines not providing third party access

A further issue that has been identified through NERA's International review is that the distinction currently drawn between pipelines that are providing third party access and those that are not, is somewhat unique by international standards. This is because service providers in other jurisdictions have either been required to be vertically separated from upstream or downstream interests, or are required to provide services to third parties on a non-discriminatory basis (see Box 7.2).

Box 7.2: Third party access in the United States and Canada

In the United States (US), operators of new and existing interstate pipelines are required to operate on an open access basis (i.e. to provide third-party access) and to provide services on a non-discriminatory basis,[139] which is defined as the provision of services:[140]

> *"…without undue discrimination, or preference, including undue discrimination or preference in the quality of service provided, the duration of service, the categories, prices, or volumes of natural gas to be transported, customer classification, or undue discrimination or preference of any kind."*

In a similar manner to the US, international and inter-provincial pipelines in Canada are required to operate on an open access basis and are prohibited from engaging in any "unjust discrimination in tolls, services or facilities against any person or locality".[141] The National Energy Board, which is responsible for regulating these pipelines, has interpreted this requirement as follows:[142]

> *"…all parties must have access to transportation on a non-discriminatory basis, as long as they meet the requirements of the tariff.*
>
> *In addition, tolls for services provided under similar circumstances and conditions with respect to all traffic of the same description, carried over the same route, must be the same for all customers."*

Where a service provider's prices is found to differ by person or locality, the burden of proving that the discrimination is not unjust lies with the service provider.

139 This requirement is set out in FERC Order 636, 8 April 1992.

140 See US Code of Federal Regulations, regulation 284.7(b)

141 See National Energy Board Act 1985 (Canada), section 97.

142 National Energy Board, Canada's Pipeline Transportation System, 2016, p. 21

In contrast to the US and Canada, a pipeline in Australia that is not providing third party access can currently only be required to do so if it is found to satisfy the coverage test. As noted in the introduction to this chapter, concerns have previously been raised by the ACCC, AEMC and GMRG about the coverage test and while it may appear more appropriate to use in this context (i.e. because it is a denial of access test), there is a concern that its application may not yield outcomes that are consistent with the NGO (see Box 7.3). There is therefore a risk that the continued use of the coverage test may result in under-regulation and inefficient use of and investment in pipelines.

Box 7.3: Example of the coverage test resulting in inconsistent outcomes with NGO

The following example, assumes that a producer in the Galilee Basin develops a pipeline to connect its gas fields to Wallumbilla. If, in this example, the producer decided not to provide third party access and smaller producers in the region wanted to obtain access then they would have to be able to demonstrate that all of the coverage criteria are met.

They would, for example, have to demonstrate that their access to the pipeline would promote a *material increase* in competition in at least one other market, which is likely to be quite difficult to do given there are already a number of producers competing in this market. Third party access to the pipeline in this example is therefore unlikely to occur, even though the use of this pipeline by the smaller producers' may be the most efficient outcome and be in the long-term interest of gas consumers, because it would result in more gas being brought to market and result in more efficient investment in and use of existing infrastructure.

While such outcomes are consistent with the NGO, they are irrelevant considerations under the coverage test, which uses competition in related markets as proxy for the efficiency gains associated with access to infrastructure in related markets. As the ACCC[143] and the Productivity Commission[144] have previously observed, the problem with using competition as a proxy for efficiency is that competition and efficiency are not synonymous. That is, while competition may promote efficiency, significant efficiency improvements that are in the long-term interests of gas consumers can still be achieved through access without any change in competition in a related market. There appears therefore to be a disconnect between the coverage test and the NGO, which may result in coverage, revocation of coverage and greenfield decisions that do not promote the NGO.

It is unclear at this stage how significant this issue is, because all of the major pipelines in Australia that are used to supply demand centres are providing third party access. Having said that, there are, around 55 pipelines across Australia that are not currently providing third party access (see Table 3.2). While most of these pipelines are dedicated pipelines servicing the service provider's upstream or downstream facilities, it is possible that in the future, other parties may build nearby upstream and/or downstream facilities and seek access to these pipelines. The retention of the coverage test in the regulatory framework could therefore have a more significant effect on efficiency in the future.

SCO is interested in hearing stakeholders' views on this issue and, in particular, whether access to pipelines that are not providing third party access is a significant issue.

143 ACCC, Inquiry into the east coast gas market, April 2016, p. 130.

144 Productivity Commission, Final Report—National Access Regime, 25 October 2013, p. 173 and Productivity Commission, Draft Report—National Access Regime, May 2013, p. 178.

7.2.4 Governance arrangements

The final concern that has been raised with this aspect of the regulatory framework is that governance arrangements associated with the test for regulation may be giving rise to unnecessary costs and delays.

As noted in section 7.1, the regulatory framework currently provides for the relevant Minister to make coverage, revocation of coverage and greenfield exemption decisions. When making its decision, the Minister is required to have regard to the NCC's recommendation, but is not bound by that recommendation. The involvement of both the NCC and the relevant Minister in this decision making process has, in effect, meant that two separate assessments are conducted using the same criteria when an application is made for the coverage status of a pipeline to change, or for a greenfield exemption to be granted. The duplication of effort involved in this process can give rise to unnecessary costs and delays in decision making.

Another limitation with the current arrangements is that there is no information gathering power (or any other investigatory powers) associated with coverage, revocation of coverage and greenfield exemption decisions. NCC recommendations and Minister decisions are therefore critically dependent on the information provided by service providers and other interested parties.

It is unclear at this stage how significant an issue this is because the scope of prior reviews of the regulatory arrangements have not included this issue. SCO is therefore interested in obtaining stakeholders' views on this potential problem with the current arrangements and how significant an issue they think it is.

7.3 How could the problems be addressed?

SCO has identified a number of potential solutions to the problems identified in section 7.2, which are outlined in further detail below.

7.3.1 Options to reduce the risk of over-regulation

If the risk of over-regulation is found to be significant, then it could be addressed by amending the regulatory framework to either:

Option 1. Limit the application of economic regulation to those cases where it is established that a pipeline has substantial market power; [145] or

Option 2. Provide for an exemption from regulation in those cases where it can be established that the pipeline does not have substantial market power.

Under the first of these options, consideration would need to be given on a case-by-case basis to whether a pipeline has substantial market power before it could became subject to economic regulation. Such an assessment would be carried out having regard to a test that would be set out in the NGL or NGR (see section 7.3.4 for more detail on the form this could take) and would involve public consultation.

[145] The term 'substantial market power' is often used by economists to refer to the ability of a firm to maintain prices above (or restrict output below) a competitive level for a sustained period of time. Substantial market power may also enable a firm to raise barriers to entry, profitably reduce the quality of goods or services or slow innovation.

See ACCC, Guidelines on misuse of market power, August 2018, p. 6.

Under the second option pipelines providing third party access would automatically be subject to some form of economic regulation, but service providers would be able to obtain an exemption from regulation (or part of the regulatory framework)[146] if they are able to demonstrate they do not have substantial market power. The exemption from regulation could either be:

- provided for a defined period of time (e.g. five years), at which point the onus would again fall on the service provider to demonstrate that it did not have substantial market power if it wanted the term of the exemption extended; or
- subject to revocation if an application[147] was made by another interested party (including a regulator), at which point the onus would again fall on the service provider to demonstrate that it does not have substantial market power.

Like Option 1, this assessment would be carried out having regard to a test that would be set out in the NGL or NGR and would involve public consultation.

Of the two options listed above, the exemption mechanism described in Option 2, which mirrors the approach used in the United States and is similar to the exemption regime that has been adopted in New Zealand (see Box 7.4), would:

- be less costly to implement, because the market power assessment would only be carried out when an exemption is applied for, rather than being carried out for each pipeline; and
- address the information asymmetries that can otherwise afflict these types of assessments, by placing the onus on the service provider to demonstrate that they don't have substantial market power.

While Option 2 appears to offer a number of benefits over Option 1, SCO is interested in hearing stakeholders' views on the two options.

Box 7.4: Exemptions from regulation in the US and New Zealand

United States

In the US, operators of new and existing interstate pipelines are presumed to have substantial market power and regulation can only be removed if the service provider can demonstrate it lacks the requisite degree of market power.[148] That is, the service provider must show it lacks the power to profitably maintain prices above competitive levels for a significant period of time.

When assessing such an application, FERC will consider:

- the market in which the pipeline services are provided;
- the pipeline's market share, the degree of market concentration and the potential for the service provider to act together with other pipelines to raise prices;[149] and
- whether there are any constraints on the service provider's market power, including the availability of good alternatives,[150] the potential for entry, the countervailing power of shippers and any other constraints on the ability or incentive to exercise market power.

146 For example, service providers might still be required to be subject to the information disclosure obligations.

147 To prevent this process from being misused, the exemption framework could allow the decision making body to refuse to consider the application if it is vexatious, misconceived or lacking in substance.

148 FERC, Alternatives to Traditional Cost-of-Service Ratemeking for Natural Gas Pipelines and Regulation of Negotiated Transportation Services of Natural Gas Pipelines, 74 FERC, 1996

149 FERC uses the Herfindahl-Hirschman Index to measure market concentration and applies a threshold of 1800, below which it applies less scrutiny - this threshold implies four to five good alternatives to the applicant's service.

150 This term is defined by FERC as having a price low enough, quality high enough and being available soon enough to permit substitution.

New Zealand
In New Zealand, the *Commerce Act 1986* provides for non-exempt transmission and distribution pipelines to be regulated and sets out a list of the exempt pipelines in Schedule 6. Provision has also been made in the Commerce Act for the relevant Minister to amend the list of exempt pipelines if it is satisfied the Commerce Commission has made a recommendation to that effect and in the case of a recommendation to:

- add a pipeline to the list of exempt pipelines, the gas pipeline services are supplied in a market where the pipeline owner does not have a substantial degree of market power; and
- delete a pipeline from the list of exempt pipelines, the gas pipeline services are supplied in a market where the pipeline owner has a substantial degree of market power.

7.3.2 Options to reduce the risk to greenfield investment incentives

If the impact on greenfield investment incentives arising from the application of Part 23 to greenfield pipelines providing third party access is found to be material, then it could potentially be addressed by expanding the scope of the 15-year exemption to include an exemption from:

(a) all elements of Part 23 (this is equivalent to the exemption that pipelines not providing third party access can obtain), or

(b) the arbitration element of Part 23 but not the other elements (i.e. not the information disclosure, access request or negotiation provisions).

The main benefit of option (b) is that it would protect service providers from that element of Part 23 that exposes them to greatest risk (i.e. the arbitration mechanism), while also:

- reducing the degree of information asymmetry that shippers may otherwise face in negotiations with these service providers; and
- requiring these service providers to respond to access requests, negotiate in good faith and to comply with other provisions that are designed to facilitate timely and effective negotiations.

While option (b) appears to offers some benefits over option (a), SCO is interested in stakeholders' views on these two options.

7.3.3 Options to improve access to pipelines not providing 3rd party access

If the use of the coverage test in third party access decisions is found to result in under-regulation and decisions that are inconsistent with the NGO, then this limitation could be addressed by either:

- Option A: Replacing the coverage test with another test that is more consistent with the NGO (see section 7.3.4); or
- Option B: Employing the same approach as that used in the US and Canada, which would involve mandating that all pipelines provide third party access and operate on a non-discriminatory basis (see Box 7.2). This option could be implemented in one of two ways. It could be applied to new pipelines only, or it could be applied to all existing and new pipelines. While the first of these options may be administratively simpler, it could limit the benefits associated with mandating third party access.

While the adoption of Option B would promote the efficient use of existing pipelines and reduce the costs, time and uncertainties associated with obtaining access to pipelines that may not otherwise offer third party access, it may:

- have a negative effect on investment in both new and existing pipelines (for example, a vertically integrated service provider subject to a third party access obligation may decide to build a smaller pipeline (or not to expand capacity) to ensure it does not have capacity available to sell to another user);[151] and
- impose other costs and risks on the service provider,[152] although there may be ways to mitigate some of these through the form of regulation that would apply to pipelines that would not otherwise offer third party access (see Chapter 8).

These adverse effects would therefore need to be carefully considered before a decision was made to move to this model.

7.3.4 Options to improve the test for regulation

The need for and the scope of the test for regulation will depend on whether or not the current approach to determining which pipelines should be subject to regulation (or exempt from regulation) as described in section 7.3.1 is maintained. Specifically, if a decision is made to mandate that all pipelines provide third party access on non-discriminatory terms, then no test will be required. If, on the other hand, a decision is made to:

1. Maintain the current approach, then all pipelines providing third party access would be subject to some form of economic regulation and the test for regulation would just be required to determine whether:
   a. a pipeline that is not providing third party access should be required to do so, and
   b. a pipeline that is yet to be commissioned should be granted a greenfield exemption.
2. Address the risk of over-regulation of pipelines providing third party access (i.e. by either requiring a positive finding of substantial market power, or by providing for a market power based exemption), then the test for regulation would be required to determine whether:
   a. a pipeline that is not providing third party access should be required to do so;
   b. a pipeline that is yet to be commissioned should be granted a greenfield exemption; and
   c. a pipeline providing third party access has (or lacks) substantial market power.

Ideally under both of these alternatives there would be a single test that could be used for all of the purposes, the objective of which would be to ensure that regulation occurs where it is efficient to do so (noting there are costs and risks associated with regulation and providing third party access) and where it would promote the NGO.

Options for the test if the current approach to regulating pipelines is maintained

If pipelines providing third party access continue to automatically be subject to regulation, then the role of the test will be to determine whether a greenfield exemption should be granted and if a pipeline not providing third party access should be required to do so. The test could be based on:

[151] Note that similar behaviour may also be exhibited by service providers that are providing third party access because of their risk averse nature.

[152] For example, if a service provider was not providing third party access but was required to do so then it may need to install equipment and processes to manage multiple users on the pipeline.

1. The existing coverage test (see Box 3.1), which differs from the third party access test in Part IIIA of the *Competition and Consumer Act 2010* (CCA).
2. The third party access test in Part IIIA of the CCA (see Box 7.5).
3. An NGO-style test, which would require consideration to be given to whether regulation of the pipeline in question is likely to promote efficient investment in, and efficient operation and use of, natural gas services for the long term interests of gas consumers with respect to price, quality, safety, reliability and security of supply.
4. A combined NGO and market power test, which could be based on the test proposed by the ACCC in its 2015-16 Inquiry, which would require the relevant decision making body to be satisfied that:[153]
   - the pipeline in question has substantial market power; and
   - regulation will or is likely to contribute to the achievement of the NGO.

   Box 7.6 outlines how the ACCC envisaged this test would be applied.

Box 7.5: Part IIIA third party access test

The test for third party access under Part IIIA of the CCA was amended in 2018. Under the amended test, a service can only be declared if the relevant Minister is satisfied that all of the following criteria are met:

(a) that access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote a material increase in competition in at least one market (whether or not in Australia), other than the market for the service;

(b) that the facility that is used (or will be used) to provide the service could meet the total foreseeable demand in the market:

(i) over the period for which the service would be declared; and

(ii) at the least cost compared to any 2 or more facilities (which could include the first-mentioned facility);

(c) that the facility is of national significance, having regard to:

(i) the size of the facility; or

(ii) the importance of the facility to constitutional trade or commerce; or

(iii) the importance of the facility to the national economy; and

(d) that access (or increased access) to the service, on reasonable terms and conditions, as a result of a declaration of the service would promote the public interest.

Box 7.6: ACCC proposed market power-NGO test

The test proposed by the ACCC in its 2015-16 Inquiry would require the relevant decision making body to be satisfied that:

- the pipeline has substantial market; and
- regulation will or is likely to contribute to the achievement of the NGO.

The ACCC noted that, in broad terms, the application of this test would require consideration to be given to:

- The degree of market power held by the pipeline (as a result of barriers to entry and, where relevant, any other interests the service provider has in the market and other markets that give rise to additional market power) and the extent to which it is likely to be effectively constrained by:
  - competition from an alternative pipeline;
  - competition from alternative energy sources;
  - any countervailing power held by shippers; and

[153] ACCC, Inquiry into the east coast gas market, April 2016, p. 138.

- any other relevant factors (for example, if contracts limit the service provider's ability to exercise market power in the short- to medium-term or the risk of asset stranding).

- Whether constraining the pipeline's market power will, or is likely to, promote efficient investment in, operation and/or the use of, natural gas services for the long-term interests of consumers with respect to price, quality, safety, reliability and security of supply. The ACCC noted that this aspect of the test was not intended to involve a detailed technical assessment of the efficiency benefits associated with regulation. Rather, it is intended to involve a *qualitative* assessment, which is how these types of assessments are usually undertaken in other regulatory contexts.

Source: ACCC, Inquiry into the east coast gas market, April 2016, p. 138.

As noted in section 7.2.2, the problem with Option 1 is that the coverage test is not directed at the right market failure and may not result in third party access being provided when it would be efficient to do so (see Box 7.3). The same problem afflicts Option 2. The other problem with Option 2 is that the hurdle for regulation under the new third party access test in the CCA is much higher than it is under the current coverage test. This point was acknowledged by the Competition Policy Review Panel, which recommended the changes to this test. In doing so, the Panel noted there were already a range of industry specific access regimes in place (including that provided for in the NGL and NGR), so the scope of Part IIIA should be "confined to ensure its use is limited to the exceptional cases".[154] This test does not therefore appear fit for purpose.

Of the remaining two options, the combined market power-NGO test described in Option 4 would provide the decision-maker with more guidance on the matters to be considered than would be provided under the more general NGO test in Option 3. There may, however, be other limitations with this test that have not been considered. SCO is therefore interested in stakeholders' views on these options.

Stakeholder feedback is also sought on whether the onus of demonstrating that the relevant test is met should remain with the decision-maker, or if it should be reversed to require a service provider to demonstrate that the test for regulation is **not** met, which is the approach that has been employed in the US.[155] The main benefit of reversing the onus is that it would overcome some of the information asymmetries a decision-maker, shippers and other stakeholders can face when assessing whether or not the relevant test is met.

Options for the test if the risk of over-regulation is to be addressed

If a decision is made to address the risk of over-regulation by either requiring a positive finding of substantial market power, or by providing for a market power based exemption, the options for the test for regulation would narrow. This is because the test would have to provide for an assessment of market power.

Of the options listed above, the only one that provides for this type of assessment is the combined market power-NGO test.

7.3.5 Options to improve the governance arrangements

As noted in section 7.2.4, the current governance arrangements applying to coverage, revocation of coverage and greenfield exemption decisions may be giving rise to

[154] Harper et al, Final report: Competition Policy Review, March 2015, pp. 72-73.

[155] A similar approach was also used by the Australian government in relation to bulk wheat port terminal facilities, with all port terminal service providers deemed to be subject to full regulation when the new regime came into effect and provision made for a lighter handed option if the ACCC or Minister, having regard to certain matters, decides an exemption should be granted.

unnecessary costs and delays. Consideration is therefore being given to whether other governance arrangements may be more appropriate.[156] In particular, consideration is being given to whether a single organisation that has sufficient experience in the gas market and economic regulation, more generally, should be accorded responsibility for making decisions on when a pipeline should be regulated and when a greenfield exemption should be granted.

The organisations that could potentially be accorded responsibility for these decisions, include:

- the NCC;
- the ACCC; or
- the relevant regulator (i.e. the AER or the ERA).

One potential issue with the first of these options is that the NCC, which has a more limited set of functions than it did in the past, may not have the scale of activities that enables it to acquire and retain the expertise and experience it would require to carry out this function.

While the ACCC and the AER/ERA are unlikely to face the same problem as the NCC, these options are not without issue. For example, while the ACCC currently has considerable experience in the gas market, it is possible that once the gas inquiry ceases in 2025 that it may no longer have the expertise required to carry out this function. The AER and ERA, on the other hand, do not currently have the competition related expertise that would be required to apply a market power style test. The AER and ERA could also be perceived to have a conflict of interest in determining whether a pipeline should be regulated or not, although it is worth noting that when the Competition Policy Review Panel considered a similar governance issue in 2015 it noted that it did not: [157]

> *"…foresee any conflict in a single regulator performing both functions [i.e. the regulatory function and the NCC's declaration functions] and anticipates that there may be benefits."* [insertions made]

SCO is interested in hearing stakeholders' views on the options listed above and any other options that should be considered. SCO is also interested in whether the governance arrangements applying to other aspects of the regulatory framework (for example, form of regulation decisions) should also change.[158]

7.3.6 Summary of potential options

Table 7.1 provides a summary of the options that could be implemented to address the problems identified in section 7.2. Note that this table does not contain an exhaustive list of solutions and stakeholders wishing to propose other solutions are encouraged to do so in their responses to the questions.

Further detail on how these potential solutions could form part of a broader regulatory package is provided in Chapter 11.

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156 Note that the case for someone other than a Minister making the decision will be stronger if the coverage test is replaced with either an NGO-style test or a combined market power-NGO test because these tests do not include a public interest test.

157 Harper et al, Final report: Competition Policy Review, March 2015, pp. 80-81.

158 Note that the NCC is currently responsible for making form of regulation decisions. It is also responsible for assessing applications to change the classification of a transmission pipeline to a distribution pipeline and vice versa.

Table 7.1: Reform Focus 1 - Summary of potential options

Problem	Potential solutions
Risk of over-regulation	1. Maintain the existing threshold for economic regulation (i.e. all pipelines providing 3rd party access are subject to some form of regulation) (status quo). 2. Raise the threshold for economic regulation, so that it only captures those pipelines that have substantial market power, which could be given effect through either: (a) A requirement for the relevant decision maker to make a positive finding that the pipeline has substantial market power, before it can be subject to regulation. (b) An exemption mechanism that would allow a service provider to obtain an exemption from regulation (or a part of the regulatory framework) if it can demonstrate the pipeline in question does not have a substantial degree of market power. This exemption could apply for a defined period of time or until an application is made by an interested party (including a regulator) to have the exemption revoked, at which point the service provider would again have the obligation to demonstrate the pipeline does not have a substantial degree of market power. In both of these cases, the relevant decision maker would carry out the assessment having regard to the combined market power-NGO test described in Box 7.6. In this case the test would be satisfied if the service provider can demonstrate that: (i) the pipeline in question does not have substantial market; and (ii) regulation of the pipeline will not or is unlikely to contribute to the achievement of the NGO.
Risk to greenfield investments	1. Maintain the existing approach to greenfield pipeline exemptions (i.e. if a greenfield pipeline is providing third party access it is subject to Part 23) (status quo). 2. Expand the scope of the 15-year exemption from coverage to include an exemption from: (a) all elements of Part 23; or (b) the arbitration element of Part 23 but not the information disclosure requirements.
Access to pipelines that are not providing 3rd party access	1. Maintain the existing approach to the treatment of pipelines that are not providing third party access (i.e. only require those pipelines that are not providing third party access to do so if they satisfy the coverage test) (status quo). 2. Continue to use a test to determine whether third party access should be provided, but replace the coverage test with another test. 3. Mandate that **all** pipelines provide third party access on a non-discriminatory basis.
Test for third party access and greenfield exemptions	1. Retain the existing coverage test (status quo). 2. Adopt the third party access test in Part IIIA of the CCA. 3. Adopt an NGO style test that would be satisfied if it can be demonstrated that regulation of the pipeline would promote efficient investment in, and efficient operation and use of, natural gas services for the long-term interests of gas users. 4. Adopt a combined NGO and market power test (see Box 7.6) that would be satisfied if it can be demonstrated that: (a) the pipeline in question has substantial market power; and (b) regulation will or is likely to contribute to the achievement of the NGO.
Governance arrangements	1. Retain the existing governance arrangements (i.e. relevant Minister to make decisions based on advice from the NCC) (status quo). 2. Change the governance arrangements to require a single organisation to make decisions. The organisation could be: (a) the NCC; (b) the ACCC; or (c) the relevant regulator (AER or ERA).

7.4 Questions for stakeholders

Box 7.7 sets out the questions SCO is interested in obtaining stakeholder feedback on.

Box 7.7: Questions on when a pipeline should be subject to regulation and how decisions should be made

7 Do you think that the current threshold for regulation (i.e. all pipelines providing third party access are subject to regulation) is giving rise to over-regulation (see sections 7.2.1 and 7.3.1), or do you think the current threshold should be maintained?

(A) If you think it is giving rise to over-regulation:

(a) How significant do you think this issue is and what are the consequences likely to be?

(b) Do you think the risk of over-regulation should be addressed by:

(i) including an exemption mechanism in the regulatory framework to enable pipelines that do not have substantial market power to obtain an exemption from regulation?

(ii) limiting the application of regulation to those cases where it is established that the pipeline has substantial market power?

(iii) another means?

(B) If you think that (i) or (ii) should be implemented, do you think the test for establishing whether a pipeline has substantial market power should be based on the combined market power-NGO test proposed by the ACCC (see Box 7.6)?

(a) If so, do you think the onus of demonstrating this test is met (or not met) should sit with the decision-maker or the service provider?

(b) If not, please explain why and what test you think should be employed.

Please explain your responses to these questions.

8 Do you think the application of Part 23 to pipelines providing third party access that have obtained a greenfield exemption is distorting investment incentives for greenfield pipelines (see sections 7.2.2 and 7.3.2), or do you think the current approach should be maintained?

If you think it is distorting investment incentives:

(a) How significant do you think this issue is and what are the consequences likely to be?

(b) Do you think this issue should be addressed by:

(i) providing these pipelines with a full exemption from regulation?

(ii) providing these pipelines with an exemption from the Part 23 arbitration mechanism, but not from the disclosure and negotiation elements of Part 23?

(iii) another means?

Please explain your responses to these questions.

9 Why do you think:

(a) the greenfield exemptions in the NGL have not been used by a greater number of service providers?

(b) the CTP provisions in the NGR have not been used by a greater number of shippers or governments?

10 Do you think the greenfield exemptions and CTP provisions should be retained in the regulatory framework, or do you think:

(a) changes to the greenfield exemptions and/or CTP provisions are required?

(b) the greenfield exemptions and/or CTP provisions should be replaced with another mechanism that would provide potential developers with greater certainty as to how new pipelines will be treated from a regulatory perspective, while also protecting potential users of these pipelines from exercises of market power?

Please explain your responses to this question.

11 Do you think the current approach to seeking access to pipelines that are not providing third party access should be maintained (i.e. a decision must be made by the relevant Minister having regard to the NCC's recommendations and the coverage test), or do you think it should be mandatory for all pipelines to offer third party access on a non-discriminatory basis, as it is in the US and Canada (see sections 7.2.3 and 7.3.3)?

Please explain your response to this question and set out what you think the costs, benefits and risks are likely to be of mandating third party access.

12 If the current threshold for economic regulation is maintained and a test for regulation is only required for third party access and greenfield exemption decisions, which of the following tests do you think should be employed (see section 7.3.4) and why:

(a) the coverage test;

(b) an equivalent test to the recently amended Part IIIA test;

(c) an NGO-style test; or

(d) a combined market power-NGO test.

Please explain your response to this question and set out whether you think the onus of demonstrating the test is met (or not met) should sit with the decision-maker or service provider.

13 Do you think the governance arrangements associated with third party access and greenfield exemption decisions are giving rise to unnecessary costs and delays, or do you think the current arrangements should be maintained (see sections 7.2.4 and 7.3.5)?

If you think the current arrangements could give rise to unnecessary costs and delays:

(a) How significant do you think this issue is and what are the consequences likely to be?

(b) Do you think this issue should be addressed by according a single organisation responsibility for making this decision? If so:

(i) What expertise do you think this organisation should have?

(ii) Which of the following organisations do you think should be responsible for making this decision:

- the ACCC?
- the relevant regulator (i.e. the AER or the ERA in Western Australia)?
- the NCC?
- another organisation?

Please explain your response to these questions.

14 If a change is made to the governance arrangements, do you think the same organisation should also be responsible for making form of regulation decisions (see Chapter 8)?

15 Are there any other problems with this aspect of the regulatory framework that have not been identified in this chapter? If so, please outline what they are and how you think they should be addressed.

8. Reform focus 2: Forms of regulation and movements between the alternative forms of regulation

The preceding chapter considered the question of *when* a pipeline should be subject to economic regulation. This chapter considers the related question of *how* a pipeline should be regulated, if a decision has been made that it should be subject to regulation. In particular, it considers how many forms of regulation should be available, the circumstances in which they should apply and the test that should be used to determine what form of regulation should apply. It also considers whether the forms of regulation should continue to focus on constraining the exercise of static market power, or should also seek to constrain the exercise of dynamic market power (see Chapter 2).

There are a number of different forms that economic regulation can take, ranging from price monitoring through to full price control and variations in between, such as information disclosure and negotiate-arbitrate (see Table 8.1 for more detail).

Table 8.1: Alternative forms of regulation

Intrusiveness	Regulatory response	Description
Less intrusive ↓ More intrusive	No regulation	Government intervention is limited to establishing institutional arrangements for competitive markets and setting competition law, the latter of which works on an ex post basis to, with competitive markets, facilitate socially optimal outcomes.
	Price monitoring	Regulatory requirements for the disclosure of information around prices and potentially quality over time. More focused on assessing trends and relative performance (where multiple firms are subject to price monitoring).
	Information disclosure	Regulatory requirements for the public disclosure of key information. This provides incentives for firms to improve performance, and allows the regulator and/or customers to hold firms to account.
	Negotiate-arbitrate	Individual customers negotiate with service providers to determine the price and non-price terms and conditions of access (often supported by information disclosure). If negotiations fail an independent arbitrator (commercial arbitrator or regulator) can be called on to resolve the dispute.
	Negotiated settlements	Customers jointly negotiate with service providers to determine the prices and non-price terms and conditions of access, which may be facilitated by the involvement of the regulator. Once an agreement (negotiated settlement) is reached, it is approved by the regulator.
	Negotiate-arbitrate with reference tariffs determined by regulator	The regulator determines reference tariffs for key services on an ex ante basis, which can then be used as the basis for negotiations by individual shippers. If negotiations fail the regulator can be called on to resolve the dispute.
	Price control	The regulator directly sets the prices and non-price terms and conditions of access on an ex ante basis (and potentially other metrics, such as quality thresholds).

Different regulatory approaches recognise that there are costs of imposing regulation and in some circumstances the service provider may face some degree of competition (e.g. from other pipelines or from other energy sources) or the customer base may have a

degree of "countervailing power".[159] That is, there is recognition that the appropriate regulatory response is proportionate to the problem. A similar point was made by the Expert Panel on Access Pricing, which noted in its 2006 report to the Ministerial Council on Energy:[160]

> *"…the form of regulation that is likely to be most cost-efficient for different classes of regulated service should be decided on the basis of the degree of market power involved in the supply of the relevant services. The general principle to be applied is that more intrusive and potentially costly forms of regulation (principally direct price or revenue controls) will only be warranted where substantial market power is involved. Where the market conditions involve the reality of, or potential for, a measure of contestability or the prospect of meaningful commercial negotiation, less intrusive and costly forms of regulation are likely to be warranted."*

The rationale for including multiple forms of regulation in a regulatory framework is that it provides for a more targeted approach to regulation, having regard to the specific circumstances of the pipeline and the constraints on the service provider's ability and/or incentive to exercise market power. However, too many forms of regulation increases the complexity of the regime and assumes that a granular assessment can be made of the costs and benefits of applying different forms of regulation to individual pipelines or services – a task that is made particularly difficult if the forms of regulation are not sufficiently different. Having multiple forms of regulation applying within an industry is also not common internationally (see Table 3.3), likely because the degree of market power held by firms in a given sector with natural monopoly characteristics doesn't vary much, thus negating the benefits of multiple forms of regulation.

Having a single form of regulation, on the other hand, may, depending on the form it takes, result in over- or under-regulation. The choice of the number and forms of regulation therefore requires balancing a desire to have more targeted forms of regulation, with the costs, complexities and risks associated with having multiple forms of regulation.

The remainder of this chapter provides further detail on the forms of regulation that are currently available, the potential problems that have been identified with this aspect of the regulatory framework and how the problems could be addressed. It also sets out a number of questions that SCO is interested in obtaining stakeholder feedback on.

8.1 What is the current situation?

The forms of regulation currently available

Section 3.1 provides an overview of the different forms of regulation that are available under the current regulatory framework and the tests used to determine which form of regulation should apply. As described in that section, the three forms of regulation that currently apply to pipelines providing third party access are "full regulation", "light regulation" and "Part 23". Each of these forms of regulation is nominally a form of the "negotiate-arbitrate" model, although as discussed below the extent to which effective negotiation occurs can differ depending on who the shippers are.

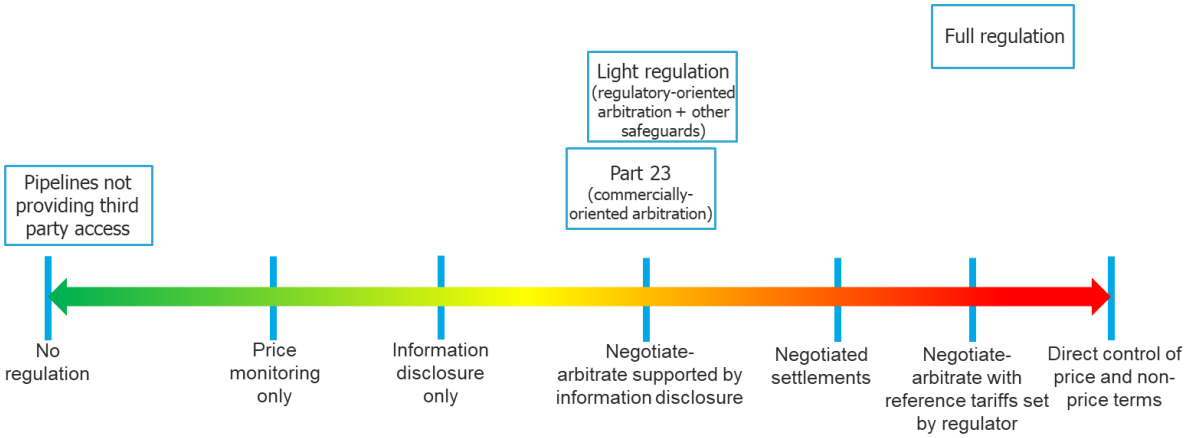
[159] Countervailing power arises when buyers have characteristics (e.g., size or commercial significance) that enable them to credibly threaten to bypass the pipeline (e.g. by building their own pipeline or sponsoring new entry).

[160] Expert Panel on Energy Access Pricing, Report to the Ministerial Council on Energy, April 2006.

A simplified mapping of the different forms of regulation against the different types of regulation and their intrusiveness identified in Table 8.1 above is shown in Figure 8.1 below. While purely illustrative, this figure shows that there is a clustering in the forms of regulation. In particular, Part 23 and light regulation are very similar as explained in detail in Figure 3.3. The key differences are that:

- Part 23 has a commercially-oriented arbitration mechanism, while light regulation utilises a regulatory-oriented mechanism.
- Light regulation includes a number of additional safeguards that do not apply under Part 23, many of which are designed to address the denial of access and discriminatory behaviour that may arise if a service provider is vertically integrated. These safeguards include:
  - the prohibition on service providers bundling services, preventing or hindering access and/or engaging in inefficient price discrimination; and
  - the ring fencing and associate contract provisions, that are designed to ensure the separation of pipeline operations from associated businesses in other markets.

Figure 8.1: Mapping of the different forms of regulation



Source: Based on AEMC diagram.

Focus of the forms of regulation

As described in Chapter 2, there are two broad market power problems that regulation can target:

- static market power, which arises when a service provider exerts its market power over the existing capacity of the pipeline by, for example, engaging in monopoly pricing, restricting or denying access, or favouring an affiliate in an upstream or downstream market; and
- dynamic market power, which arises when a service provider uses its market power to block competition from other pipelines by, for example, restricting or denying interconnections,[161] or pricing new capacity below the incremental cost.[162]

[161] Where a new pipeline would require interconnection with an existing pipeline, if the existing pipeline refuses interconnection, or offers unreasonable terms to do so, this may hinder an alternative provider from competing to provide the new pipeline.

[162] If existing pipelines can cross subsidise new pipeline capacity by increasing prices to existing users, then alternative providers who are not similarly positioned may be unable to compete with the incumbent.

The existing forms of regulation are primarily directed toward static market power and while dynamic market power is dealt with to some extent, there are inconsistencies in approaches across the forms of regulation.

The process for moving between the forms of regulation

As outlined in section 3.1.1 and Figure 3.2, there is currently a two-tiered test for determining what form of regulation to apply to a pipeline:

- The coverage test is used to determine whether a pipeline is a scheme pipeline and therefore subject to either full or light regulation (if all the coverage criteria are satisfied), or a non-scheme pipeline (if one or more of the criteria are not satisfied).
- If the coverage test is:
    - satisfied, the form of regulation test in s. 122 of the NGL is used to determine whether full or light regulation should be applied (see section 3.1.1); or
    - not satisfied, the pipeline will be subject to Part 23 if it is providing third party access.

The coverage test, which was originally intended to be a threshold test for whether a pipeline should be subject to economic regulation, has therefore, following the introduction of Part 23, become a gateway between Part 23 and full/light regulation and vice versa.

For scheme pipelines, the form of regulation determination is presently made by the NCC using the process described in section 3.1.1. The application of this test requires the NCC to consider:

- the likely effectiveness of full and light regulation in promoting access to the services provided by the pipeline, and
- the effect of full and light regulation on the costs that may be incurred by an efficient service provider, efficient users and prospective users, and end-users.

In applying this test, the NCC must have regard to the form of regulation factors, the NGO and any other matters it considers relevant. The form of regulation factors, which are set out in Box 3.2, require an assessment of the degree of market power held by the pipeline and the extent to which there are any constraints on that power (e.g. from competition from other pipelines or energy sources, or the countervailing power of shippers).

8.2 What are the potential problems?

The problems that have been identified with this aspect of the regulatory framework are that:

(a) the use of the coverage test as a gateway from Part 23 to full regulation could result in under-regulation[163] and, in so doing, render shippers more susceptible to exercises of market power;[164]

[163] The term under-regulation is used to refer to a situation where the level of regulation applied does not limit a service provider's ability to exercise market power.

[164] A similar concern was also raised in the AEMC's 2017-18 Economic regulation review, with the AEMC noting the potential for the current order and construction of tests used to determine the form of regulation to apply to a pipeline to result in under-regulation.

See AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, p. iv.

(b) the inconsistencies and overlap between Part 23 and light regulation could increase the complexity and administrative burden for regulators, shippers and service providers;[165] and

(c) the current forms of regulation may not be adequately targeting exercises of dynamic market power, which could become a more significant issue in the future given the investment in pipeline capacity that AEMO has projected will be required.[166]

Questions have also been raised about the governance arrangements associated with the form of regulation test. The issues raised in this context are similar to those raised in relation to the governance arrangements applying to the test for when to regulate (see section 7.2.4). If any changes are made to the party that determines when a pipeline should be regulated, it would make sense for that same party to also make decisions about the form of regulation. This issue is not therefore discussed any further in this chapter.

Further detail on the problems that have been identified with this aspect of the regulatory framework is provided below. Note that it is unclear at this stage how significant the three problems listed above are. SCO is therefore interested in stakeholders' views on the significance of the issues raised in this section, including their likely effect on shippers, service providers and economic efficiency.

8.2.1 Under-regulation

The features of the framework that introduce the risk of under-regulation are:

- the use of the coverage test as a hurdle to heavier handed forms of regulation; and
- the application of the negotiate-arbitrate form of regulation in situations where customers are unable to negotiate effectively.

8.2.1.1 Under-regulation arising as a result of the coverage test acting as a de facto form of regulation test

Following the introduction of Part 23, the coverage test is acting as a gateway between Part 23 and full/light regulation and vice versa. This creates a risk of under-regulation, because to pass the coverage test all of the coverage criteria must be satisfied, including the requirement for there to be a material increase in competition in another market. The other problem that was identified by the AEMC in its 2017-18 Economic regulation review is that the introduction of Part 23 may have inadvertently made the coverage test harder to pass. This is because the counterfactual used for the assessment of the coverage test is no longer no regulation, it is the information disclosure and arbitration framework applying under Part 23.

The use of the coverage test as the gateway to stronger forms of regulation therefore introduces a bias against imposing stronger forms of regulation in the current framework. As a consequence, there is an increased likelihood of market power being exercised, with consequential effects for consumers (i.e. higher prices) and a range of economic

[165] This concern was also raised in the AEMC's 2017-18 Economic regulation review, with the AEMC noting the inconsistencies and overlap between some forms of regulation to increase the complexity and administrative burden for regulators, shippers and service providers

See AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, p. iv.

[166] AEMO, 2019 Gas Statement of Opportunities, March 2019, p. 3.

inefficiencies across the gas market, upstream and downstream markets and the broader economy.

SCO is interested in stakeholders' views on the risk of under-regulation arising as a result of the use of the coverage test in the broader form of regulation test.

8.2.1.2 Under-regulation due to applying negotiate-arbitrate in situations where shippers lack the incentive or ability to negotiate effectively

As Figure 8.1 highlights, Part 23, light regulation and full regulation are all nominally "negotiate-arbitrate" forms of regulation, although the extent to which effective negotiation actually occurs differs depending on who the customer is. For example:

- some shippers (e.g. small or captive customers) may lack negotiating power and therefore have limited ability to meaningfully negotiate with service providers; and
- residential and smaller commercial and industrial customers are atomistic and unable to negotiate directly with gas pipelines, and retailers may have little incentive to negotiate on their behalf.

As noted by the Expert Panel, the negotiate-arbitrate form of regulation is premised on the idea that shippers have *some* level of countervailing power: [167]

> *"This form of regulation [negotiate-arbitrate] is likely to be most effective where the regulated service is subject to a degree of contestability and access seekers are relatively small in number and have some countervailing market power to exercise in the commercial negotiation phase."*

However, if users are unable to meaningfully negotiate, either because they are under-resourced, atomistic/unable to co-ordinate or captive and lacking credible alternatives, then it is not clear they have any countervailing power. The option to seek arbitration may mitigate this to a certain extent. However, small or unsophisticated shippers may be at a disadvantage in any arbitration, so the threat of arbitration may not be considered credible for these shippers (see Chapter 10). In these circumstances, the negotiate-arbitrate model may be a relatively weak form of regulation. It is perhaps because of this that forms of regulatory-oriented arbitration, or the complaints-based regime for small pipelines in Canada, exists.[168] That is, shippers without countervailing power, or who are small/unsophisticated, may be less disadvantaged in regulatory setting versus a commercial arbitration.

A related point is that if there are a large number of shippers, there might be large number of arbitrations, which could be quite costly. This is a relevant point both for considering the available forms of regulation and also the test for determining what form of regulation applies.[169] The Productivity Commission made a similar point in the 2004 Gas Access

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[167] Expert Panel on Energy Access Pricing, Report to the Ministerial Council on Energy, April 2006, p. 45.

[168] In this regime shippers and pipelines are left to negotiate, but shippers can make a complaint to the regulator and that complaint is resolved using the principles that would apply in a standard rate setting case. For an overview see section 6.4 of NERA Economic Consulting, International Review of Pipeline Regulation: Vol. 2 – Detailed Case Studies and Performance Assessment, 28 June 2019.

[169] If it was generally the case that in most circumstances there would be a large number of shippers, one might conclude that negotiate-arbitrate is too costly and not have it as an available form of regulation. Similarly, if the number of shippers varies greatly across pipelines, the number of shippers might be a factor that is considered in determining which form of regulation applies.

Review, when commenting on the reduced costs due to having reference tariffs available:[170]

> *"Further, there is likely to be more than one access seeker for some pipelines. A generally available access arrangement for such pipelines is likely to involve lower costs than those of requiring each access seeker to seek access through the negotiate–arbitrate framework of the national access regime*."

Where negotiation is unlikely to be meaningful, or the costs of arbitration are likely to be high, a more direct form of price control may be justified. In theory, full regulation fulfils this role in the current regulatory menu, but it only controls the prices of reference services and reference tariffs are technically enforced through arbitration. If reference services do not cover enough services, then there may be benefit in further strengthening full regulation. However, recent reforms to full regulation have broadened the scope of reference services, which likely achieves this to a large degree.

SCO is interested in stakeholders' views on how significant this issue is.

8.2.2 Inconsistent and complex set of regulatory options

As shown in Figure 8.1, there is an overlap between Part 23 and light regulation. In some respects, light regulation is a stronger form of regulation than Part 23 because it utilises a regulatory-oriented dispute resolution mechanism rather than a commercially-oriented mechanism. It also includes a number of safeguards that are primarily targeted at denial of access and discriminatory behaviour issues, although it is unclear why these vertical issues are more of a concern for light regulation pipelines than they are for non-scheme pipelines. In other respects, Part 23 and light regulation are very similar, particularly following the recent changes to the NGR to align many of the information disclosure requirements across these two forms of regulation (see Table 9.1).

It is also not clear that the two forms of regulation target different market power problems. Even if they did, given the similarities between the two regimes, it is not clear that a sufficiently granular assessment could be conducted to accurately determine which of the two forms of regulation should apply. This is because the only real differences between the two forms of regulation are the following, neither of which is dependent on the degree of market power held by the pipeline:

- the nature of the arbitration mechanism (commercial versus regulatory); and
- the presence of the safeguards under light regulation.

Furthermore, given that light regulation overlaps to a large extent with Part 23, there is not a clear linear progression in the strength of regulation by seeking to have a pipeline covered. Shippers could therefore submit an application for a pipeline to be covered, succeed, and then end up with a very similar form of regulation applying, despite going through a costly process to satisfy a test for stronger regulation. This disconnect between the forms of regulation, and the uncertainty it brings, may discourage users from seeking to have pipelines covered. This would contribute further to the problem of under regulation.

[170] Productivity Commission, Review of the Gas Access Regime, 2004, p. 92.

The inconsistent application of information disclosures required under the three forms of regulation is a more general inconsistency that does not appear to have a clear basis. This is discussed in more detail in Chapter 9.

SCO is interested in stakeholders' views on whether the overlap between light regulation and Part 23 is causing confusion and/or giving rise unnecessary costs for shippers, service providers and regulators.

8.2.3 The existing forms of regulation may not adequately address dynamic market power

Outside the Victorian Transmission System, competition can occur between pipeline operators to construct new transmission capacity. For example:

- if incremental demand is located in close proximity to an existing pipeline, but it could not be met by the existing capacity of the pipeline, then this demand could either be met by the development of a new pipeline by an alternative operator or an expansion of the existing pipeline by the incumbent service provider;
- if incremental demand is located in close proximity to two pipelines (owned by different parties), but it could not be met by the existing capacity of either pipeline, then this demand could potentially be met by the development of a new pipeline by an alternative operator or one of the existing pipelines being expanded by the relevant incumbent service provider; and
- if incremental demand was located some distance from an existing pipeline, then it could either be met by the development of a new pipeline by an alternative operator that would interconnect with the existing pipeline, or by an extension of the existing pipeline by the incumbent service provider.

In each of these examples there could be competition *for* the development of new capacity, although competition between expansions and new pipelines is only likely to occur where the existing pipeline has exhausted its economies of scale (given its initial design),[171] or is attempting to exercise market power.[172]

While competition is possible in these circumstances, service providers may be able to use their market power to block efficient competition from new pipelines by, for example:

- not allowing other service providers to interconnect to the service provider's pipeline, or by charging excessive prices for doing so; and/or
- pricing new capacity on the existing pipeline below the incremental cost of providing the capacity.

As noted in section 8.1, while exercises of these forms of dynamic market power are dealt with to some extent under the regulatory framework, there are inconsistencies in the approaches used. Further detail on these inconsistencies and the effect they may have is provided below.

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171 In this situation the incremental cost of the expansion exceeds the average cost of existing capacity. While pipelines are generally considered to have a natural monopoly cost function in a "greenfield" sense (i.e. there are essentially infinite economies of scale available from building larger diameter pipes), the same is not necessarily true in a brownfields sense. Once a pipeline is built, infinite economies of scale for expanding that pipeline no longer exist - continually expanding a small diameter pipeline at some point may be less efficient than building a separate pipeline with a larger diameter. That is to say, existing pipelines are not necessarily natural monopolies for the next lump of capacity.

172 Though in the case of full regulation pipelines, this would mitigated by expansions automatically being covered.

8.2.3.1 Interconnection

Competition *for* the market (i.e. to build a new pipeline) will often involve a new service provider requiring interconnection from the incumbent service provider whom they are seeking to compete with. As noted in Chapter 2, an incumbent service provider could block competition by refusing to allow interconnection, or by setting the price for interconnections at an excessive level.

While interconnections are dealt with to some extent in the regulatory framework, there are inconsistencies in the approaches across the forms of regulation. For example:

- Under full and light regulation, service providers are prohibited by the NGL from preventing or hindering access to pipeline services, [173] which includes interconnection services. A competing pipeline that is seeking to interconnect with a full or light regulation pipeline therefore has a right to negotiate access to such a service and can take action if a service provider seeks to prevent or hinder access to these services.[174] If the competing pipeline is unable to reach an agreement with the service provider, then it may also trigger the dispute resolution mechanism that is available under full and light regulation.[175]
- Under Part 23, service providers are not prohibited from preventing or hindering access. The arbitration provisions in Part 23 do, however, provide for an access determination to be made about interconnections.[176] A competing pipeline seeking to interconnect with a non-scheme pipeline that is unable to reach an agreement with the service provider could therefore trigger the arbitration mechanism.

The other problem with the regulatory framework is that the measures outlined above are reactive measures. This may therefore create uncertainty for competing pipeline providers and hinder their ability to compete to build new pipelines. Specifically, an alternative pipeline operator putting a proposal forward to shippers may not know the terms and conditions of interconnection, which may make this alternative more uncertain *vis-à-vis* an alternative proposal by the incumbent service provider.

SCO is interested in stakeholder views on the extent to which the current settings for interconnection give incumbent pipelines an ability to frustrate entry by creating uncertainty as to the terms of interconnection or simply refusing interconnection.

8.2.3.2 Cross-subsidising new capacity

The other way in which an incumbent service provider could block competition is to price extensions or expansions of its pipeline below the incremental cost of providing the new capacity in those cases where an expansion or an extension of an existing pipeline is a substitute for:

- a new pipeline built by another service provider; or

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173 See s. 133 of the NGL.

174 Note that this provision is both a civil penalty and conduct provision.

175 Following the recent reforms to broaden the scope of reference services on full regulation pipelines, it is possible that an interconnection service could become a reference service, in which case there would be a cost base reference price for this service on full regulation pipelines that would be approved by the relevant regulator.

176 See rule 570 of the NGR.

- an extension or expansion of another pipeline.[177]

An incumbent service provider could price new capacity below the incremental cost, by using a 'rolled-in' approach to pricing capacity, which as noted in Box 8.1, can result in existing shippers cross subsidising the new capacity.

In other jurisdictions where the contract carriage model is used and there is competition to construct new capacity (e.g. in the United States and Canada), this form of market power has been addressed by prohibiting the use of the rolled-in approach and requiring service providers to use an 'incremental pricing' approach (see Box 8.1 for more detail).

The same prohibition has not, however, been adopted in Australia. That is not to say there aren't some constraints on the use of the rolled-in approach in the regulatory framework, it is just that there is not a strict prohibition on the use of a rolled-in approach and the treatment of this issue differs under the alternative forms of regulation. For example:

- Under full regulation, rule 79[178] places some constraints on the use of the rolled-in approach,[179] with service providers only able to use this approach to cross-subsidise new capacity if it can be demonstrated that:
  - the overall economic value of the expenditure is positive; or
  - the expenditure is necessary to maintain and improve the safety of services, maintain the integrity of services or to comply with a regulatory obligation or requirement.
- Under light regulation and Part 23 there are no constraints on how new capacity is priced by a services provider.

Furthermore, it is not clear whether the constraints under full regulation are binding and if they in fact give service providers a broad discretion to use rolled-in pricing, even in situations where it would result in a clear distortion in competition.[180]

The alternative to using the rolled-in approach, is, as noted above, to use incremental pricing. While rolled-in pricing creates a potential competitive distortion, there are also efficiency and fairness trade-offs associated with incremental pricing. Therefore, whether rolled-in pricing is a 'problem' per se depends on the policy goal. Box 8.1 provides further detail on the concepts of rolled-in and incremental pricing using an illustrative example and explains the efficiency-fairness trade-off.

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177 While it may be possible for both pipeline operators in this case to try and cross subsidise the new capacity, the extension or expansion of the pipeline with the greater ability to cross-subsidise the new capacity, rather than lowest cost extension or expansion would be most likely be built. This could further entrench the position of pipelines with larger existing customer bases, because they would be able to spread the cost of the expansion/extension over larger existing user bases.

178 There are also some constraints on the use of the rolled-in approach embodied in rules 93 and 95 of the NGR.

179 Specifically, capex is "conforming" when any of the limbs of rule 79 (2) are satisfied. Rule 79 (2)(b) is that the incremental revenues associated with an expansion exceed the incremental costs. This essentially requires incremental pricing unless one of the limbs of rule 79 (2) are satisfied.

180 Specifically, rule 79(2)(a) adopts a broader "economic value" criteria, which may give broad scope for capex to be conforming under circumstances where costs are "rolled-in". For example, in a situation where new capacity is required because the existing pipelines are at capacity, it seems likely that pipelines would be able to demonstrate benefits in upstream/downstream markets, at least against a counterfactual of no new capacity being built.

Box 8.1: Incremental versus rolled-in pricing and the efficiency fairness trade-off

Under **incremental pricing**, all new capacity is charged at its incremental cost, whether that expansion is less or more expensive than existing capacity. This approach relies on the ability to set different tariffs for different capacity tranches, or to impose surcharges for that capacity.

Under "pure" **rolled-in** pricing, all volumes are charged the average cost of capacity, and thus the price charged for use of the existing capacity changes when capacity is expanded depending on whether the expansion is more or less expensive than existing capacity.

Hybrid approaches also exist, where expansions that are higher cost are charged using incremental pricing[181] but for expansions that are lower cost, the expansions are rolled in.

Consider a pipeline that transports 100 PJ of gas per year and has total annual costs of $100 million (including annualised capital costs). The average cost per GJ is $1, and so is the transportation charge.

Now consider the impact of two different expansions, one where the incremental cost is higher than the average cost of existing capacity and another where the incremental cost is below the average cost of existing capacity.

Illustrative example: Expansion is more expensive than existing capacity

Suppose an expansion is proposed which would add 20 PJ of capacity at an annual average cost of $50 million (cost $2.50/ GJ). Under incremental and rolled-in pricing the charges would be as follows:

Incremental pricing: The new capacity would be charged at its incremental cost of $2.50/GJ. This would be more than the cost of, and charge for, existing capacity of $1.

Rolled-in pricing: With the expansion, the total annual costs of the pipeline are $150 million and the pipeline transports 120 PJ of gas per year. The average cost per unit of gas is therefore $1.25/GJ. Under rolled-in pricing, the charge to all users would $1.25/GJ.

Hybrid pricing: Users of the new capacity would pay the existing tariff of $1 and a surcharge of $1.50. Users of existing capacity will continue to pay $1.

Illustrative example: Expansion is less expensive than existing capacity

Suppose an expansion is proposed that would add 20 PJ of capacity at an annual average cost of $18 million (cost $0.90/GJ). This incremental capacity could be charged for in two ways:

Incremental pricing: The new capacity would be charged at its incremental cost of $0.90/GJ, which would be *less* than the cost of, and charge for, existing capacity of $1.

Rolled-in pricing: With the expansion, the total annual costs of the pipeline are $118 million and the pipeline transports 120 PJ of gas per year. The average cost per unit of gas is therefore $0.98/GJ, which would be the new price for all users.

Hybrid pricing: All capacity would face the rolled-in tariff of $0.98/GJ.

The efficiency-fairness trade-off

In a situation where the unit cost of an expansion or extension exceeds the average cost of existing capacity, incremental pricing would require users of the new capacity to pay more than users of existing capacity. While this is efficient, there may be questions about fairness. Incremental pricing assumes that the users of the new capacity, who would pay the incremental tariff, are the "cause" of the capacity expansion. In some industries, this can also raise concerns about competition in related markets, if for example incremental pricing would mean entrants in the related market face a much higher cost than incumbents. The flip side also applies in a situation where an expansion is lower cost than existing capacity – users of the new capacity would pay a lower price than users of existing capacity. Existing users might consider this unfair and that they should share in the economies of scale and/or scope of the new investment.

[181] On the Northern Gas Pipeline, this takes the form of a surcharge.

It is also worth noting that in this situation, if there is competition to serve incremental demand, pricing above incremental cost would likely be disciplined to some extent by competitors. That is, a pipeline that attempted to charge a price that was above incremental cost for new capacity could be undercut by a rival that could make a similar investment. Ultimately, concerns about fairness with incremental pricing reduce to an argument that the sequencing of demand for capacity shouldn't determine who pays what, even if that sequencing results in different incremental and total costs versus a situation where the pipeline was built from scratch to serve the new total level of demand.

Rolled-in pricing is based on the principle that all users (current and prospective) equally contribute to whether additional capacity is required,[182] and therefore all users should pay the average cost of capacity even when different users/volumes have different effects on cost by the nature of the sequence with which they result in capacity being built. Equally, this also means that all users should share in any efficiency gains of expanding capacity.

As this discussion illustrates, efficiency is likely only a concern in situations where the incremental cost of capacity exceeds the existing average cost. In situations where the incremental cost is below average cost, if competition is possible it will not be hindered by the ability to roll-in pricing. In this sense, Hybrid approaches such as that adopted on the NGP balance efficiency and fairness.

This discussion also illustrates why for market and common carriage systems, where users generally have no firm right to capacity and competition for new investments is effectively precluded, rolled in pricing generally applies.

8.3 How could the problems be addressed?

To address the problems of under-regulation and the overlap between Part 23 and light regulation, steps could be taken to develop a consistent set of alternative forms of regulation and have logical process by which pipelines move from lighter to heavier handed forms of regulation. Steps could also be taken to address dynamic market power by adopting a more proactive approach to interconnections and/or by implementing incremental pricing as a pricing principle in the NGR.

8.3.1 Options to address the risk of under-regulation

As discussed above, the coverage test is ill suited to determining the form of regulation. Removing the coverage test's role in determining the form of regulation would remove the current bias against stronger forms of regulation.

If the coverage test was removed, a decision would need to be made about what test should be used to determine the form of regulation that should be applied to a particular pipeline. One option would be to use the existing form of regulation test set out in s. 122 of the NGL (described above and in section 3.1.1). This test, which arose from the 2006 Expert Panel on Energy Access pricing and the Productivity Commission's 2004 Review of the Gas Access Regime, requires an assessment of both the degree of market power held by the pipeline and the likely cost and benefits of the alternative forms of regulation. While this test appears well suited to a choice between two forms of regulation, it is less suited to choices between the three forms of regulation that are currently available under the regulatory framework. Some changes to the test would therefore be required if a decision was made to retain three forms of regulation.

[182] Alternatively, all users benefit from additional capacity and therefore should share the costs.

SCO is interested in stakeholders' views on the appropriateness of this test and on whether:

- The onus of proof in form of regulation decisions should sit with the service provider, applicant or the decision maker. As noted in section 7.3.1 a decision maker (or applicant) can face significant information asymmetries in these types of assessments, so one option to address this is to place the onus on the service provider to demonstrate that a lighter handed form of regulation should apply to its pipeline if an application is made for a heavier handed form of regulation.
- The relevant regulator should play a greater role in monitoring the behaviour of service providers, so that it can refer pipelines for a form of regulation assessment if it suspects market power is being exercised. This could, for example, involve monitoring service providers' prices, service quality, financial information, the outcome of access negotiations and, where relevant, dealings with associates and ring fencing arrangements.

8.3.2 Options for the number and forms of regulation

As already discussed, the logic for having multiple forms of regulation is that it can enable the selection of a more appropriate form of regulation for each particular pipeline having regard to its circumstances. While this may limit the risk of under- or over-regulation, having multiple forms of regulation may also add to costs and complexities of the regulatory framework. It would also make the process for selecting the appropriate form of regulation more difficult.

That process itself may lead to further regulatory error if it can not sufficiently distinguish between the circumstances in which particular forms of regulation should apply. This suggests that the available forms of regulation should be sufficiently different that a relatively objective assessment can be made of which form of regulation each pipeline should be subject to.

For example, the option that would be closest to maintaining the status quo would be to simply tidy up Part 23, light regulation and full regulation by implementing the AEMC's suggested reforms to light regulation (see Table 4.1). This may introduce a slightly more linear progression between the existing forms of regulation. However, Part 23 and light regulation may still not be sufficiently different for it to be clear which form of regulation should apply.

A number of broadly defined forms of regulation are available, each of which are, in principle, targeted at different circumstances. The circumstances that each regulatory instrument is targeted at, and typical industries where it has been applied, are set out in Table 8.2.

Table 8.2: Forms of regulation and the circumstances they target

Regulatory response	Circumstances in which regulatory response is appropriate	Example sectors
Price monitoring	Services with a degree of contestability or markets that are transitioning from conditions of substantial market power to more competitive conditions.	Retail fuel
Information disclosure and monitoring	Services subject to a degree of contestability that have a concentrated/sophisticated customer base and therefore either there is threat of countervailing power or credible threat of further regulatory intervention.	Airports
Negotiate-arbitrate (with commercial or regulatory dispute resolution)	Services subject to a degree of contestability and customers are relatively small in number and have some countervailing market power. Inappropriate where customers are large in number, information asymmetry is substantial, and the transaction costs involved in negotiation and arbitration are likely to be prohibitive	Gas pipelines (light regulation and Part 23) and Airports.
Negotiate-arbitrate (with reference tariffs set by regulator)	An intermediate step between negotiate-arbitrate and pure price control where customers are more numerous/less informed. Customer negotiating disadvantages are mitigated by the ability to have regard to the reference tariffs and terms and conditions approved by the regulator. Though this is only true for reference services.	Gas pipelines (full regulation)
Negotiated settlements	Service provider under conditions of natural monopoly or substantial market power with little prospect of contestability. Implemented in situations where a lower cost, less adversarial method of implementing direct price controls is desired. Also relies on customers having some negotiating ability.	Gas pipelines in US and Canada
Direct price control	Service provider under conditions of natural monopoly or substantial market power with little prospect of contestability.	Electricity networks

In the following sections, the following questions are considered, which form the basis of the options for the forms of regulation:

- How many and what forms of regulation are appropriate?
- What form should a lighter handed form of regulation take?
- What form should a heavier handed form of regulation take?

8.3.2.1 How many forms of regulation are appropriate?

It is not clear that there is a case for having three forms of regulation, given the complexity of determining when each form should apply. If a third form was to be introduced, it would most likely be a lighter hand form of regulation than those which are currently available, in order to ensure the three forms of regulation are differentiated with respect to their intrusiveness. This would most likely take the form of a pure information disclosure and monitoring regime, without the threat of binding arbitration.

A price monitoring regime would be another alternative, but this may not exercise a meaningful constraint on monopoly pricing in situations where a pipeline has been deemed to have market power. Given the key difference between an information disclosure regime and a negotiate-arbitrate regime is the source of the “threat” (arbitration versus complaining to the regulator and getting stronger regulation imposed), it may be hard for a form of regulation test to distinguish between the two.

The other problem with a pure information disclosure and monitoring regime is that it is unlikely to pose a meaningful constraint on pipelines that have been deemed to have market power. Under the negotiate-arbitrate form of regulation, shippers can have recourse to arbitration if a service provider attempts to exercise market power during negotiations. In contrast, under an information disclosure and monitoring regime, shippers without countervailing power have to rely on future regulatory intervention as a check on pipeline behaviour and for changes to the form of regulation to occur relatively rapidly in response to exercises of market power.[183]

The key sector where information disclosure and monitoring is used as a pure form of regulation is airports, where there is typically a small group of sophisticated buyers that are relatively co-ordinated, a regular and public cycle for setting prices to *all* customers and, in the case of New Zealand, separate disclosure and analysis by the regulator whenever a pricing decision is made. In contrast to airports, gas pipelines have multiple customers who may lack the incentive/ability to co-ordinate[184] and have long term contracts of differing lengths with non-coincident start and end dates. Given the non-regular and non-coincident negotiations that take place between pipelines and shippers, it is unclear that an information disclosure regime would constrain the behaviour of service providers in the same way it can in other contexts. Or it might only do so with a significant lag (as abuses of monopoly power would only be revealed over time) or only do so for subsets of customers (depending on the extent of disclosure requirements in relation to the prices different customers receive).

It therefore seems that if information disclosure and monitoring were to be included as a form of regulation, its role may not be as a form of price control per se, but rather as a regulatory instrument to aide decisions about whether and how pipelines should be regulated. The rationale for this type of regulation may be strongest in a situation where all pipelines are deemed subject to regulation with no way for regulation to be removed (e.g. if all pipelines were required to provide third party access on non-discriminatory terms – see section 7.3.3). In this circumstance there may be a case for three forms of regulation to mitigate the risk of over regulation, though the complexity of having three forms remains.

Given the issues outlined above, it would appear that two forms of regulation is sufficient, with the heavier handed form of regulation based on the current full regulation or direct price control, and the lighter handed form of regulation based on a negotiate-arbitrate model. SCO is, however, interested in stakeholders' views on this issue.

8.3.2.2 What form should the lighter handed form of regulation take?

If two forms of regulation are to be adopted then a decision will need to be made about the form that the lighter handed form of regulation takes. The options that have been identified include basing it on:

[183] A similar point was made by the Productivity Commission int it's 2004 review of the gas access regime, where it noted: "*Light-handed monitoring might not necessarily restrain market power. The effectiveness of monitoring could be improved if there is a real threat of heavy handed regulation at some later time. When effectively designed, a price monitoring regime promotes commercial negotiations and imposes lower compliance costs on service providers."*
Productivity Commission, Review of the Gas Access Regime, 2004, p. 338.

[184] This is due to shippers often being competitors with each other.

- the recently amended light regulation negotiate-arbitrate model, which utilises a regulatory-oriented arbitration mechanism and includes a number of safeguards, such as:
    - the prohibition on service providers bundling services, preventing or hindering access and/or engaging in inefficient price discrimination; and
    - the ring fencing and associate contract provisions, that are designed to ensure the separation of pipeline operations from associated businesses in other markets;
- the Part 23 negotiate-arbitrate model, which utilises a commercially-oriented arbitration mechanism but does not include any of the safeguards listed above; or
- a strengthened Part 23 negotiate-arbitrate model, which would extend the safeguards that are currently available under light regulation to Part 23.

The choice between these options will, in part, depend on the number of pipelines that are likely to be subject to the lighter handed form of regulation. As noted in Table 3.1, there are currently over 85 pipelines subject to either Part 23 or light regulation. Adopting the light regulation option could therefore impose a significant administrative burden on the AER (in its capacity as the dispute resolution body) and the WA Energy Disputes Arbitrator. Furthermore, as already discussed, if multiple forms of regulation are employed then they need to be sufficiently different that a test can accurately distinguish between the situations in which they apply. This suggests a model of commercial arbitration may be preferable to regulatory arbitration as a means of differentiating the lighter handed form from the heavier form of regulation. SCO is nevertheless interested in stakeholders' views on the three options.

SCO is particularly interested in stakeholders' views on whether the additional safeguards applying under light regulation should be extended to Part 23. As noted above, the safeguards primarily (but not exclusively) relate to issues around denial of access and discriminatory behaviour, which would still be a concern on pipelines that have been deemed to have market power and are subject to negotiate-arbitrate. In addition, as noted in NERA's report there may be broader reasons than just denial of access to have a ban on inefficient price discrimination.[185] It seems appropriate therefore for these protections to continue to apply under the lighter handed form of regulation.

Another issue that SCO is seeking feedback on is whether the lighter handed form of regulation applied to distribution pipelines should be based on the negotiate-arbitrate model, or another form of regulation. While the regulatory framework does not currently draw a distinction between the forms of regulation applied to distribution and transmission pipelines, questions have been raised in prior reviews about the potential for a different lighter handed form of regulation to be applied to distribution pipelines. One potential reason for employing a different approach is that if retail competition is not effective in an area, then retailers may not have a strong incentive to negotiate the best outcome with the service provider of the distribution pipeline. While the same risk exists on transmission pipelines, distribution charges account for a much larger proportion of the final gas price

[185] NERA note that price discrimination can be used by pipelines with market power to: 1) Exercise market power against end customers "along the pipe" who do not have alternative options, 2) capture the rents of upstream/downstream innovation, making it less likely the benefits of innovation are passed through to consumers and 3) strategically give discounts to large shippers for the purpose of preventing them underwriting a competing pipeline.
NERA Economic Consulting, International Review of Pipeline Regulation: Vol. 1 – Synthesis and Reform Options, 28 June 2019, p. 71.

paid by customers located in distribution areas (~35%),[186] so the effect of this behaviour on end-users is more significant.

The alternative approaches that could potentially be employed in this context include:

- the Default Price Path (DPP) form of regulation used in New Zealand, which is a building block style form of regulation where costs are forecast using a top down approach rather than the bottom up approach used under full regulation; or
- the negotiated-settlements form of regulation used in the US and Canada, which is a variant of the negotiate-arbitrate model in which the price and non-price terms and conditions of access are negotiated on a joint basis by all the shippers and the service provider (potentially facilitated by the involvement of the regulator) with the final agreement (negotiated settlement) approved by the regulator.

SCO is interested in hearing stakeholders' views on these two approaches, which are heavier handed than light regulation and Part 23, but lighter handed and lower cost than full regulation.

8.3.2.3 What form should the heavier handed form of regulation take?

As outlined above, negotiate-arbitrate is unlikely to effectively constrain the exercise of market power against users who are small/unsophisticated or lack a material degree of countervailing power. Under full regulation, this is addressed by the provision of regulator determined reference tariffs, which operate in a similar way to regulation via *ex ante* price caps. However, reference tariffs only apply to reference services, which could give pipelines scope to exercise market power by offering services that differ slightly from the reference service (and therefore the reference tariff doesn't apply) or over more niche services that do not qualify as reference services.

Reforms recently implemented by the AEMC are intended to address this issue, by requiring more services to be classified as reference services.[187] While this may address the concerns identified above, it is worth considering whether full regulation could be further strengthened by moving to a more direct form of price control such, as price caps on all services, or a weighted average price cap. One potential issue with this option is that it may remove some of the flexibility in services that shippers value, by requiring more standardised services to be developed for price setting purposes. It is also not clear that the introduction of this form of regulation would, in practice, yield a different outcome to the negotiate-arbitrate model with expanded reference services. While there are likely to be some limitations with direct price control, SCO is interested in stakeholders' views on this option and whether it is required, particularly given the recent reforms that have been made to the scope of reference services.

8.3.3 Options to address dynamic market power

Introduce a more proactive right to interconnect

As described above, if an incumbent service provider attempted to frustrate competition from a rival service provider competing against it to build a new pipeline, the prospective service provider could, in the case of full and light regulation pipelines, have recourse to

[186] OGW, Gas Price Trends Review 2017, March 2018, p. 20.

[187] AEMC, Rule Determination: National Gas Amendment (Regulation of Covered Pipelines) Rule 2019, 14 March 2019.

the NGL provision that prohibits service providers of these pipelines from preventing or hindering access, or to the dispute resolution mechanisms applying under full and light regulation and Part 23.

The reactive nature by which interconnection is resolved has the potential to make interconnection an adversarial process and stifle competition. An option to address this would be to introduce a more explicit right of interconnection, so that alternative service providers have some certainty around the terms and conditions of access when competing to build new pipelines. An example of such a policy is that used in the United States, which is described in Box 8.2 below.

Box 8.2: FERC's interconnection policy

The FERC policy on interconnection enables a party seeking access to a pipeline to obtain an interconnection if it satisfies five conditions:[188]

1. The party seeking the interconnection must be willing to bear the costs of the construction if the pipeline performs that task. In the alternative, the party seeking the interconnection could construct the facilities itself in compliance with the pipeline's technical requirements.
2. The proposed interconnection must not adversely affect the pipeline's operations.
3. The proposed interconnection and any resulting transportation must not diminish service to the pipeline's existing customers.
4. The proposed interconnection must not cause the pipeline to be in violation of any applicable environmental or safety laws or regulations with respect to the facilities required to establish an interconnection with the pipeline's existing facilities.
5. The proposed interconnection must not cause the pipeline to be in violation of its right-of-way agreements or any other contractual obligations with respect to the interconnection facilities.

When these conditions are met, the pipeline cannot deny an interconnection, regardless of whether it previously has allowed an interconnection for a similarly-situated shipper.

This policy does not differ greatly from the conditions under which an arbitrator can require an interconnection under Part 23. For example, under rule 570 an arbitrator can only require an interconnection with another pipeline if doing so is technically feasible,[189] consistent with the safe and reliable operation of the pipeline[190] and the prospective user funds the activity in its entirety.[191]

The goal of any change would therefore be to change the existing measure from a reactive measure to proactive one. Under the contract carriage regime this would not fundamentally alter the dynamics of how existing pipelines operate. Under existing settings, if an interconnecting pipeline was for the purposes of connecting new supply, and the existing pipeline did not have spare capacity, shippers would need to contract separately with the existing pipeline to have it expanded in order to ship the new gas. Whether there is a proactive or reactive interconnection right does not change this.

188 Panhandle Eastern Pipe Line Company, 91 FERC ¶ 61,037 (2000)

189 See rule 570 (5)(d)(i) of the NGR.

190 See rule 570 (5)(d)(ii) of the NGR.

191 See rule 570 (6)(b) of the NGR.

Incremental pricing

As described above, in situations where the incremental cost of an expansion or extension exceeds the average cost of existing capacity, rolled-in pricing will result in the price charged for incremental capacity being below its incremental cost. This is because the price paid by existing users would rise, resulting in existing users partially funding the incremental capacity. This results in an effective cross-subsidy for new capacity, which may distort competition to construct new capacity.

The solution to this potential distortion is to require incremental pricing as a pricing principle for all regulated pipelines (noting that to some extent it may already effectively be the case under full regulation).[192] This would require that the revenue received from users of expansions and extensions be greater than or equal to the incremental cost of the expansion/extension. In practical terms, the simplest way to achieve this would be for surcharges or capital contributions to be used. In the case of expansions, this would result in different tranches of capacity on a pipeline having different effective prices, which could increase complexity. However, to the extent that different shippers have different negotiated rates today, the additional complexity may not be that material.

How an incremental pricing principle would be implemented in practice is likely to vary depending on the form of regulation. Full regulation pipelines have the ability to charge surcharges,[193] which would achieve the goal of having different effective prices without the complexities that would arise from different reference tariffs for different tranches of capacity. Another approach would be to use capital contributions. For light regulation and Part 23, a more general principle could be included in the NGR that would require incremental pricing to be used where the cost of an expansion or extension would otherwise result in the price of existing capacity increasing, with the ability for enforcement action to be taken if pipelines do not comply.[194] It would thus operate similar to some of the competitive safeguards that exist today for light regulation, such as the prohibition on price discrimination.

There is of course a trade-off between efficiency and fairness when considering incremental versus rolled-in pricing, which is described in Box 8.1 above. If competition for new investment is to be facilitated by the regulatory framework, then incremental pricing is likely a pre-requisite for it to occur.

8.3.4 Summary of potential options

Table 8.1 provides a summary of the options that could be implemented to address the problems identified in section 8.2. Note that this table does not contain an exhaustive list of solutions and stakeholders wishing to propose other solutions are encouraged to do so in their responses to the questions.

Further detail on how these potential solutions could form part of a broader regulatory package is provided in Chapter 11.

192 See rule 79 of the NGR and the discussion in section 8.2.3.2 above.

193 See rule 83 of the NGR.

194 In this sense, it would be similar to the no price discrimination provisions that currently apply for light regulation pipelines.

Table 8.3: Reform focus 2 – Summary of potential options

Problem	Policy options
Under-regulation due to the use of the coverage tests as a hurdle to stronger forms of regulation	1 Maintain the existing approach, with the coverage test acting as a gateway to stronger forms of regulation (status quo). 2 Remove the coverage test from form of regulation assessments and use a single test for form of regulation decisions based on the form of regulation test in s. 122 of the NGL. 3 Accord the relevant regulator an explicit monitoring role and ability to refer pipelines to the relevant decision maker for a form of regulation assessment.
Increased complexity and cost due to overlapping and inconsistent forms of regulation	1 Maintain the existing three forms of regulation (status quo). 2 Adopt two forms of regulation, with: (a) The heavier handed form of regulation based on either: (i) full regulation (i.e. negotiate-arbitrate with reference tariffs); or (ii) direct price (revenue) control; (b) The lighter handed form of regulation based on: (i) light regulation; (ii) Part 23; or (iii) a strengthened Part 23 (i.e. the existing Part 23 plus the safeguards available under light regulation). 3 Apply a different form of light handed regulation to distribution pipelines, based on either the default price path or negotiated settlements approach.
The current forms of regulation deal with dynamic market power on an inconsistent and reactive basis	1 Maintain the existing approach to interconnections and pricing of new capacity (status quo). 2 Include a more explicit right to interconnection in the NGR and pricing principles for interconnections. 3 Prohibit existing pipelines from cross-subsidising new capacity by requiring incremental pricing to be used where the cost of an expansion or extension would otherwise result in the price of existing capacity increasing.

8.4 Questions for stakeholders

Box 8.3 sets out the questions SCO is interested in obtaining stakeholder feedback on.

Box 8.3: Questions on forms of regulation

16 Do you think the use of the coverage test as a gateway between Part 23 and full regulation is resulting in under-regulation?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think the coverage test should be removed and a single test used for moving between the alternative forms of regulation? If so, do you think the single test should be based on:

(i) the form of regulation test in s. 122 of the NGL (see section 3.1.1)?

(ii) another test?

(c) Do you think:

(i) the onus of demonstrating that a particular form of regulation should apply to a pipeline should sit with the applicant or decision making body; or

(ii) the onus should be on the service provider to demonstrate why a heavier handed form of regulation is not required?

(d) Do you think the relevant regulator should play a greater role in monitoring the behaviour of service providers and be able to refer pipelines for a form of regulation assessment if it suspects market power is being exercised?

Please explain your responses to these questions.

17 Do you agree that the inconsistencies and overlap between the three forms of regulation that are currently available under the regulatory framework are increasing the complexity and administrative burden for regulators, shippers and service providers?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) If the number of forms of regulation was reduced to two, do you think:

(i) the heavier handed form of regulation should be based on:

- full regulation (i.e. negotiate-arbitrate with reference tariffs)?
- direct price (revenue) control?
- another form of regulation?

(ii) the lighter handed form of regulation should be based on:

- the existing light regulation?
- Part 23?
- a strengthened Part 23 (i.e. the existing Part 23 plus the safeguards available under light regulation)?
- another form of regulation?

Please explain your responses to these questions.

18 Do you think there is a case for adopting a different lighter handed form of regulation for distribution pipelines?

If so, do you think it should be based on:

(a) the Default Price Path (DPP) approach used in New Zealand?

(b) the negotiated settlements approach used in the US and Canada?

(c) another form of regulation?

Please explain your responses to these questions.

19 Do you think additional measures are required in the regulatory framework to deal with dynamic market power?

(A) If not, please explain why not.

(B) If so:

(a) Do you think the NGR should be amended to include:

(i) an explicit right to interconnection to regulated pipelines?

(ii) pricing principles for interconnections to regulated pipelines?

(b) Do you think the NGR should be amended to prohibit regulated pipelines from cross-subsidising new capacity by requiring incremental pricing to be used where the cost of an expansion or extension would otherwise result in the price of existing capacity increasing?

Please explain your responses to these questions.

20 Are there any other problems with this aspect of the regulatory framework that have not been identified in this chapter? If so, please outline what they are and how you think they should be addressed.

9. Reform focus 3: Information disclosure requirements

The purpose of the information disclosure requirements in the current regulatory framework is to:

- enable shippers to make a more informed decision about whether to seek access and to assess the reasonableness of a service provider's offer; and
- reduce the degree of information asymmetry and imbalance in bargaining power that shippers can face in negotiations with service providers and, in so doing, facilitate more timely and effective negotiations.

While improvements have been made to the information disclosure requirements over the last two years, it would appear from recent reviews (see Chapter 5) that there are still some information gaps and asymmetries that could be:

(a) imposing unnecessary search and transaction costs on shippers and/or compliance costs on service providers;

(b) hindering the ability of shippers to negotiate effectively with service providers; and/or

(c) making shippers more susceptible to exercises of market power.

This issue is discussed in further detail in the remainder of this chapter, which commences with a brief overview of the current information disclosure requirements and then outlines the problems that have been identified with the current disclosure requirements and the potential solutions to these problems. It also sets out a number of questions SCO is interested in obtaining stakeholder feedback on.

Note that while this chapter focuses on the disclosure requirements under the existing forms of regulation, the solutions identified in this chapter will still be relevant if a decision is made to implement any of the other forms of regulation outlined in Chapter 8.

9.1 What is the current situation?

Table 9.1 sets out the information that service providers are currently required to publish and where the information can be found, which is currently dispersed across the Bulletin Board, service providers' websites and pipeline AAs. This table also shows the exemptions from the obligation to publish information that are currently available to:

- non-scheme pipelines that supply a single shipper, who can obtain a full exemption from the obligation to publish information;
- non-scheme pipelines that have average daily injections less than 10 TJ/day over the preceding 24 months ('small pipelines'), who can obtain an exemption from the obligation to publish all the information except the requirement to publish pipeline and pipeline service information; and
- scheme distribution pipelines that have a maximum daily capacity of 10 TJ/day or less, or a maximum pressure capability of 4MPa or less, who can obtain an exemption from the requirement to publish service availability information.

It is important to note that the exemptions outlined above are only from the obligation to publish information and that shippers can still seek equivalent information from service providers during negotiations.

Table 9.1: Information disclosure requirements under the alternative forms of regulation

Information				Full regulation		Light regulation		Part 23	
				Transmission	Distribution	Transmission	Distribution	Non-exempt transmission	Non-exempt distribution
Pipeline information		Nameplate rating (or for distribution pipelines the volume of gas that can be transported through gate stations), list of receipt and delivery points and schematic		Bulletin Board	SP Website	Bulletin Board	SP Website	SP Website or Bulletin Board	Website
		Matters that may affect access, use or prices for services	Technical/physical characteristics	AA on SP Website	SP Website	Bulletin Board	SP Website	SP Website	SP Website
			SP policies			×			
Pipeline service information		Description of all services offered, locational limitations on availability and priority ranking of services		AA on SP Website (reference services only)	AA on SP Website (reference services only)	SP Website	SP Website	SP Website	SP Website
Standing terms		Standing price and terms and conditions for each service		AA on SP Website (reference services only)		SP Website	SP Website	SP Website	SP Website
		Method used to calculate standing price for each service and sufficient information to enable users to understand how price reflects application of method		AA on SP Website (reference services only)		SP Website	SP Website	SP Website	SP Website
Service availability information		Outlook of uncontracted primary capacity for each month in the following 36-mths		Bulletin Board in eastern-northern Australia only	SP Website (large distribution pipelines only)	Bulletin Board in eastern-northern Australia only	SP Website (large distribution pipelines only)	SP Website (or Bulletin Board)	SP Website
		Information about matters (including planned expansions) expected to affect capacity in the following 12-mths		Bulletin Board (planned expansions eastern-northern Australia only)	SP Website (large distribution pipelines only)	Bulletin Board (planned expansions eastern-northern Australia only)	SP Website (large distribution pipelines only)	SP Website (or Bulletin Board)	SP Website
Information used to assess reasonableness of offers	Weighted average prices paid for services	Annual reporting of weighted average prices paid by shippers (exemptions available if less than 3 shippers)		×		SP Website (reporting to commence 2020)		SP Website	
	Historic demand (service usage) information	Total demand (total quantity of gas injected into and withdrawn from the pipeline)		Bulletin Board	SP Website*	Bulletin Board	SP Website*	SP Website (or Bulletin Board)	SP Website
		Demand for each service (total quantities injected and withdrawn by service type)		×	×	×	×	SP Website	SP Website
	Historic financial information	Annual statement of revenue and expenses, statement of pipeline assets, financial performance metrics and asset value(s).		Some information provided in AA process and may also be required through regulatory information notices (RINs)		SP Website (reporting to commence 2020)		SP Website	
	Forecast costs and demand	Forecast expenditure, rate of return, depreciation and demand		AA on SP Website (reference services only)		×			

Sources: Parts 7, 11, 18 and 23 of the NGR.
Notes: * Additional information must be reported by large distribution pipelines.

With the exception of the information reported on the Bulletin Board and in AAs, service providers are required to prepare, publish and maintain the information in Table 9.1 in accordance with the access information standard set out in Parts 7, 11 and 23 of the NGR. Amongst other things, this standard states that information must not be "false or misleading in a material particular". Service providers must also update information as soon as practicable after they become aware it does not comply with this standard.

As the grey shaded cells in Table 9.1 show, there are number of important differences between the reporting requirements applying to pipelines operating under the alternative forms of regulation. For example:

(a) a description of each of the services offered by the pipeline (pipeline service information) and the standing terms for each service must be published for non-scheme pipelines and light regulation pipelines, but full regulation pipelines are only required to disclose this information for reference services;

(b) information on weighted average prices paid by shippers for each service[195] must be published for non-scheme pipelines and light regulation pipelines, but not for full regulation pipelines;

(c) information on the historic demand for each service (e.g. transportation versus storage services, firm versus as available services) must be published for non-scheme pipelines, but not for full and light regulation pipelines;

(d) historic financial information must be published for non-scheme and light regulation pipelines, but this information is only required of full regulation pipelines if a regulatory information notice is issued, which has occurred on a limited basis to date;[196] and

(e) information on the forecast costs and forecast demand must be published for full regulation pipelines, but not for non-scheme pipelines.

The size threshold used for exemptions also differs across the forms of regulation and there are some differences in the treatment of distribution pipelines.

There are also some differences between the information that service providers subject to the same form of regulation are required to report. For example, transmission pipelines in eastern and northern Australia that are subject to full or light regulation are required to publish information on planned expansions and a 36-month outlook for uncontracted capacity, while their counterparts in Western Australia are not. This is because the obligation to report the information in eastern and northern Australia is set out in the Bulletin Board provisions in the NGR, which do not apply to pipelines in Western Australia.

9.2 What are the potential problems?

As noted in the introduction to this chapter and in Chapter 5, a number of potential problems have been raised with the information disclosure requirements that currently apply to full regulation, light regulation and non-scheme pipelines, with specific concerns raised about:

[195] Note that an exemption may be obtained if there are less than two shippers using the service.

[196] One potential problem with relying on the regulator's regulatory information notice power to obtain information that shippers may require to negotiate more effectively with service providers is that this power can only be exercised if the regulator considers it reasonably necessary for the performance or exercise of its functions or powers under the NGL or NGR. It may therefore be difficult for the relevant regulator to issue a notice on this basis.

- the limited information available to shippers negotiating access to non-reference services on full regulation pipelines;
- the deficiencies in the information that shippers are expected to use to assess the reasonableness of prices offered by service providers (i.e. the description of the methodologies used to calculate standing prices, the weighted average prices paid by shippers for services and historic financial information);
- the quality and reliability of some of the information that must be disclosed by service providers and the access information standard, which may be setting too low a standard for the reported information;
- the accessibility of the information reported by service providers and the ease with which it can be used by shippers; and
- the exemptions that are available from the obligation to publish basic information, such as standing prices and standard terms and conditions.

Central to each of these issues, is a concern that if shippers have to negotiate on the basis of incomplete, inaccurate and/or asymmetric information, then it could hinder their ability to negotiate effectively with service providers and result in inefficient decisions being made, with consequential effects for efficiency in the gas market and broader economy. It could also make shippers more susceptible to exercises of market power by service providers, which could have a detrimental effect on economic efficiency and on consumers more generally (see section 2.1). There is also a risk that differences in reporting obligations across the forms of regulation may impose unnecessary costs on both service providers and shippers.

Further detail on the concerns that have been raised with the current disclosure requirements is provided below.

9.2.1 Limited information available on pipelines subject to full regulation

As noted in section 9.1, there are some differences between the information disclosure requirements prevailing under the alternative forms of regulation. While some differences are to be expected given the nature of the alternative forms of regulation, the rationale for requiring pipelines subject to light regulation and Part 23 to report the following information but not full regulation pipelines is less clear given shippers using these pipelines have to negotiate access to non-reference services:

(a) a description of each of the services offered by the pipeline (pipeline service information);

(b) the standing terms for each service (i.e. the standing prices, standard terms and conditions and pricing methods used to calculate the standing prices);

(c) information on prices paid by other shippers for services provided by the pipeline;

(d) information on the historic demand for each service provided by the pipeline; and

(e) historic financial information published on an annual basis in accordance with the relevant regulator's financial reporting guideline.

The concern in this case is that the limited information available under full regulation could:[197]

- hinder the ability of shippers to negotiate effectively with service providers of full regulation pipelines;
- impose additional search and transaction costs on shippers seeking access to these pipelines; and
- be gamed by service providers operating under the different forms of regulation.[198]

For example, full regulation pipelines are not currently required to publish information on non-reference services (including information on the standing prices, the pricing method or the prices paid by other shippers). This could make it more difficult for shippers to understand the range of non-reference services available and associated prices, giving rise to higher search and transaction costs.

Full regulation pipelines are also not required to report any historic financial information, which may make it difficult for shippers to assess the reasonableness of the prices offered for non-reference services and make them more susceptible to exercises of market power. In those cases where the service provider of a full regulation pipeline also operates a non-scheme and/or light regulation pipeline, the absence of a requirement to publish comparable financial information across all the forms of regulation may also:

- make it easier to engage in monopoly pricing and to conceal this by artificially lowering the reported rates of return on non-scheme and light regulation pipelines (e.g. by shifting costs and/or revenues between pipelines); and
- increase the service provider's reporting and compliance costs if it must also comply with a regulatory information notice that requires information to be prepared and reported in a different way to what applies on their other pipelines.

SCO is interested in stakeholders' views on how significant this issue is and the effect it may have on shippers and service providers. SCO is also interested in understanding what effect the differences may have on shippers and service providers if it becomes easier to move between the forms of regulation.[199]

9.2.2 Information used to assess the reasonableness of prices

In the recent reviews of Part 23, the ACCC, Brattle Group and respondents to the OGW shipper survey identified a number of potential deficiencies with the information that shippers are expected to use to assess the reasonableness of prices offered by service providers. Further detail on the issues that have been identified with the pricing methodologies, weighted average prices and financial information, is provided in Box 9.1.

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197 A contrary view was expressed by the AEMC in its 2017-18 review into the scope of economic regulation applied to covered pipelines. In short, the AEMC was of the view that on full regulation pipelines suers of reference services have direct access to reference tariffs and that this information, coupled with the access arrangement and other information published as part of the determination, provides a comprehensive set of financial information for users. The AEMC did not therefore recommend additional financial reporting for full regulation pipelines.

AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, p. 182.

198 This is particularly the case for financial information, where costs and revenues could, for example, be shifted between pipelines to artificially lower the reported rates of return. A service provider with full regulation and non-scheme pipelines could, for example, allocate all of its shared costs to Part 23 pipelines so that the return on assets reported for these pipelines is lower than what it would otherwise be if a more appropriate cost allocation method was used and a reasonable share of costs was attributed to full regulation pipelines.

199 For example, if a pipeline is subject to Part 23 and then becomes subject to full regulation and then reverts back to Part 23, then there will be gaps in the financial reporting over the period in which full regulation applied.

Box 9.1: Deficiencies in the reported information

As noted in Chapter 5, the following issues have been identified with:

- **Pricing methodologies**: Both the ACCC and respondents to the OGW survey found that the pricing methodologies published by most service providers did not contain sufficient information to enable shippers to understand how the standing prices had actually been calculated and therefore to assess the reasonableness of the standing prices.[200] To address this limitation, the ACCC suggested that, consistent with the GMRG's original recommendation, service providers be required to publish the inputs used to calculate the standing prices.[201] The ACCC also suggested the relevant regulator publish a guide to provide more guidance to service providers on what, at a minimum, the description of the pricing methods used to calculate standing prices should include. [202]
- **Financial information**: The Brattle Group found that, on its own, the financial information published by service providers was not sufficient to enable shippers to assess the reasonableness of prices. To address this limitation, the Brattle Group recommended that service providers also be required to report on the extent to which future costs are likely to be in line with historic costs.[203] The ACCC also suggested that service providers be required to report on the amount of capacity that was contracted and the volume of gas transported historically (by year), so shippers can calculate an effective price for services.[204]
- **Weighted average prices:** The ACCC found that the weighted average prices published by service providers of Part 23 pipelines may not be meeting their stated objective because they did not provide a good representation of the prices actually paid by shippers and in some cases were not directly comparable to the service providers' standing prices.[205] To address these limitations, the ACCC suggested that the requirement to report weighted average prices either be:[206]
  - replaced with a requirement to report the individual prices paid by each shipper; or
  - supplemented with a requirement to report information on the minimum and maximum prices paid for services.

  As noted in section 5.3.4, the ACCC did not have an opportunity to consult with stakeholders on these two options. It therefore recommended that they be consulted on as part of this Consultation RIS and that as part of this process, consideration be given to any impacts that the publication of individual prices may have on competition in other markets.

  Another issue that will need to be considered as part of this consultation process is whether the publication of individual prices or the price range, may reduce the incentive service providers have to offer prudent discounts[207] to shippers and, if so, how significant this issue is.

  While these options were not tested through the OGW shipper survey, some respondents did suggest that there may be value in publishing individual prices or the price range.[208]

As Box 9.1 highlights, the deficiencies that have been identified could limit the reliance that shippers can place on the reported information and hinder their ability to negotiate effectively with service providers. It may also make them more susceptible to exercises of

200 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 132-136.

201 ibid, p. 136.

202 ibid, p. 161.

203 Brattle Group, Financial Information Disclosed by Gas Pipelines in Australia Under Part 23 of the National Gas Rules, August 2019, p. 119.

204 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, p. 163.

205 ibid, p. 142.

206 ibid.

market power. SCO is therefore interested in hearing stakeholders' views on how significant an issue this is and the effect the deficiencies may be having on the ability of shippers to negotiate with service providers.

9.2.3 Quality and reliability of the information

As noted in section 5.3.1, the ACCC has expressed some concerns about the quality and reliability of the financial and weighted average price information reported by non-scheme pipelines and the detrimental effect that this could have on shippers. The ACCC, for example, noted in its July 2019 interim report that:[209]

> *"The effectiveness of the Part 23 is critically dependent on the provision of accurate information as the basis for commercial negotiations. Pipeline operators are required to publish a range of information, including standing prices, the methodology used to determine these prices, weighted average prices and financial information. This information is designed to reduce the information asymmetry and imbalance in bargaining power shippers can face in negotiations with pipeline operators, facilitating more timely and effective negotiations.*
>
> *The ACCC has identified some significant problems with the information published by pipeline operators to date, including instances where serious errors have been made and inflationary measures used. The publication of inaccurate information severely undermines the benefits of Part 23 and has the potential to mislead shippers in their negotiations with pipeline operators."*

The ACCC also expressed concerns about the access information standard, which applies to most of the information in Table 9.1, because it does not require service providers to update information if errors are identified. Rather, it only requires published information to be corrected if it is 'false or misleading in a material particular'.[210] This approach, differs from the approach used in other areas of the NGR, where errors are required to be corrected as soon as practicable after they have been identified. [211]

SCO is interested in hearing stakeholders' views on the concerns that have been raised about the quality and reliability of the reported information and the access information standard, and the effect they may have on the ability of shippers to negotiate effectively with service providers.

9.2.4 Accessibility of information and the ease with which it can be used

Concerns have been raised by shippers in the OGW survey (see Table 5.1) and by the ACCC[212] about the accessibility of the information that service providers of non-scheme pipelines and light regulation pipelines are required to publish. Shippers responding to the OGW survey, for example, noted that it can be difficult to locate the information because service providers present the information in different ways and in different locations on

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207 A prudent discount is a discount that is provided in response to competition from other providers of pipeline services or other sources of energy, or to maintain the efficient use of the pipeline and results in reference prices or equivalent tariffs being lower than they would otherwise have been.

208 OGW, Gas Shippers Survey, September 2019, p. 33.

209 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 27-28.

210 The subjective nature of this standard, coupled with the emphasis placed on materiality, means that a service provider could decide not to update information if it considers an error 'immaterial', even if not correcting the information could mislead shippers.

211 For example, a number of Bulletin Board and STTM provisions in the NGR require information to be updated as soon as practicable if the information is no longer accurate (e.g. rules 168, 169, 172, 187, 188, 190A, 190B, 190C and 378).

212 ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 128-164.

their websites.[213] Some respondents also claimed that information had been removed or changed by service providers during negotiations.[214] While these concerns were raised in the context of Part 23, similar concerns are likely to apply to full and light regulation, given the dispersion of information published on these pipelines (see Table 9.1). To address these concerns, the ACCC suggested that the AER publish a guide on how information is to be disclosed by service providers.

Another concern raised in the OGW survey was that shippers, particularly smaller shippers, are likely to face some difficulties and costs using the financial information that non-scheme pipelines and light regulation pipelines are required to publish.[215] This is because a significant amount of information is published and there is no readily accessible summary that shippers can have recourse to. Similar observations were also made by both the ACCC and the Brattle Group, both of whom suggested that steps be taken to improve the usability of the information (see sections 5.2-5.3). The ACCC and Brattle Group, for example, suggested that a summary tab be included in the relevant regulator's financial reporting template to bring together key information that are of most relevance to shippers in negotiations.[216]

SCO is interested in hearing from stakeholders on how significant the accessibility and usability issues outlined above are and the effect they may be having on the ability of shippers to negotiate effectively with service providers and search and transaction costs.

9.2.5 Exemptions

Exemptions are currently available from a number of the reporting obligations under Part 23 and under full and light regulation. Pipelines subject to Part 23 that are supplying a single shipper are, for example, able to obtain a full exemption from the obligation to publish information, while small pipelines are able to obtain an exemption from the obligation to publish all information except the pipeline information and pipeline service information.[217] Small distribution pipelines that are subject to full or light regulation are also exempt from the obligation to publish service availability information.

These exemptions were introduced because the costs of requiring service providers of single shipper and small pipelines to comply with the public information disclosure requirements were expected to outweigh the benefits.

While the exemptions were introduced to minimise the reporting burden, SCO is interested in hearing stakeholders' views on whether the exemptions have hindered shippers seeking access to these pipelines. SCO is particularly interested in whether the exemption that single shipper and small pipelines can obtain from the obligation to publish the following basic information (see Table 9.1 for more detail on this information) is acting as an impediment to shippers seeking access to these pipelines:

- pipeline service information;
- the standing terms for each service offered by the pipeline (including the standard terms and conditions, standing prices and method used to calculate standing prices);

213 OGW, Gas Shippers Survey, September 2019, p. 8.

214 ibid.

215 ibid, p. 9.

216 See ACCC, Gas inquiry report 2017-2020 Interim report, July 2019, pp. 161-164 and Brattle Group, Financial Information Disclosed by Gas Pipelines in Australia Under Part 23 of the National Gas Rules, August 2019, p. 121.

217 Note that the exemption is only from the obligation to publish and that prospective users of these pipelines can still seek the information during negotiations.

- the prices paid by other shippers for pipeline services;
- pipeline information;[218] and
- service availability information.[219]

Stakeholder feedback is also sought on whether the difference in size thresholds used for exemptions under Part 23 *vis-à-vis* full and light regulation is giving rise to any issues, or could in the future if it becomes easier to move between the forms of regulation.

9.3 How could the problems be addressed?

SCO has identified a number of potential solutions that could be implemented to address the issues set out in section 9.2 if they are found to be:

- hindering the ability of shippers to negotiate effectively;
- making shippers more susceptible to exercises of market power; and/or
- imposing unnecessary costs on shippers and/or service providers.

The potential solutions are in most cases based on the recommendations made by the ACCC, the Brattle Group and respondents to the OGW shipper survey (see Chapter 5 and Appendix B).

9.3.1 Limited information available on pipelines subject to full regulation

To reduce the information asymmetries faced by shippers seeking access to full regulation pipelines, the NGR could be amended to require service providers of these pipelines to publish:

- a description of all the reference and non-reference services offered by the pipeline (pipeline service information);
- the standing terms for non-reference services (i.e. the standing prices, standard terms and conditions and pricing methods used to calculate the standing prices);
- information on the prices paid by shippers for both reference and non-reference services;
- historic demand information for each service offered by the pipeline; and/or
- historic financial information for the pipeline on an annual basis in accordance with a financial reporting guideline published by the relevant regulator.

SCO is interested in stakeholders' views on these reporting requirements and, in particular, whether all the measures would be required, or a sub-set would be sufficient.

[218] Note that if the pipeline is a transmission pipeline with a nameplate rating greater than 10 TJ/day, some of this information may already be available through the Bulletin Board.

[219] ibid.

9.3.2 Information used to assess the reasonableness of prices

Pricing methodologies

To address the deficiencies the ACCC and respondents to the OGW shipper survey have identified with the pricing methodologies published by services providers, the NGR could be amended to require:

(a) service providers to publish the inputs used to calculate the standing prices; and/or

(b) the relevant regulator to publish a guideline that sets out what information, at a minimum, a service provider's description of the pricing methodology should include.

SCO is interested in stakeholders' views on these two options.

Financial information

To address the deficiencies the Brattle Group and the ACCC have identified with the financial information, the relevant regulator's Financial Reporting Guideline could be amended to require service providers to report:

- the extent to which future costs (e.g. costs over the next five years) are likely to be in line with historic costs; and
- historic information on the pipeline's contracted capacity and the volume of gas transported by the pipeline (by year).

SCO is interested in stakeholders' views on these two measures.

Weighted average prices

To address the deficiencies the ACCC has identified with weighted average prices, the NGR could be amended to require service providers to:

(a) report the individual prices (plus key terms and conditions) paid by each shipper rather than weighted average prices; or

(b) publish the weighted average prices for each service as well as the minimum and maximum prices paid for each service.

There are a number of potential benefits with option (a). It would, for example, provide shippers with more accurate information about the prices paid by other shippers for capacity, which they could then use in negotiations with service providers (this is likely to be particularly beneficial for smaller shippers who may be able to leverage off the bargaining power of larger shippers). This information could also be used to monitor whether service providers are engaging in inefficient price discrimination.

While this option offers a number of benefits, consideration will, as the ACCC noted (see section 5.3.4) need to be given to any impacts the publication of individual prices may have on competition in the markets in which shippers compete. Consideration will also need to be given to whether the publication of individual prices will reduce the incentives that service providers have to offer prudent discounts to shippers. SCO is therefore interested in shippers' and service providers' views on these two options and what, if any, effect they may have on competition in the market in which the shipper competes, or on service providers' incentives.

9.3.3 Quality and reliability of the information

To improve the quality and reliability of information reported by service providers, one or more of the following measures could be employed:

(a) the NGR could be amended to provide for greater regulatory oversight of the financial information reported by service providers and information on the prices paid by shippers, which could be facilitated by:

- giving the relevant regulator the power to require an independent review of a service provider's financial information, the costs of which would be borne by the service provider; and
- requiring service providers to provide the relevant regulator with access to the material relied upon to generate their financial information and, where relevant, the prices paid by shippers.

(b) the access information standard in the NGR could be amended to require service providers to update any information they are required to report as soon as practicable if the information is found to no longer be accurate;

(c) the penalties for breaches of the information disclosure obligations and standards set in the access information standard and Financial Reporting Guideline could be increased from their current levels of $100,000 for body corporates ($20,000 for individuals) to $1 million for body corporates ($200,000 for individuals); and/or

(d) the changes to the Financial Reporting Guideline identified by the ACCC and the Brattle Group (see Appendix B) could be implemented.

As an alternative to (a) the relevant regulator could be required to review the information before it is published, but this is likely to be quite resource intensive and could delay the publication of information.

SCO is interested in stakeholders' views on the measures outlined above and, in particular, whether all the measures would be required, or a sub-set would be sufficient.

9.3.4 Accessibility of information and the ease with which it can be used

To make the information reported by service providers more accessible:

(a) the NGR could be amended to require the relevant regulator to prepare a guideline that sets out where and how the information is to be presented on a service provider's website and, for compliance monitoring purposes, to require service providers to advise the relevant regulator when changes are made to the information;

(b) links to the information reported by service providers could be published on the relevant regulator's website, the Bulletin Board or the AEMC's scheme register; or

(c) all the information reported by service providers could be held in a single repository, which could be accessed via the relevant regulator's website, the Bulletin Board or the AEMC's scheme register.

Of the three options, option (a) is expected to be more cost effective than the other two options and should also make it easier for the relevant regulator to monitor compliance with the disclosure obligations and to see if any information is being removed or changed by service providers, as some shippers have contended (see Table 5.1).

While option (a) appears preferable to the other two options, SCO is interested in stakeholders' views on the three options.

9.3.5 Exemptions

Part 23 exemptions

If the exemptions available under Part 23 are found to be hindering access, then: [220]

(a) the exemptions could either be removed in their entirety; or

(b) the exemptions could be narrowed in scope by, for example, requiring all service providers to publish the following basic set of information that shippers can have recourse to if they are seeking access to a pipeline:

- a description of each of the services offered by the pipeline (pipeline service information);
- the standing terms for each service (i.e. the standing prices, standard terms and conditions and pricing methods used to calculate the standing prices);
- the prices paid by other shippers for pipeline services;
- pipeline information; and
- service availability information.

Note that option (a) could impose significant costs on service providers, particularly if it means they are required to publish financial information on an annual basis. In contrast, if the scope of the exemptions was narrowed to require these pipelines to report the basic information outlined above (which excludes the financial information), then the reporting and compliance costs would be lower.

SCO is interested in stakeholders' views on these two options and is also interested in whether all of the basic information outlined in option (b) is required by shippers, or if a sub-set of this information would be sufficient.

Size thresholds used for exemptions

If the lack of alignment in size thresholds used for exemption purposes is found to be a material issue, then

(a) the size threshold adopted under Part 23 could be aligned with the threshold used under full and light regulation, which is based on the nameplate rating and operating pressure; or

(b) the size threshold adopted for distribution pipelines under full and light regulation could be aligned with the threshold used under Part 23, which is based on average daily injections over the preceding 24 months.

One benefit of option (a) is that it would simplify the exemption process by bringing the threshold into line with that adopted in the Bulletin Board and the capacity trading reforms (both of which use a 10 TJ/day nameplate capacity threshold). There would, however, be some costs associated with making this change, because it would result in those non-

[220] Note that if third party access was mandated on all pipelines then these changes would also apply to the not providing third party access exemption under Part 23.

scheme pipelines that are below the current size threshold but have a nameplate capacity of 10 TJ/day or more being subject to all the reporting obligations.[221]

SCO is interested in stakeholders' views on the size threshold options.

9.3.6 Summary of potential options

Table 9.2 provides a summary of the options that could be implemented to address the problems identified in section 9.2. Note that this table does not contain an exhaustive list of solutions and stakeholders wishing to propose other solutions are encouraged to do so in their responses to the questions.

Further detail on how these potential solutions could form part of a broader regulatory package is provided in Chapter 11.

[221] If the pipeline was only used to service a single user then an exemption would still be available.

Table 9.2: Reform focus 3 – Summary of potential options

Problem		Potential solutions
Limited information available to shippers negotiating access to full regulation pipelines		1. Maintain the existing reporting requirements for full regulation pipelines (status quo). 2. Require full regulation pipelines to publish: ▪ a description of all the reference and non-reference services offered by the pipeline (pipeline service information); ▪ the standing terms for non-reference services (i.e. the standing prices, standard terms and conditions and pricing methods used to calculate the standing prices); ▪ information on the prices paid by shippers for each reference and non-reference service; ▪ historic demand information for each service offered by the pipeline; and ▪ historic financial information for the pipeline on an annual basis in accordance with a financial reporting guideline published by the relevant regulator.
Deficiencies in information used to assess the reasonableness of prices	**Pricing methodologies**	1. Maintain the existing approach to reporting on the pricing methods used to calculate standing prices(status quo). 2. Amend the NGR to require: (a) service providers to publish the inputs used to calculate the standing prices; and/or (b) the relevant regulator to publish a guideline that sets out what information, at a minimum, a service provider's description of the pricing methodology should include.
	Financial information	1. Maintain the existing approach for reporting historic financial information in the Financial Reporting Guideline (status quo). 2. Amend the Financial Reporting Guideline to require service providers to report: (a) on the extent to which future costs are likely to be in line with historic costs; and/or (b) historic information on the pipeline's contracted capacity and the volume of gas transported by the pipeline (by year).
	Weighted average prices	1. Maintain the existing approach to reporting on the prices paid by shippers for services (i.e. reporting the weighted average prices) (status quo). 2. Amend the NGR to require service providers to: (a) report the individual prices (plus key terms and conditions) paid by each shipper rather than weighted average prices; or (b) publish the weighted average prices for each service as well as the minimum and maximum prices paid for each service.
Quality and reliability of information reported by service providers		1. Maintain the existing approach (status quo). 2. Amend the NGR to provide for greater regulatory oversight of the financial information reported by service providers and information on the prices paid by shippers. 3. Amend the access information standard in the NGR to require service providers to update any information they are required to report as soon as practicable if the information is no longer be accurate. 4. Increase the penalties for breaches of the information disclosure obligations and standards set in the access information standard and Financial Reporting Guideline could be increased from their current levels of $100,000 for body corporates ($20,000 for individuals) to $1 million for body corporates ($200,000 for individuals). 5. Implement the changes to the Financial Reporting Guideline identified by the ACCC and the Brattle Group (see Appendix B). Note that options 2-5 could be implemented individually or as part of a package.

Problem	Potential solutions
Accessibility of information	1. Retain the existing approach (status quo). 2. Amend the NGR to require: (a) the relevant regulator to prepare a guideline that sets out where and how the information is to be disclosed and to require service providers to advise the regulator when changes are made; (b) links to the information reported by service providers to be published on the relevant regulator's website, the Bulletin Board or the AEMC's scheme register; or (c) all the information reported by service providers to be held in a single repository that could be accessed via the relevant regulator's website, the Bulletin Board or the AEMC's scheme register.
Usability of information	1. Retain the existing approach (status quo). 2. Include a summary tab in the relevant regulator's financial reporting template to provide a high level summary of the pipeline's key financial information, as well as information on the prices paid by other shippers and the standing prices for each service. 3. Require the relevant regulator to develop a template that could be used by shippers to calculate one or more the pricing benchmarks identified by the Brattle Group using the information published by service providers.
Part 23 exemptions	1. Retain the existing exemptions from the obligation to publish information (status quo). 2. Amend the NGR to either: (a) remove the exemptions from the obligation to publish information in their entirety; or (b) narrow the scope of the exemptions by requiring all service providers to publish a basic set of information (i.e. pipeline service information, standing terms, information on the prices paid by other shippers, pipeline information and service availability information).
Size threshold for exemptions	1. Retain the existing differences in size thresholds under the alternative forms of regulation (status quo). 2. Amend the NGR to either: (a) align the size threshold adopted under Part 23 with the size threshold adopted under full and light regulation, the Bulletin Board and the capacity trading reforms (i.e. nameplate capacity: 10 TJ/day); or (b) align the size threshold adopted for distribution pipelines under full and light regulation with the threshold adopted under Part 23 (i.e. average daily injections are less than 10 TJ/day over the preceding 24 months).

9.4 Questions for stakeholders

Box 9.2 sets out the questions SCO is interested in obtaining stakeholder feedback on.

Box 9.2: Questions on information disclosure requirements

21 Do you think the limited information available on full regulation pipelines is hindering the ability of shippers to negotiate access to non-reference services or having any other adverse effects (see section 9.2.1)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think this issue should be addressed by requiring full regulation pipelines to publish the following information:

(i) a description of all the reference and non-reference services offered by the pipeline (pipeline service information);

(ii) the standing terms for non-reference services (i.e. the standard terms and conditions, the standing prices and methods used to calculate standing prices);

(iii) information on the prices paid by shippers for each reference and non-reference service;

(iv) historic demand information for each service offered by the pipeline; and

(v) historic financial information for the pipeline on an annual basis in accordance with a financial reporting guideline published by the relevant regulator.

Please explain your responses to these questions.

22 Do you think the deficiencies that have been identified with the pricing methodologies and financial information published by service providers are limiting the reliance that shippers can place on this information and making them more susceptible to exercises of market power (see section 9.2.2)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think the deficiencies that have been identified with the pricing methodologies should be addressed by amending the NGR to require:

- service providers to publish the inputs used to calculate standing prices?
- the relevant regulator to publish a guideline on what information should be contained in the pricing methodology?

(c) Do you think the deficiencies that have been identified with the financial information should be addressed by requiring service providers to report on the extent to which future costs are likely to be in line with historic costs, and historic information on contracted capacity and volumes transported?

23 Do you think the deficiencies that have been identified with the weighted average prices are limiting the reliance that shippers can place on this information and making them more susceptible to exercises of market power (see section 9.2.2)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think the deficiencies should be addressed by requiring service providers to report:

(i) the individual prices (plus key terms and conditions) paid by each shipper rather than weighted average prices; or

(ii) the minimum and maximum prices paid for each service in addition to the weighted average prices?

If you are a shipper, please explain what, if any effect, the disclosure of individual prices may have on competition in the markets in which you compete.

If you are a service provider, please explain what effect the disclosure of individual prices or the price range may have on your incentive to offer prudent discounts to shippers.

24 Do you think the quality and reliability issues identified by the ACCC are limiting the reliance shippers can place on the information reported by service providers and making them more susceptible to exercises of market power (see section 9.2.3)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think this issue should be addressed by implementing one or more of the following measures:

(i) amending the NGR to provide for greater regulatory oversight of the information reported by service providers?

(ii) amending the access information standard in the NGR to require information to be updated as soon as practicable if the information is found to no longer be accurate?

(iii) increasing the penalties for breaches of the information disclosure obligations and the access information standard?

(iv) the changes to the Financial Reporting Guideline identified by the ACCC and the Brattle Group (see Appendix B) should be implemented?

Please explain your responses to these questions.

25 Do you think the current approach to reporting information should be maintained, or do you think:

(a) the NGR should be amended to require the relevant regulator to prepare a guideline that sets out where and how the information is to be disclosed on a service provider's website and to inform the regulator whenever changes are made?

(b) links to all the information reported by service providers should be published in a single location (e.g. the regulator's website, the Bulletin Board or AEMC register)?

(c) all the information reported by service providers should be made available through a single repository?

Please explain your response to this question and set out how significant you think the accessibility issue is for shippers.

26 Do you think, the current approach to reporting information should be maintained, or do you think the usability should be improved by requiring:

(a) a summary tab to be included in the financial reporting template to provide a high level summary of the key financial and pricing information; and/or

(b) a template to be developed to enable shippers to use the information published by service providers to calculate one or more the pricing benchmarks identified by the Brattle Group?

Please explain your responses to these questions and set out how significant you think the usability issue is for shippers.

27 Do you think the current exemptions from information disclosure under Part 23 should be retained, or do you think the scope should be amended to require exempt pipelines to publish a basic set of information?

If you think a basic set of information should be reported by all pipelines, what do you think it should include (e.g. pipeline service information, standing terms, the prices paid by other shippers, service availability and pipeline information)?

28 Do you think the size threshold used for exemptions under Part 23 should be retained, or do you think it should be aligned with the 10 TJ/day nameplate rating used for the purposes of full and light regulation, the Bulletin Board and the capacity trading reforms?

29 Are there any other problems with the information disclosure requirements or exemptions that have not been identified in this chapter, or changes you think should be made to address the information deficiencies, accessibility, usability, reliability and quality issues outlined in section 9.2? If so, please explain what they are.

10. Reform focus 4: Negotiation frameworks and dispute resolution mechanisms

Under the current regulatory framework, which is based on the negotiate-arbitrate form of regulation, the purpose of the negotiation framework is to facilitate timely and effective commercial negotiations between shippers and service providers. The purpose of the dispute resolution mechanism, on the other hand, is to:

- constrain the exercise of market power by service providers during negotiations by providing for a credible threat of intervention by a dispute resolution body if negotiations fail; and
- enable those disputes that cannot be resolved through negotiations to be resolved in a cost-effective and efficient manner.

Like the information disclosure requirements, some steps have been taken over the last two years to strengthen the negotiation frameworks and dispute resolution mechanisms applying to scheme and non-scheme pipelines. It would appear, however, from the recent reviews of the regulatory framework outlined in Chapters 4-5, that some aspects of the negotiation frameworks and dispute resolution mechanisms may not be working as intended and, as a consequence may be:

(a) hindering the ability of shippers to negotiate effectively with service providers;

(b) making shippers more susceptible to exercises of market power; and/or

(c) imposing unnecessary costs and risks on shippers and/or service providers.

The problems that have been identified are discussed in further detail in the remainder of this chapter, which commences with an overview of the existing negotiation frameworks and dispute resolution mechanisms applying under the various forms of regulation. The chapter then sets out the potential problems that have been identified with these aspects of the regulatory framework and the ways in which these problems could be addressed. It also sets out a number of questions SCO is interested in obtaining feedback on.

Note that the discussion in this chapter assumes that the negotiate-arbitrate model will be retained under the various forms of regulation. If this changes as a result of the adoption of any of the options outlined in Chapter 8 (for example, if full regulation moves to direct price control), then some of the options contemplated in this chapter may not be required.

10.1 What is the current situation?

The regulatory framework currently provides for both:

- a regulatory-oriented negotiate-arbitrate model, which is applied under full and light regulation; and
- a commercially-oriented negotiate-arbitrate model, which is applied under Part 23.

Table 10.1 provides an overview of the negotiation frameworks and dispute resolution mechanisms applying under these two negotiate-arbitrate models, while Box 10.1 sets out the pricing principles the relevant dispute resolution body must have regard to under the two negotiate-arbitrate models.

Table 10.1: Key differences between negotiation and dispute resolution mechanisms

		Full and light regulation	Part 23
Negotiation frameworks			
Negotiation process	User access guide	n.a.	Service providers must publish a user access guide to assist shippers seeking access to the pipeline (rule 558 of NGR).
	Access request	Shippers may make access requests, which must be in writing and contain the information set out in rule 112 of NGR.	Shippers may make preliminary enquiries before an access request. Access requests must be in writing and include the information "reasonably required" for the service provider to respond (rule 559 of NGR).
	Access offer	Service providers must respond in accordance with the timeframes set out in rule 112 of NGR (i.e. access proposal required in 25 business days if no further investigation required or 40 business days if investigations are required - these times can be extended by agreement).	Service providers must respond to access requests in accordance with the timeframes set out in rule 560 of NGR (i.e. response required in 20 business days if no further investigation required or 60 business days if investigation required – these times can be extended by agreement).
	Negotiation	The number of days each party has to respond following the access request and response process are set out in rule 112 of NGR. This rule also states that if the service provider's proposal is not agreed to within the specified time, the service provider is taken to have rejected the request. This can act as the trigger for a dispute.	A shipper that has made an access request under rule 559 of NGR may by notice to the service provider request negotiations. If a notice is issued, the parties must agree on a timetable for negotiations and comply with the exchange of information provisions (rule 561 of NGR). They must also negotiate in good faith (s.216G of NGL) .
	Ability of shipper to seek additional information	There is no formal process for a shipper to seek information from a service provider during negotiations, but rule 107 of NGR allows the relevant regulator, at the shipper's request, to issue a notice to a service provider requiring them to provide the shipper with information if it is reasonably required to decide whether to seek access to a service.	Shippers are able to request information from service providers during negotiations and service providers must comply with the request (unless to do so would breach a confidentiality obligation or a third party has not given consent to the disclosure) within 15 business days (or longer if agreed). Service providers must comply with the access information standard when providing information (rule 562 of NGR).
Dispute resolution mechanisms			
Forms of dispute resolution		Mediation, conciliation, alternative dispute and arbitration (s. 185 of NGL)	Arbitration (Ch. 6A, Part 3 of NGL)
Dispute resolution body		AER and Energy Disputes Arbitrator for WA disputes	Commercial arbitrator selected from pool established by relevant regulator
Availability of arbitration		Dispute resolution is available when a shipper is seeking access, when an existing shipper is seeking to add a new service to an existing contract or when an existing shipper seeks a new contract to take effect on expiry of an existing GTA. It is not, however, available for disputes about existing services or extensions.	
Process	Dispute trigger	A dispute notice may be given by either party if agreement cannot be reached (s. 181 of NGL) within the timeframes specified in the NGR (rule 112)..	A dispute notice may be given by either party if agreement cannot be reached if an access request has been made under Part 23 (rule 564 of NGR)
	Joint disputes	Joint dispute hearings may be held.	n.a.
	Termination of disputes	Disputes may be terminated if the dispute resolution body (arbitrator) considers: (i) the dispute notices is vexatious; (ii) the subject matter is trivial, misconceived or lacking in substance; and (iii) the party who notified the dispute did not negotiate in good faith (ss. 186 and 216O of the NGL).	
		The dispute resolution body may refuse to make an access determination if it considers the pipeline service could be provided on a genuinely competitive basis by another service provider (s. 187 of NGL).	The arbitrator may also terminate the dispute if there is some other good reason why it should not proceed or the shipper is not engaging in the arbitration in good faith (s. 216O of NGL).

		Full and light regulation	Part 23
Principles to be applied by dispute resolution body		The dispute resolution body must: ▪ where relevant, give effect to an AA (s. 189 of NGL) ▪ exercise its functions and powers in manner that will, or is likely to, contribute to the NGO and must also take into account the revenue and pricing principles in s. 24 of the NGR (see Box 10.1 for more detail) (s. 28 of the NGL)	The arbitrator must take into account: ▪ the principle that access must be on reasonable terms (i.e. terms that, so far as practicable, reflect the outcomes of a workably competitive market) ▪ the pricing principles in rule 569 of the NGR (see Box 10.1 for more detail) ▪ the operational and technical requirements necessary for the safe and reliable operation of the pipeline. The arbitrator *may* also take into account other factors in rule 569 of the NGR, such as the legitimate business interests of service providers and users.
Other	Time frames	The dispute resolution body "must act as speedily as a proper consideration of the access dispute allows" (s. 198 of NGL)	The arbitrator must make a final access determination within 50 business days (or up to 90 business days in certain circumstances) (rule 572 of NGR)
	Binding nature of decision	Binding on service providers and shippers (s. 195 of NGL)	The determination is binding on service providers but not the shipper (s. 216Q of NGL). If the shipper decides not to take up the service, it is prohibited from seeking an arbitration for the same or a substantially similar service for up to 1 year (rule 573 of NGR)
	Information to be published	Not specified	Summary information published on the pipeline and services subject to dispute, the parties to the dispute (if agreed by shipper), the arbitrator's name, the duration of the arbitration proceedings, the asset value and valuation method used (where applicable), and whether the shipper entered into a contract that reflected the final determination (rule 581 of NGR)
Costs of arbitration		Parties bear their own costs, but the dispute resolution body can order a party to pay all or a part of the costs of another party in the dispute (s. 206 of NGL) if it is satisfied that it is fair to do so, having regard to whether a party has conducted the dispute hearing in a way that unnecessarily disadvantaged another party (e.g. by failing to comply with an order, the NGL, NGR or Regulations; causing an adjournment; attempting to deceive the other party or dispute resolution body; or behaving vexatiously) (s. 206 of NGL). The dispute resolution body can also recover its costs and apportion the costs between the parties (cl. 9 of the Regulations)	Parties bear their own costs (s. 216V of the NGL). The costs of the arbitration (e.g. arbitrator fees, experts, room hire) to be shared equally unless arbitrator decides otherwise (rule 580 of NGR), which could occur for similar reasons to those applying to cost orders under full and light regulation and could also occur if a shipper, elects not to enter into an access contract.

Box 10.1: Pricing principles applying to disputes

Revenue and pricing principles applying to full and light regulation pipelines

When making a pricing related access determination for full and light regulation pipelines, the dispute resolution body must take into account the following revenue and pricing principles set out in section 24 of the NGL:

- A service provider should be provided with a reasonable opportunity to recover at least the efficient costs the service provider incurs in:
  (a) providing reference services; and
  (b) complying with a regulatory obligation or requirement or making a regulatory payment.
- A service provider should be provided with effective incentives to promote economic efficiency with respect to the reference services the service provider provides. The economic efficiency that should be promoted includes:
  (a) efficient investment in, or in connection with, a pipeline with which the service provider provides reference services; and
  (b) the efficient provision of pipeline services; and
  (c) the efficient use of the pipeline.
- Regard should be had to the capital base adopted in any previous full AA decision (or decision by the relevant regulator under the Gas Code) or in the NGR.
- A reference tariff should allow for a return commensurate with the regulatory and commercial risks involved in providing the reference service to which that tariff relates.
- Regard should be had to the economic costs and risks of the potential for under and over investment by a service provider in the pipeline.
- Regard should be had to the economic costs and risks of the potential for under and over utilisation of a pipeline with which a service provider provides pipeline services.

The dispute resolution body is also required to apply the relevant regulator's binding rate of return instrument.

Pricing principles under Part 23

When making a pricing related determination under Part 23, the arbitrator must have regard to the following pricing principles set out in rule 569 of the NGR:

(1) The price for access to a pipeline service on a non-scheme pipeline should reflect the cost of providing that service, including a commercial rate of return that is commensurate with the prevailing conditions in the market for funds and reflects the risks the service provider faces in providing the pipeline service. For the purposes of this rule:
  (a) the value of any assets used in the provision of the pipeline service must be determined using asset valuation techniques consistent with the objective of Part 23 (i.e. to facilitate access to pipeline services on reasonable terms, which is taken to mean at prices and on other terms and conditions that, so far as practical reflect the outcomes of a workably competitive market); and
  (b) unless inconsistent with paragraph (a), the value of any assets used in the provision of the pipeline service is to be calculated using the recovered capital method (i.e. the construction cost plus capital expenditure since commissioning less the return of capital recovered and the value of pipeline assets disposed of since commissioning).

(2) When applying the principle in paragraph (1) to a pipeline service that when used affects the capacity of the non-scheme pipeline available for other pipeline services and is priced at a premium or a discount to the price for a firm haulage service on the relevant non-scheme pipeline – the premium or discount must:
  (i) take into account any opportunity cost or benefit to the service provider of providing the pipeline service, having regard to any effect on the cost of providing firm haulage services or the capacity of the non-scheme pipeline; and
  (ii) be consistent with the price for the pipeline service providing a reasonable contribution to joint and common costs.

Why different pricing principles were adopted under Part 23

The rationale for adopting different pricing principles under Part 23 is reflected in the following statement made by the GMRG in its final recommendations on the design of this framework:[222]

> *"…the objective of the new framework is to pose a constraint on the exercise of market power by pipeline operators by facilitating access to the services provided by these pipelines on reasonable terms. The term 'reasonable' is taken in this context to mean at prices and on terms and conditions that, so far as practical, reflect the outcomes of a workably competitive market.*
>
> *In a workably competitive market, rivalry between competing firms can be expected in the longer-run to drive prices down to a cost reflective level, where firms are covering their costs plus a rate of return that reflects the risk faced by the firm. In keeping with this concept, the final design provides for the adoption of cost reflective pricing principles… In the GMRG's view, the cost reflective pricing principles (which provide for the recovery of a commercial rate of return that reflects the risks faced by the pipeline operator) are consistent with what would occur in a workably competitive market. They should also preserve incentives for investment and innovation in pipelines, which shippers have made clear is of considerable importance to the market. While some pipeline operators have characterised the adoption of cost reflective pricing principles as a "quasi regulatory" approach, it is consistent with what would occur in a workably competitive market.*
>
> *…*
>
> *The GMRG has also considered the suggestion by some stakeholders that greater guidance be provided to the arbitrator on how the cost-reflective pricing principles are to be applied. While the GMRG can see merit in providing the arbitrator with some additional guidance on asset valuation, the intention is not…to mirror the regulatory arrangements applying to full regulation pipelines. The GMRG is not therefore recommending the adoption of prescriptive pricing principles and will allow the arbitrator to have some discretion on how it applies the principles."*

As Table 10.1 and Box 10.1 reveal, there are a number of differences between the negotiation frameworks and dispute resolution mechanisms applying under the two negotiate-arbitrate models. In most cases, these differences are by design; reflecting both the nature of the negotiate-arbitrate models (i.e. regulatory- or commercially-oriented) and the intent in implementing the two models.

The commercially-oriented model adopted under Part 23, for example, was implemented in response to the feedback shippers provided to Dr Vertigan's Examination, which was that they were not looking for a traditional regulatory solution. Rather, they wanted a mechanism to be put in place that would facilitate more timely and effective commercial negotiations between shippers and service providers and to reduce the imbalance in bargaining power shippers can face in these negotiations.[223] A decision was therefore made to implement a more commercial dispute resolution mechanism, which provided for a credible threat of intervention if negotiations broke down and the timely resolution of disputes that proceeded to arbitration.[224] Interestingly, the model adopted under Part 23 is similar to what the Productivity Commission originally proposed, when it recommended the introduction of a lighter handed form of regulation in 2004 (see Box 10.2).

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222 GMRG, Final Design Recommendation: Gas Pipeline Information Disclosure and Arbitration Framework, June 2017, pp. 9-10.

223 Vertigan, M., Examination of the current test for the regulation of gas pipelines, 14 December 2016, p. 78

224 COAG Energy Council, Meeting Communique, 14 December 2016.

Box 10.2: Productivity Commission's proposed use of a commercially-oriented arbitration mechanism

The decision to adopt a commercially-oriented arbitration mechanism under Part 23 is consistent with what the Productivity Commission originally proposed in 2004 when it recommended the introduction of a lighter handed form of regulation for pipelines that are not exerting substantial market power. At the time, the Productivity Commission recommended that service providers subject to this lighter handed form of regulation be required to disclose a range of information and be subject to a binding commercial arbitration mechanism. In doing so, the Productivity Commission noted that: [225]

> *"Commercial arbitration is likely to avoid the costs and delays associated with a costly building block approach because:*
>
> - *the rules governing arbitration are those used in commercial circumstances (perhaps according to a commercial arbitration act and/or through an arbitration and mediation organisation)*
> - *the incentives facing parties are different to those when the regulator is arbitrating according to a complex set of pricing principles."*

While the Productivity Commission advocated the use of a commercially-oriented mechanism, the MCE decided in 2006 to utilise the existing dispute resolution mechanism in the Gas Code for the lighter handed option. This resulted in the application of a regulatory-oriented dispute resolution mechanism.[226]

Consistent with the decision to adopt a commercially-oriented mechanism, the dispute resolution mechanism in Part 23 provides for:

- access disputes to proceed immediately to arbitration, rather than to mediation, conciliation or another alternative form of dispute resolution available under full and light regulation;
- the dispute to be heard by a commercial arbitrator rather than a regulator;
- the arbitrator to have regard to workably competitive market-based pricing principles rather than economic efficiency-based pricing principles;
- arbitrations to be completed within a specified number of days (i.e. 50-90 business days), rather than by reference to a principle that the dispute resolution body act "as speedily as possible as the resolution of the dispute allows"; and
- limited information about the outcome of an arbitration to be made public.[227]

Setting aside these more fundamental differences, there are a number of other important differences between the negotiation frameworks and dispute resolution mechanisms that are unrelated to the nature of the negotiate-arbitrate models. The negotiation frameworks, for example, differ in terms of:

- the requirement for service providers to publish a user access guide;
- the access request, offer and negotiation processes (including response times);
- how shippers can seek additional information during negotiations;
- the trigger for initiating access disputes; and
- the requirement to report on the status of negotiations to the relevant regulator.

[225] Productivity Commission, Review of the Gas Access Regime, 11 June 2004, p. 336.

[226] MCE, Review of the National Gas Pipelines Access Regime, May 2006, p. 13.

[227] Note that in commercial arbitrations the arbitrator's decisions are not typically made public.

The dispute resolution mechanisms, on the other hand, differ in terms of the extent to which an access determination is binding on a shipper and the ability of the dispute resolution body to award costs against a party.

10.2 What are the potential problems?

As noted in the introduction to this chapter, it would appear from the recent reviews of the regulatory framework outlined in Chapters 4-5, that some aspects of the negotiation frameworks and dispute resolution mechanisms may not be:

- effectively constraining the exercise of market power by service providers;
- facilitating timely and effective commercial negotiations; and
- enabling disputes to be resolved in a cost-effective and efficient manner.

In particular, it would appear that:

(a) differences between the existing negotiation frameworks may be causing confusion amongst shippers, giving rise to unnecessary costs and delays and/or impeding the ability of shippers to negotiate effectively with service providers;

(b) the credibility of the threat of arbitration may not be as strong for smaller shippers as it is for other shippers, which may make them more susceptible to exercises of market power by service providers; and

(c) the dispute resolution mechanism applying under full and light regulation may not be as credible as it could and may not therefore be posing a constraint on the behaviour of service providers in negotiations.

Conflicting views have also been expressed by shippers about the effectiveness of the pricing principles under Part 23.

Further detail on these issues is provided below. As with other aspects of the RIS, it is unclear at this stage how significant these potential problems are. SCO is therefore interested in stakeholders' views on the significance of the issues raised in this section and the effect they may have on shippers and service providers.

10.2.1 Differences between the negotiation frameworks applying under the alternative forms of regulation

A number of amendments have been made to the NGL and NGR over the last two years to strengthen the negotiation frameworks applying under the two negotiate-arbitrate models and to provide shippers and service providers with greater clarity about their rights and obligations in negotiations. While improvements have been made, there is a concern that the differences that currently exist between the two negotiation frameworks could cause confusion, impose unnecessary costs on the negotiating parties and/or hinder the ability of shippers to engage in effective negotiations.

As Table 10.1 shows, some of the more notable differences between the two negotiation frameworks relate to:

- the obligation to publish a user access guide;[228]
- the access request and offer process and, in particular, the number of business days that service providers have to respond to access requests;[229]
- the way in which the negotiation timetable is established[230] and the manner in which negotiations are to be conducted[231] and concluded;[232] and
- the ability of shippers to seek additional information during negotiations.[233]

These differences appear to have arisen because the negotiation frameworks have been developed at different times.

Another potential problem that the ACCC has identified with the Part 23 negotiation framework is that shippers' requests are often treated as 'preliminary enquiries', rather than access requests.[234] As the ACCC noted, the treatment of shipper requests in this way means that service providers can avoid some of the rules in Part 23 that set out how they are to respond to access requests (including response times). It can also delay a shipper's access to arbitration if negotiations fail. This is because to trigger a dispute under Part 23, a formal access request must be made and the parties must have gone through the negotiation process set out in Part 23 of the NGR.

SCO is interested in hearing stakeholders' views on how significant these issues are.

10.2.2 Credibility of the threat of arbitration for smaller shippers

In its review of the operation of Part 23, the ACCC noted the potential for the threat of arbitration to be viewed as less credible when it comes from smaller shippers that are negotiating directly with service providers. This is because the cost to these shippers of triggering an arbitration may outweigh the benefits.[235]

228 Service providers of non-scheme pipelines are currently required to publish a user access guide, the intent of which is to provide prospective shippers with information on how to make an access request and the rights and duties of parties in negotiations. The same obligation does not, however, extend to full and light regulation pipelines even though shippers are expected to negotiate access to these pipelines.

229 For example, service providers of non-scheme pipelines have 20-60 business days to respond to a shipper's request (depending on whether further investigations are required), while under full and light regulation they have 25-40 business days to respond.

230 For example, under Part 23 the timetable must be agreed between the parties, while under full and light regulation the time lines are specified in the NGR (although these may be extended by agreement).

231 For example, shippers and service providers negotiating access to non-scheme pipelines are required by section 216G to negotiate in good faith, but the same explicit obligation does not apply under full and light regulation.

232 For example, under full and light regulation if a service provider's proposal is not agreed to within the time specified in Part 11 of the NGR, the service provider will be taken to have rejected the request, which then acts as the trigger for a dispute. A similar provision has not been adopted under Part 23.

233 Service providers of non-scheme pipelines can request information from the service provider on any aspect of the matters being negotiated. Service providers are then required to respond within 15 business days (or longer if agreed to by the shipper). The obligation to respond is classified as both a conduct provision and a civil penalty provision, so if a service provider fails to respond, the shipper can either take action itself or report the non-compliance to the relevant regulator. In contrast to Part 23, if a service provider of a full or light regulation pipeline fails to respond to a shipper's request for information, the shipper must ask the relevant regulator to issue a notice to the service provider requiring the information to be provided (which it can refuse to do in certain circumstances).

234 ACCC, Gas inquiry 2017-2020 Interim report, July 2019, p. 156.

235 ibid, p. 157.

Similar concerns were also raised by user groups during the development of Part 23. The Major Energy Users (MEU), for example, noted that the proposed dispute resolution mechanism could act as a:[236]

> *"…barrier to smaller gas users to access the process due to the costs involved in the process compared to the likely reward a small user might gain from obtaining a benefit from the process. This provides the service provider with the continued ability to retain monopoly rents."*

The EUAA also expressed some concerns about the ability of smaller shippers to negotiate and credibly threaten arbitration because they do not have access to the same financial resources and internal capabilities as service providers and larger shippers.[237]

As the ACCC and MEU noted, if the threat of arbitration is not considered credible, then smaller shippers may be more susceptible to exercises of market power by service providers. They may therefore be required to pay more for transportation services (or be subject to more onerous terms and conditions) than their larger counterparts, as the ACCC observed in its review of the operation of Part 23.[238]

SCO is interested in hearing from stakeholders on how significant this issue is and the effect it may be having on smaller shippers. SCO is also interested in whether:

- there are any other groups of shippers for whom the threat of arbitration may not be considered credible by service providers; and
- there are any other factors that may discourage shippers from threatening the use of arbitration.

10.2.3 Effectiveness, efficiency and credibility of the dispute resolution mechanism applying under full and light regulation

In the AEMC's 2017-18 Economic regulation review, concerns were raised about a number of aspects of the dispute resolution mechanism applying under full and light regulation. Concerns were, for example, expressed about the limited guidance provided in the NGL and/or the NGR about:

- the matters to be considered by the dispute resolution body in an arbitration, which the AEMC noted could increase the uncertainty of arbitration outcomes and, in so doing, reduce the credibility of the threat of arbitration in negotiations;[239]
- how the asset value would be determined for light regulation pipelines, which the AEMC noted could give rise to unnecessary costs and uncertainties and hinder negotiations;[240]
- the process for advising market participants of the existence of a dispute and joining other parties to a dispute, which the AEMC noted could limit the effectiveness of the

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236 MEU, Gas Pipeline Information Disclosure and Arbitration Framework Proposed Initial National Gas Rules, 20 July 2017, p. 4. See also MEU, Gas Pipeline Information Disclosure and Arbitration Framework Response to Implementation Options paper, 10 April 2017.

237 EUAA, Submission on Gas Pipeline Information Disclosure and Arbitration Framework, 20 July 2017 and EUAA, Submission on GMRG Options Paper, April 2017.

238 ACCC, Gas inquiry report 2017-2020 Interim Report, July 2019, p. 157.

239 AEMC, Final Report: Review into the scope of economic regulation applied to covered pipelines, 3 July 2018, pp. 207-208.

240 ibid, pp. 151-152.

joint dispute provisions and, in turn, the credibility of the threat that joining may otherwise provide to the disputing parties and others in negotiations;[241]

- the role of the dispute resolution expert in providing advice, the process for appointing such an expert and using the expert's evidence, which the AEMC noted could affect the efficiency of the dispute resolution mechanism and the ability to reach a timely resolution of the dispute;[242]
- the timeframes for the dispute resolution process, which the AEMC noted could deter parties from triggering a dispute and, in so doing, reduce the credibility of the threat of arbitration in negotiations;[243] and
- the information to be published on the outcome of an arbitration, which the AEMC noted could limit the accountability of the parties involved and the precedent value of the dispute resolution body's determination.[244]

Another potential issue that has been identified with the dispute resolution mechanism applying under full and light regulation is that the dispute resolution body's access determination is binding on both parties.[245] This is in direct contrast to the approach adopted under Part 23, where the access determination is binding on the service provider but is only binding on the shipper if it decides to enter into a contract that gives effect to the access determination. If the shipper decides not to enter into such a contract, then it is prohibited by the rules from seeking arbitration in relation to the same or a substantially similar service for a period of one year.

A different approach was adopted in Part 23 because concerns were raised during the development of Part 23 about the potential for an arbitrator's access determination to cause a shipper financial distress.[246] While a similar risk exists under full and light regulation, the access determination is binding on shippers.[247] It is possible therefore that this feature of the dispute resolution mechanism could discourage shippers from triggering an access dispute on a full or light regulation pipeline.

10.2.4 Part 23 pricing principles

As noted in Table 5.1, respondents to the OGW shipper survey were supportive of the workably competitive market objective that underpins Part 23. Conflicting views were, however, expressed about whether the pricing principles provide sufficient guidance as to what an arbitrator would hand down, with approximately 30% of respondents saying it provided sufficient guidance, 20% saying it did not provide sufficient guidance and 50% saying they were not sure.[248]

Respondents to the OGW survey also expressed conflicting views about how the pricing principles should be changed, with some suggesting more detail should be provided on how the key inputs are determined (e.g. the asset value and the rate of return) and to

241 ibid, p. 220.

242 ibid, pp. 205-206.

243 ibid, p. 211.

244 ibid, p. 217.

245 See s. 195 of the NGL.

246 GMRG, Gas Pipeline Information Disclosure and Arbitration Framework: Implementation Options Paper, March 2017, p. 69.

247 See s. 195 of the NGL.

248 OGW, Gas Shippers Survey, September 2019, p. 8.

prohibit service providers from recovering more than the cost of providing the service. [249] Other respondents, on the other hand, thought the existing principles were too regulatory in nature and should be more commercially focused.[250]

The conflicting views expressed by shippers is not surprising given the pricing principles:

- have only been in place for two years and have only been employed in one arbitration;[251] and
- were designed to provide some stakes in the ground if an arbitration occurred, while also providing for some uncertainty in the outcome to try and incentivise the parties to negotiate and reach a commercial agreement, rather than relying on arbitration as a matter of course.

While not surprising, the differences in views, when coupled with the fact that the principles have only been in place for two years, makes it difficult to determine whether there is a problem with the Part 23 pricing principles and, if so, how significant this problem is and what the consequences might be. No changes to the pricing principles are therefore being contemplated as part of this Consultation RIS. SCO is nevertheless interested in hearing from stakeholders on the Part 23 pricing principles. SCO is also interested in whether stakeholders think:

- the changes contemplated in Chapter 8, which will make it easier to transition to a heavier handed form of regulation, will impose more of a constraint on service providers of non-scheme pipelines and therefore limit the need to amend the pricing principles; and/or
- there would be value in providing greater clarity in Part 23 about how:
    - prior regulatory decisions are to be accounted for by an arbitrator, in those cases where a pipeline has previously been subject to full regulation, particularly if it becomes easier to move between forms of regulation;[252] and
    - shared costs are to be allocated between other assets that are operated by the service provider and between the services offered by the pipeline.

10.3 How could the problems be addressed?

SCO has identified a number of ways the potential problems identified in section 10.2.1-10.2.3 could be addressed, which are outlined in further detail below. SCO is interested in hearing stakeholders' views on the alternatives outlined in this section and if there are any other alternatives that should be considered.

10.3.1 Options to address the differences in negotiation frameworks

If the differences in negotiation frameworks is found to be imposing unnecessary costs and delays on parties and/or hindering the ability of shippers to negotiate effectively, then one potential solution would be to adopt a single negotiation framework that would apply under all forms of the negotiate-arbitrate model.

[249] ibid, pp. 43-46.

[250] ibid.

[251] The principles were used in Tasmanian Gas Pipeline and Hydro Tasmania arbitration.

[252] For example, Part 23 could potentially be amended to require an arbitrator to use the asset value determined by a regulator, if such a value has already been determined.

A single negotiation framework could take a number of different forms. It could, for example, be based on the framework that currently applies to scheme pipelines, or the framework that applies to non-scheme pipelines (see Table 10.1). It could also be based on a hybrid of the two frameworks, drawing on the best elements of each. The hybrid option could, for example:

- require all service providers to publish a user access guide (i.e. so that shippers have a better understanding of the process for seeking access);
- adopt the same access request, access offer and negotiation timelines that have recently been implemented for scheme pipelines;
- provide for shippers to obtain additional information during negotiations in the same manner as that currently provided for under Part 23; and
- adopt the same trigger for access disputes that has recently been implemented for scheme pipelines.[253]

Of the three options, the hybrid option is likely to facilitate more timely and effective negotiations than the other two options. It would also address the concerns that the ACCC has raised about the preliminary enquiry process, because this process would not be adopted under the hybrid approach. While there are number of benefits associated with the hybrid option, SCO is interested in hearing stakeholders' views on the other two options.

10.3.2 Options to strengthen the threat of arbitration for smaller shippers

As noted in section 10.2.2, concerns have been raised about the potential for service providers not to view the threat of arbitration by smaller shippers as credible and for smaller shippers to therefore be more susceptible to exercises of market power.

Before considering whether any specific measures are required to address this issue, it is worth noting that if it becomes easier for pipelines to move from lighter handed to heavier handed forms of regulation (see Chapter 8) then this should pose more of a constraint on service providers when dealing with smaller shippers. Implementing some of the measures outlined in Chapter 9 can also be expected to strengthen the position of smaller shippers in their negotiations with service providers. For example:

- if service providers are required to publish individual prices or the minimum and maximum prices paid by shippers, then smaller shippers could use this information as a starting point for their own negotiations and, in so doing, 'leverage off' the bargaining power of larger shippers; and
- if improvements are made to the usability and accessibility of the information that service providers are required to disclose, this would reduce the information asymmetries faced by smaller shippers and strengthen their position in negotiations.

Additionally, it may be possible to implement some specific measures to strengthen the position of smaller shippers in a dispute. For example, if the cost provisions are perceived to be more of a risk by smaller shippers, then this could potentially be addressed by amending the NGL and/or NGR to prevent the dispute resolution body from:

[253] That is, if an agreement is not reached within a specified number of days (note the parties can agree to extend the day count) then the shipper's request is taken to have been rejected by the service provider and a dispute can be triggered.

- awarding a service provider's costs against the smaller shipper, which is currently possible under full and light regulation; and
- making smaller shippers pay more than half the dispute resolution body's costs.

The commercially-oriented negotiate-arbitrate model in Part 23 could also be amended to:

- allow user groups to intervene in arbitral proceedings involving smaller shippers (i.e. to strengthen the position of the smaller shipper); and/or
- provide smaller shippers the option of having the dispute heard by the regulatory dispute resolution body (i.e. the AER or the Energy Disputes Arbitrator in WA) or a commercial arbitrator.

In relation to the latter option, it is worth noting that even if the smaller shipper decided to use a commercial arbitrator, the threat of involving the regulatory dispute resolution body could pose more of a constraint on service providers in negotiations, particularly if that body is able to refer pipelines for a form of regulation assessment (see Chapter 8).

If any of these specific measures were implemented, a definition of 'smaller shipper' would need to be developed to ensure they are appropriately targeted. SCO is interested in hearing stakeholders' views on a size threshold that could be adopted for this purpose. It is also interested in stakeholders' views on the measures outlined above.

10.3.3 Options to improve the effectiveness, efficiency and credibility of the dispute resolution mechanism applying under full and light regulation

The AEMC's 2017-18 Economic regulation review set out a number of recommendations on how to address the concerns outlined in section 10.2.3. These recommendations are summarised in Table 10.2 along with some additional options that have been identified during the development of the Consultation RIS. SCO is interested in stakeholders' views on the options set out in this table.

Table 10.2: Options to improve full & light regulation dispute resolution mechanism

Feature	Summary of the potential problem	Options to address the problem
Matters to be considered by the dispute resolution body	The NGL provides limited guidance on the matters to be considered by the dispute resolution body in an arbitration, which could reduce the credibility of the threat of arbitration	This issue could be addressed by implementing the AEMC's recommendation, which is to amend the NGL to require the dispute resolution body to have regard to the NGO, the revenue and pricing principles,[254] an applicable AA (where relevant), previous AAs or access determinations, pre-existing contractual rights and the price and revenue regulation provisions in Part 9 of the NGR.
Joint dispute hearings	The current joint dispute provisions in the NGL do not do enough to facilitate joint dispute hearings.	This issue could be addressed by implementing the AEMC's recommendation, which is to amend the NGL to require the existence of a dispute to be made public and to set out the process for joining parties.
Role of dispute resolution expert	There is some confusion about the role a dispute resolution expert could play in a dispute.	This issue could be addressed by implementing the AEMC's recommendation, which is to provide additional guidance in the NGL on the role of the dispute resolution expert, the process for appointing such an expert and using the evidence or reports that the expert provides.

[254] Note s. 28 of the NGL already requires the dispute resolution body to have regard to the NGO and revenue and pricing principles.

Feature	Summary of the potential problem	Options to address the problem
Timeframes for access determinations	The NGL does not specify the time within which an access determination must be made, which could deter shippers from proceeding to arbitration.	To address this issue, the NGL could be amended to: ▪ implement the AEMC's recommendation to introduce a 50 business day fast-track option (with stop the clock provisions) for disputes involving a full regulation pipeline where the service is the same or similar to a reference service and an extension is not required; and/or ▪ specify the maximum period of time to be taken by the dispute resolution body (e.g. 8 mths[255] or 12 mths) to ensure this does not undermine the credibility of the threat.
Transparency of access determination	There is currently no requirement in the NGL for the dispute resolution body's access determination or statement of reasons to be published.	This issue could be addressed by implementing the AEMC's recommendation, which is to require the dispute resolution body to publish the following (subject to the confidentiality provisions in the NGL): ▪ the access determination, statement of reasons and relevant financial calculations; and ▪ the information provided to the dispute resolution body in the course of the dispute.
Binding nature of final access determination	Access determinations are binding on shippers, which could discourage shippers from trigger a dispute if there is a risk that the decision will cause the shipper financial distress.	This issue could be addressed by adopting the same approach as that used in Part 23, with the decision only becoming binding if the shipper decides to enter into a contract on the terms set through the access determination (within the specified time). If the shipper decides not to enter into a contract it would be prohibited from taking a substantially similar matter to arbitration for 12 months.
Asset value for light regulation pipelines	The NGL and NGR provide no guidance on how the asset value for light regulation pipelines would be determined, which could hinder negotiations and give rise to unnecessary costs and uncertainties	This issue could be addressed by implementing the AEMC's recommendation, which is to amend the NGR to require the relevant regulator to determine an initial capital base for those light regulation pipelines that have not previously had a value determined and to use the same method that would apply under full regulation.

10.3.4 Summary of potential options

Table 10.3 provides a summary of the options that could be implemented to address the problems identified in section 10.2. Note that this table does not contain an exhaustive list of solutions and stakeholders wishing to propose other solutions are encouraged to do so in their responses to the questions.

Further detail on how these potential solutions could form part of a broader regulatory package is provided in Chapter 11.

[255] This timeframe is in line with the requirement in rule 62(7) of the NGR for the relevant regulator to make an access arrangement final decision within eight months of the date of receipt of an access arrangement proposal.

Table 10.3: Reform Focus 4 - Summary of potential options

Problem	Potential solutions
Differences in negotiation frameworks	1 Maintain the existing differences in negotiation frameworks (status quo). 2 Adopt a single negotiation framework that applies under all negotiate-arbitrate models, which is based on: (a) the approach that currently applies under full and light regulation; (b) the approach that currently applies under Part 23; or (c) a hybrid approach that: (a) requires all service providers to publish a user access guide; (b) uses the same access request, offer and negotiation timelines used for full and light regulation pipelines; (c) allows shippers to obtain information from service providers in negotiations in the manner set out in Part 23; and(d) adopt the same trigger for access disputes that applies to full and light regulation pipelines. 3 If separate negotiation frameworks are maintained, then amend Part 23 to remove the preliminary enquiry process.
Credibility of the threat of arbitration by smaller shippers	1 Maintain the existing approach (status quo). 2 Amend the dispute resolution mechanisms to prevent service providers' costs being awarded against smaller shippers (this is only applicable under full and light regulation) and prevent smaller shippers paying more than half the dispute resolution body's costs. 3 Allow user groups to intervene in arbitral proceedings involving smaller shippers. 4 Enable smaller shippers seeking access to non-scheme pipelines to elect to have the dispute heard by the regulatory dispute resolution body rather than a commercial arbitrator. In addition to these options, the position of smaller shippers is expected to be strengthened if it becomes easier for pipelines to be moved from lighter to heavier handed forms of regulation, if service providers have to publish information on the individual or minimum and maximum prices paid by other shippers and the usability and accessibility of information reported by service providers is improved.
Efficiency, effectiveness and credibility of the threat of arbitration for scheme pipelines	1 Maintain the existing approach (status quo). 2 Amend the NGL to require the dispute resolution body to have regard to the NGO, the revenue and pricing principles,[256] an applicable AA (where relevant), previous AAs or access determinations, pre-existing contractual rights and the price and revenue regulation provisions in Part 9 of the NGR. 3 Amend the joint dispute provisions in the NGL to require the existence of a dispute to be made public and to set out the process for joining parties. 4 Amend the timeframes for access determinations by: (a) introducing a 50-day fast-track option for disputes involving full regulation pipelines; and/or (b) specifying the maximum period of time to be taken by the dispute resolution body to resolve a dispute (e.g. 8 or 12 mths). 5 Amend the NGL and/or NGR so that: (a) an access determination is not binding on the shipper unless the shipper decides to enter into a contract that reflects the access determination; and (b) a shipper that decides not to enter into such a contract is prevented from seeking arbitration for the same or a substantially similar service for 12 mths. 6 Amend the NGL to require the dispute resolution body to publish the access determination, statement of reasons, relevant financial calculations and information provided in the course of the dispute (subject to the confidentiality provisions in the NGL). 7 Amend the NGR to require the relevant regulator to determine the value of light regulation pipelines that have not had a regulated value previously set.

[256] Note that section 28 of the NGL already requires the dispute resolution body to have regard to the NGO and revenue and pricing principles.

10.4 Questions for stakeholders

Box 10.3 sets out the questions SCO is interested in obtaining stakeholder feedback on.

Box 10.3: Questions on negotiation frameworks and dispute resolution mechanisms

30 Do you think the differences in negotiation frameworks applying under Part 23 and full/light regulation is causing confusion, imposing unnecessary costs on negotiating parties or otherwise hindering the ability of shippers to negotiate access (see section 10.2.1)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think this issue should be addressed by adopting a single negotiation framework that would apply under all negotiate-arbitrate models that is based on:

(i) the approach currently applied under full and light regulation (see Table 10.1)?

(ii) the approach currently applied under Part 23 (see Table 10.1)?

(iii) a hybrid of the two frameworks as described in section 10.3.1?

Please explain your responses to these questions.

31 Do you agree with the ACCC that the preliminary enquiry process in Part 23 could delay a shipper's access to arbitration if negotiations fail and also allow service providers to avoid the rules relating to access requests (including response times)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think the preliminary enquiry process should be removed from Part 23?

32 Do you agree that the credibility of the threat of arbitration is weaker for smaller shippers (see section 10.2.2)?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think the position of smaller shippers would be improved by:

(i) making it easier for pipelines to move from lighter to heavier handed forms of regulation as set out in Chapter 8?

(ii) requiring individual prices or maximum and minimum prices to be reported by service providers rather than weighted average prices (see Table 9.2)?

(iii) improving the usability and accessibility of information reported by service providers in the manner set out in Table 9.2?

(c) Do you think any of the following should occur to further strengthen the position of smaller shippers:

(i) amend the cost provisions to prevent the dispute resolution body from awarding the service provider's costs against smaller shippers (relevant to full and light regulation only) and making smaller shippers pay more than half the dispute resolution body's costs?

(ii) allow user groups to intervene in arbitral proceedings involving smaller shippers?

(iii) give smaller shippers the option under Part 23 to have the dispute heard by the relevant regulatory dispute resolution body or a commercial arbitrator?

(d) If any of the measures outlined in (c) are implemented, how should 'smaller shipper' be defined? If you think it should be based on a size threshold, what threshold do you think should be adopted?

33 Do you think:

(a) there are any other groups of shippers for whom the threat of arbitration may not be considered credible by service providers?

(b) there any other factors that may discourage shippers from threatening the use of arbitration?

34 Do you agree that the limited guidance provided in the NGL/NGR on the matters to be considered by the dispute resolution body under full and light regulation as set out in section 10.2.3 are adversely affecting the efficiency, effectiveness and credibility of the dispute resolution mechanism applying to full and light regulation pipelines?

(A) If not, please explain why not.

(B) If so:

(a) How significant do you think this issue is?

(b) Do you think these deficiencies should be addressed by amending the NGL/NGR to:

(i) require the dispute resolution body to have regard to the NGO, the revenue and pricing principles, an applicable AA (where relevant), previous AAs or access determinations, pre-existing contractual rights and the price and revenue regulation provisions in Part 9 of the NGR?

(ii) require the existence of a dispute to be made public and to set out the process for joining parties?

(iii) introduce a 50-day fast-track option for certain disputes under full regulation?

(iv) specify the maximum period of time to be taken by the dispute resolution body to resolve a dispute (e.g. 8 months or 12 months)?

(v) only require the access determination to be binding on a shipper if the shipper decides to enter into a contract that reflects the access determination and to prevent a shipper that decides not to enter into such a contract from seeking arbitration for the same or a substantially similar service for 12 months?

(vi) require the dispute resolution body to publish the access determination, statement of reasons, relevant financial calculations and information provided in the course of the dispute (subject to the confidentiality provisions in the NGL)?

35 Do you have any concerns with the Part 23 pricing principles (see Box 10.1)? If so:

(a) Please explain what your concerns are, how significant you think they are and what, if anything, you think could be done to address these concerns.

(b) Do you think these concerns will be addressed by making it easier for pipelines to move from lighter to heavier handed forms of regulation?

(c) Do you think there would be value in providing greater clarity in Part 23 about:

(i) how prior regulatory decisions are to be accounted for by an arbitrator, in those cases where a pipeline has previously been subject to full regulation, particularly if it becomes easier to move between forms of regulation?

(ii) shared costs are to be allocated between other assets that are operated by the service provider and between the services offered by the pipeline?

36 Are there any other problems with the negotiation frameworks and dispute resolution mechanisms that have not been identified in this chapter, or changes you think should be made to address the issues identified in section 10.2? If so, please explain what they are.

11. What are the policy options

SCO has identified four policy options that could be implemented to address the potential problems outlined in Chapters 7-10 (reform focus 1-4). One of these options is to maintain the status quo. The other options differ in a number of respects, but for ease of reference have been named on the basis of the pipelines that would be subject to regulation under each option. The four policy options are:

(a) Option 1: Maintain the status quo.

(b) Option 2: Regulation of pipelines with substantial market power.

(c) Option 3: Regulation of all third party access pipelines plus pipelines that are not providing third party access that pass the test for regulation.

(d) Option 4: Regulation of all pipelines.

It is worth noting that these options do not provide an exhaustive list of potential solutions to addressing the problems that have been identified. Stakeholders who wish to propose alternatives are encouraged to do so in their feedback to this Consultation RIS.

11.1 Summary of policy options

Table 11.1 and boxes 11.1-11.2 provide an overview of the key elements of Options 1-4, while Table 11.2 sets out the extent to which the problems identified in Chapters 7-10 are addressed by each option.

While not shown in Table 11.1, if options 2, 3 or 4 are implemented then light regulation would be removed from the regulatory framework. Transitional arrangements would therefore need to be put in place to deal with the 5.5 pipelines that are currently subject to light regulation. There are a number of different ways that this could be achieved, including by:[257]

(a) Retaining light regulation on these pipelines until an application is made for the form of regulation to change (i.e. grandfathering the existing arrangements).

(b) Deeming all light regulation pipelines to be subject to full regulation.

(c) Deeming all light regulation pipelines to be subject to the new lighter handed form of regulation.

(d) Requiring the relevant decision making body to carry out an assessment of whether the pipelines should be subject to the heavier handed or lighter handed form of regulation using the form of regulation test.

SCO is interested in hearing stakeholders' views on these alternatives and any other transitional arrangements that may be required if options 2-4 are implemented.

Further detail on these policy options and the costs, benefits and risks associated with each option is provided in the following sections.

[257] In the case of the Carpentaria Gas Pipeline, options (b)-(d) could only be implemented if the *National Gas (Queensland) Regulation 2008* is amended because provisions in this regulation currently deem this pipeline to be subject to light regulation until 1 May 2023.

Table 11.1: Key Elements of Policy Options 1-4

Problem		Option 1 (Status quo)	Option 2	Option 3	Option 4
When should pipelines be regulated	**When to regulate**	Maintain the current approach, with: ▪ all pipelines providing 3rd party access subject to some form of regulation ▪ a mechanism available to require those not providing 3rd party access to do so.	Amend framework to allow pipelines providing 3rd party access to obtain an exemption from regulation (but not from the basic information disclosure requirements – see below) if: ▪ the service provider can demonstrate the pipeline does not have substantial market power (this exemption could be revoked if conditions change and the service provider can no longer demonstrate it does not have market power) ▪ the pipeline has obtained a 15-year greenfield exemption. Maintain the current approach for seeking access to pipelines that are not providing 3rd party access.	Maintain the current approach, with: ▪ all pipelines providing 3rd party access subject to some form of regulation ▪ a mechanism available to require those not providing 3rd party access to do so if they pass the test for regulation.	Require <u>all</u> pipelines to provide 3rd party access on a non-discriminatory basis.
	Test for regulation	Retain the existing coverage test.	Replace the coverage test with the hybrid market power-NGO test that would require the decision-making body to be satisfied (see Box 7.6): ▪ the pipeline has substantial market power ▪ regulation will or is likely to contribute to the achievement of the NGO.		n.a.
	Governance arrangements	Retain the existing governance arrangements (NCC/Minister).	Accord a single organisation (either the ACCC or the AER/ERA) responsibility for deciding when a pipeline should be regulated or exempt from regulation.		n.a.
Forms of regulation and the movement between the alternative forms	**Forms of regulation**	Retain the existing forms of regulation (i.e. full, light and Part 23).	Adopt the following forms of regulation: ▪ Heavier handed regulation - based on the existing full regulation approach (i.e. negotiate-arbitrate with reference tariffs set by the relevant regulator and a regulatory-oriented dispute resolution mechanism) ▪ Lighter handed regulation – based on a strengthened Part 23 (i.e. negotiate-arbitrate with a commercially-oriented dispute resolution mechanism plus the safeguards currently available under light regulation).		Adopt the following forms of regulation: ▪ Heavier handed form of regulation based on direct price/revenue control ▪ Lighter handed regulation – based on a strengthened Part 23. All pipelines would also be required to: ▪ comply with interconnection principles that would be set out in the NGR ▪ use incremental pricing where the cost of new capacity would otherwise result in the price of existing capacity increasing.
	Monitoring and referral functions	Retain the existing approach (i.e. the relevant regulator can monitor light regulation negotiations only and is treated like any other interested person in terms of being able to apply for a form of regulation assessment).		Require the relevant regulator to monitor the behaviour of service providers (e.g. by monitoring service providers' prices, service quality, financial information, the outcome of access negotiations and, where relevant, dealings with associates and ring fencing arrangements) and refer pipelines for a form of regulation assessment if it suspects market power is being exercised.	
	Form of regulation test	Retain existing structure of tests, with coverage test acting as a gateway to full and light regulation.	Remove the coverage test and use the existing form of the regulation test for form of regulation decisions.		

Problem		Option 1 (Status quo)	Option 2	Option 3	Option 4
	Governance arrangements	Retain the exiting governance arrangements (NCC).	Accord a single organisation (either the ACCC or the AER/ERA) responsibility for making form of regulation decisions.		
Information disclosure requirements	**Information to be disclosed by <u>non-exempt</u> service providers**	Retain the existing information disclosure requirements across the forms of regulation.	All non-exempt service providers to publish: ▪ pipeline information, pipeline service information and service availability information ▪ standing terms (i.e. standard terms and conditions, standing prices and the method used to calculate standing prices) ▪ information on the prices paid by other shippers in the form set out in the next row ▪ historic financial information and historic demand (service usage) information.		
			Information on the prices paid by other shippers to be based on the weighted average price and the minimum and maximum prices paid for each service.	Information on the prices paid by other shippers to be based on the individual prices (including key terms and conditions) paid by shippers.	
			n.a.	The disclosure requirements would be amended in the manner set out in Box 11.1 to address the information deficiencies that have been identified with the pricing methodologies and financial information and to improve the quality, reliability, accessibility and usability of the information.	
	Exemptions from the disclosure requirements and information to be disclosed by <u>exempt</u> service providers	Retain the existing exemptions from disclosure under Part 23 and light regulation.	▪ No exemptions from the disclosure requirements would be available for regulated pipelines. ▪ Pipelines that obtain an exemption from regulation (see above) but are providing 3rd party access would still be required to publish the basic information set out in Box 11.1.	Exemptions from the requirement to publish financial information would be available to: ▪ single shipper pipelines ▪ small pipelines with a nameplate capacity less than 10 TJ/day These pipelines would still, however, be required to publish the basic information set out in Box 11.1.	Exemptions from the requirement to publish financial information would be available to: ▪ pipelines with no 3rd party shippers ▪ single shipper pipelines ▪ small pipelines with a nameplate capacity less than 10 TJ/day. These pipelines would still, however, be required to publish the basic information set out in Box 11.1. In the case of pipelines that have no 3rd party shippers, the obligation to publish basic information would only commence once a prospective shipper seeks access.
Negotiation frameworks and dispute resolution mechanism*	**Negotiation framework**	Retain the existing negotiation frameworks.	Implement a single negotiation framework that applies to both the lighter and heavier handed forms of regulation based on the hybrid model (see Box 11.2).		Use negotiation framework in Box 11.2 for the lighter handed form of regulation.
	Threat of arbitration for small shippers	Retain the existing arrangements (i.e. no specific measures to strengthen the threat for smaller shippers).	Strengthen the credibility of the threat of arbitration for small shippers by changing the dispute related cost provisions.	Strengthen the credibility of the threat of arbitration for smaller shippers on pipelines subject to the negotiate-arbitrate model by: ▪ changing the dispute related cost provisions ▪ allowing user bodies to be joined to arbitral proceedings involving smaller shippers ▪ allowing the smaller shipper to elect to have the dispute heard by the relevant regulator rather than a commercial arbitrator.	
	Dispute resolution mechanisms	Retain the existing dispute resolution mechanisms.	Maintain the Part 23 dispute resolution mechanism for the lighter handed regulation and the full regulation mechanism for the heavier handed regulation.		Maintain the Part 23 dispute resolution mechanism for lighter handed regulation.
			Implement the amendments to full regulation dispute resolution mechanism set out in Box 11.2.		n.a.

Box 11.1: Information disclosure requirements

Basic information to be published by exempt pipelines providing 3rd party access

Service providers of pipelines that are providing third party access but have obtained either an exemption from regulation under Option 2, or an exemption from some of the disclosure requirements under Options 3 and 4 would be required to publish the following information.

- pipeline service information;
- the standing terms for each service offered by the pipeline (i.e. the standard terms and conditions, standing prices and method used to calculate standing prices);
- the prices paid by other shippers for pipeline services;
- pipeline information; and
- service availability information.

Table 9.1 provides more detail on the information to be reported under each category.

Deficiencies in the information available to assess the reasonableness of prices

To address the deficiencies identified with the pricing methodologies and financial information:

- service providers would be required to publish the inputs used to calculate the standing prices and the relevant regulator would be required to publish a guideline on what information, at a minimum, the pricing methodology should include; and
- service providers would be required report on the extent to which future costs are likely to be in line with historic costs and historic information on contracted capacity and the utilisation of that capacity.

Quality and reliability of information

To improve the quality and reliability of information reported by service providers:

- the NGR would be amended to provide for greater regulatory oversight of the financial information reported by service providers and information on the prices paid by shippers;
- the access information standard in the NGR would be amended to require service providers to update any information they are required to report as soon as practicable if the information is found to no longer be accurate;
- penalties would be increased for breaches of the information disclosure obligations, the access information standard and Financial Reporting Guideline; and
- the changes to the Financial Reporting Guideline identified by the ACCC and the Brattle Group (see Appendix C) would be implemented.

Accessibility of information

To make the information reported by service providers more accessible:

- the relevant regulator would be required to prepare a guideline that sets out where and how the information is to be reported on a service provider's website; and
- service providers would be required to advise the regulator when changes are made to information on their respective websites.

Usability of information

To improve the usability of the financial and pricing information:

- a summary tab would be included in the relevant regulator's financial reporting template to provide a high level summary of key financial and price information; and
- the relevant regulator would publish a pricing template that shippers could use to transform the financial information into one or more cost-based pricing benchmarks.

Box 11.2: Negotiation frameworks and dispute resolution mechanisms

Improvements to the negotiation framework

To avoid any unnecessary confusion or costs that may be associated with having multiple negotiation frameworks, a single negotiation framework would be implemented that would:

- require all service providers to publish a user access guide (i.e. so that shippers have a better understanding of the process for seeking access);
- adopt the same access request, access offer and negotiation timelines that have recently been adopted under full and light regulation;
- provide for shippers to obtain additional information during negotiations in the same manner as that currently provided for under Part 23;
- adopt the same trigger for access disputes that has recently been adopted under full and light regulation;[258] and
- remove the preliminary enquiry process that is currently provided for under Part 23.

Improvements to the full regulation dispute resolution mechanism

To address the deficiencies that have been identified with the dispute resolution mechanism applying under full regulation, this mechanism would be amended to:

- require the dispute resolution body to have regard to the NGO, the revenue and pricing principles, the applicable AA, previous AAs/determinations, pre-existing contractual rights and applicable provisions in Part 9 of the NGR when making an access determination;
- provide additional guidance on the role of the dispute resolution expert and the process for appointing and using the evidence of such an expert;
- better facilitate joint dispute hearings;
- introduce a fast track option for the regulatory-oriented negotiate-arbitrate model and specify the maximum period of time the dispute resolution body has to make a decision under this model (e.g. 8 months or 12 months);
- amend the dispute resolution mechanism so that:
  - an access determination is only binding on the parties if the shipper decides to enter into a contract that reflects the access determination; and
  - if a shipper decides not to enter into such a contract, it is prohibited from seeking arbitration for the same or a substantially similar service for 12 months.
- require the dispute resolution body to publish the access determination, statement of reasons, relevant financial calculations and, where appropriate, information provided in the course of the dispute (subject to the confidentiality provisions in the NGL).

[258] That is, if an agreement is not reached within a specified number of days (note the parties can agree to extend the day count) then the shipper's request is taken to have been rejected by the service provider and a dispute can be triggered.

Table 11.2: Extent to which the identified problems are addressed

Focus area	Potential problems with Status Quo	Option 2	Option 3	Option 4
When a pipeline should be subject to regulation and how decisions to regulate are made	The threshold for economic regulation (i.e. all pipelines providing third party access) may result in over-regulation and therefore higher direct and indirect costs.	Addressed	Not addressed	Risk increased
	The application of regulation to pipelines with a greenfield exemption may distort the incentives service providers have to invest in new pipelines.	Addressed	Not addressed	Risk increased
	The use of the coverage test for third party access decisions may result in under-regulation and inefficient investment in and use of pipelines.	Addressed	Addressed	Addressed
	The governance arrangements associated with the test for regulation may give rise to unnecessary costs and delays.	Addressed	Addressed	Addressed
Form of regulation and movements between the alternative forms of regulation	The use of the coverage test as a gateway from Part 23 to full regulation may result in under-regulation and, as a result, leave shippers more exposed to exercises of market power by service providers.	Addressed	Addressed	Addressed
	The inconsistencies and overlap between some forms of regulation could increase the complexity and administrative burden and impose unnecessary costs on regulators, shippers and service providers.	Addressed	Addressed	Addressed
	The current forms of regulation may not effectively deal with potential exercises of dynamic market power, which could further entrench the incumbent service providers' market power.	Not addressed	Not addressed	Addressed
Information disclosure requirements	The limited information available to shippers negotiating access to non-reference services on full regulation pipelines may give rise to additional search and transaction costs, hinder their ability to negotiate access to these services and make them more susceptible to exercises of market power.	Addressed	Addressed	Addressed
	The quality, reliability, accessibility, usability and other deficiencies in the information reported by service providers subject to Part 23 and light regulation may give rise to additional search and transaction costs, hinder the ability of shippers to negotiate and make them more susceptible to market power.	Not addressed	Addressed	Addressed
Negotiation frameworks and dispute resolution mechanisms	Differences in the negotiation frameworks applying under the various forms of regulation may impose unnecessary costs and delays on negotiating parties and hinder the ability of shippers to negotiate effectively with service providers.	Addressed	Addressed	Addressed
	The threat of arbitration by smaller shippers may not being viewed as credible by service providers, which may make this group of shippers more susceptible to exercises of market power.	Partially addressed	Addressed	Addressed
	Aspects of the dispute resolution mechanism applying under full and light regulation may not be as effective or efficient as they could be and may undermine the credibility of the threat of arbitration.	Addressed	Addressed	Addressed

11.2 Option 1: Maintain the status quo

As its name suggests, this option provides for no changes to the current regulatory framework. Further detail on this option, including the costs, benefits and risks associated with this option, is provided below.

Description of option

Under this option the following arrangements would continue to apply:

- **When economic regulation would apply and how the decision is made:**
  - All pipelines providing third party access (including those pipelines that have obtained a greenfield exemption) would be subject to some form of regulation.
  - A pipeline that is not providing third party access could only be required to do so if the relevant Minister, having regard to the NCC's recommendation, is satisfied the pipeline meets all the coverage criteria (see Box 3.1).
  - Pipelines that are yet to be commissioned could obtain a 15-year exemption from coverage if the relevant Minister, having regard to the NCC's recommendation, is satisfied the pipeline does not meet one or more of the coverage criteria.
- **Forms of regulation and movements between forms of regulation:**
  - Scheme pipelines would continue to be subject to full or light regulation, while non-scheme pipelines that are providing third party access would be subject to Part 23.
  - A pipeline subject to Part 23 could only move to full or light regulation if the relevant Minister, having regard to the NCC's recommendation, is satisfied the pipeline meets all the coverage criteria.[259] If this occurs, the NCC would decide if the pipeline should be subject to full or light regulation, having regard to the form of regulation test in section 3.1.1. Any interested person (including the relevant regulator) could apply to have the form of regulation applied to a pipeline changed.
- **Information disclosure requirements:**
  - The information disclosure obligations and exemptions outlined in section 9.1 would continue to apply and no steps would be taken to address the limitations with the full regulation disclosure requirements or to address the information deficiencies, quality, reliability, usability and accessibility issues that have been identified.
- **Negotiation frameworks and dispute resolution mechanisms:**
  - The negotiation frameworks and dispute resolution mechanisms outlined in section 10.1 would continue to apply and no steps would be taken to align the negotiation frameworks, strengthen the credibility of the threat of arbitration or address the other issues that have been identified with the dispute resolution mechanism applying to full and light regulation pipelines.

[259] Similarly, a pipeline that is subject to full or light regulation could only become subject to Part 23 if the relevant Minister is satisfied that one or more of the coverage criteria are not met.

Benefits, costs and risks associated with option

The only real benefit of maintaining the status quo is that it is understood by market participants and would avoid the costs and risks that may be associated with the other three policy options.

The costs of this option, on the other hand, include the **direct and indirect costs** associated with the potential problems that have been identified with:

- the threshold used for economic regulation and how decisions to regulate are made, which as noted in Chapter 7 include the potential for:
    - the application of regulation to all pipelines providing third party access to result in over-regulation and therefore higher direct and indirect costs of regulation;
    - the application of regulation to pipelines with a greenfield exemption to distort the incentives service providers have to invest in new pipelines;
    - the use of the third party coverage test for third party access decisions to result in under-regulation and inefficient investment in and use of pipelines; and
    - the governance arrangements associated with the test for regulation to give rise to unnecessary costs and delays;
- the forms of regulation and how form of regulation decisions are made, which as noted in Chapter 8 include the potential for:
    - the use of the coverage test as a gateway to heavier handed regulation to result in under-regulation and shippers more exposed to exercises of market power; and
    - the inconsistencies and overlap between some forms of regulation to impose unnecessary costs on regulators, shippers and service providers;
- the information disclosure requirements, which as noted in Chapter 9 include the potential for:
    - the limited information on non-reference services on full regulation pipelines to impose unnecessary search and transaction costs on shippers, hinder their ability to negotiate and make them more susceptible to exercises of market power; and
    - the other information deficiencies that have been identified to impose unnecessary search and transaction costs on shippers, hinder their ability to negotiate and make them more susceptible to exercises of market power.
- the negotiation frameworks and dispute resolution mechanisms, which as noted in Chapter 10 include the potential for:
    - differences in the negotiation frameworks to impose unnecessary costs and delays on negotiating parties and hinder the ability of shippers to negotiate;
    - smaller shippers to be more susceptible to exercises of market power because the threat of arbitration from these shippers is not considered as credible; and
    - some aspects of the full and light regulation dispute resolution mechanism to be inefficient and ineffective and to undermine the threat of arbitration.

From a risk perspective, if the status quo is maintained, the risk rating is estimated to be ‘severe’ because the likelihood of the problems identified in Chapters 7-10 eventuating on an *aggregated* basis is ‘highly likely’ and if they do occur, they are expected to have a ‘major’ negative impact on efficiency and the long-term interests of gas consumers. The term ‘aggregated’ is italicised in the preceding sentence, because the risks associated

with individual problems varies markedly. The risk rating associated with greenfield investment incentives, for example, is estimated to be 'low' because Part 23 is relatively light handed in nature (see section 7.2) and because there has been no evidence that Part 23 was deterring investment (see section 5.3.3). The risk rating associated with the under-regulation, on the other hand, is estimated to be 'severe' because if market power is being exercised in an unconstrained manner it can have a range of deleterious effects on efficiency and consumers more generally (see for example Box 2.1). Appendix A provides more detail on the preliminary risk analysis that has been carried out.

11.3 Option 2: Regulation of pipelines with substantial market power

In contrast to Option 1, Option 2 assumes that the regulatory framework would be amended to enable an exemption from regulation to be obtained if it can be demonstrated that a pipeline does not have substantial market power, or has a greenfield exemption. The threshold for regulation under this option is therefore higher than it is under Option 1.

The other key differences between these two options are that:

- the coverage test would be replaced with a hybrid market power-NGO test; and
- a single decision making body (either the ACCC or the relevant regulator (i.e. the AER and ERA)) would be responsible for making decisions on when a pipeline should be regulated or exempt from regulation, and form of regulation decisions.

The coverage test would also have no role to play in form of regulation decisions, so it would be easier to move between the two forms of regulation available under this option.

This option also provides for some improvements to the information disclosure obligations applying under the heavier handed form of regulation, which would facilitate more informed negotiations for non-reference services. It also provides for some small improvements to the negotiation frameworks and dispute resolution mechanisms to facilitate more timely and effective negotiations and to strengthen the bargaining position of smaller shippers.

Further detail on this option, including the costs, benefits and risks associated with this option, is provided below.

Description of option

Under this option, the following would apply.

- **When economic regulation would apply and how the decision is made:**
  - All pipelines providing third party access would automatically be subject to economic regulation, but an exemption from regulation would be available to those pipelines:
    (a) where the service provider can demonstrate the pipeline does not have substantial market power; or
    (b) that have obtained a 15-year greenfield exemption (the exemption would be available for the duration of the greenfield exemption).

    The decision making body (i.e. the ACCC or AER/ERA) would be responsible for granting the exemptions in (a) and (b), which it would assess having regard to the

hybrid market power-NGO test in Box 7.6. The decision making body would also be responsible for revoking the exemption in (a), which could occur if an application is made by another interested party and the service provider is unable to demonstrate it does not have substantial market power.

- A pipeline that is not providing third party access could only be required to do so if the decision making body is satisfied the hybrid market power-NGO test in Box 7.6 is met.
- Pipelines that are yet to be commissioned could obtain a 15-year greenfield exemption, if the decision making body is satisfied the hybrid market power-NGO test is not met.

- **Forms of regulation and movements between forms of regulation:**
  - There would be two forms of regulation available under this option:
    - a heavier handed form of regulation that would be based on full regulation; and
    - a lighter handed form of regulation that would be based on a strengthened Part 23 (i.e. Part 23 plus the safeguards available under light regulation).[260]
  - Movements between the lighter and heavier handed forms of regulation would be based on the application of the existing form of regulation test (see section 3.1.1), which the decision making body would be responsible for applying. Any interested person (including the regulator) could apply to have the form of regulation changed.
- **Information disclosure requirements:**
  - All regulated pipelines would be subject to the information disclosure requirements that currently apply under Part 23 (see Table 9.1), with the only difference being that service providers would also be required to publish the minimum and maximum prices paid by shippers.
  - Pipelines that have obtained an exemption from regulation that are providing third party access would be required to publish a basic set of information to facilitate negotiations with shippers (see Box 11.1).
  - There would be no exemptions from the obligation to publish information under this option, because the premise of this option is that regulation would only apply to pipelines that have substantial market power.
- **Negotiation frameworks and dispute resolution mechanisms:**
  - A single negotiation framework, based on the hybrid model set out in Box 11.2, would apply under both the lighter and heavier handed forms of regulation.
  - The dispute resolution mechanism applying under:
    - the lighter handed form of regulation would be based on the commercially-oriented dispute resolution mechanism in Part 23; and
    - the heavier handed form of regulation would be based on the regulatory-oriented dispute resolution mechanism applying under full regulation but amended in the manner set out in Box 11.2.

[260] These safeguards include
- the prohibition on service providers bundling services, preventing or hindering access and/or engaging in inefficient price discrimination; and
- the ring fencing and associate contract provisions, that are designed to ensure the separation of pipeline operations from associated businesses in other markets.

- The position of smaller shippers that have to negotiate with regulated service providers would be strengthened by making the threat of a stronger form of regulation more credible. It would also be strengthened by changing the dispute resolution provisions, so that service providers' costs cannot be awarded against smaller shippers (this only applies under full regulation) and so smaller shippers can only be required to pay half of the dispute resolution body's costs.

Benefits, costs and risks associated with option

The main benefit of this option is that most of the problems that have been identified with the current regulatory framework would be addressed (see Table 11.2). The adoption of this option would, for example:

- address the risk of over-regulation and the risk to greenfield investment incentives;
- facilitate more efficient investment in and use of pipelines by improving the ability to access pipelines that are not providing third party access;
- reduce the risk of under-regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers;
- reduce the costs associated with the current governance arrangements by according a single decision making body responsibility for making decisions;
- reduce the complexities, costs and administrative burden associated with maintaining three forms of regulation;
- reduce shippers' search and transaction costs and facilitate more informed, efficient and effective negotiations between service providers and shippers; and
- strengthen the credibility of the threat of arbitration for smaller shippers and shippers using pipelines that are subject to the heavier handed form of regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers.

The costs of this option, on the other hand, include the incremental costs associated with:

- making the changes to the legislative and regulatory instruments required to give effect to the changes;
- administering the exemptions that would be available where the service provider can demonstrate the pipeline does not have market power;[261]
- more pipelines that are not providing third party access potentially being required to do so if they pass the new hybrid market power-NGO test;
- transitioning the 5.5 pipelines that are currently subject to light regulation to either the new lighter handed or heavier handed form of regulation;
- monitoring the compliance of pipelines that are subject to the lighter handed form of regulation with the additional safeguards that would be added to Part 23 (i.e. the prohibition on bundling services, preventing or hindering access and/or engaging in inefficient price discrimination; and the ring fencing and associate contract provisions);
- administering the form of regulation test, with more applications expected to be made once the hurdle posed by the coverage test is removed;
- more pipelines becoming subject to the heavier handed form of regulation;

[261] Note that there are not expected to be any incremental administrative costs associated with greenfield exemptions because these exemptions exist under Option 1.

- the new information disclosure obligations that would apply to:
  - pipelines subject to the heavier handed form of regulation; and
  - pipelines with an exemption from regulation that are providing third party access, who would be required to report the basic information set out in Box 11.1.
- the requirement for service providers to publish minimum and maximum prices for services in addition to the weighted average prices; and
- the implementation of a single negotiation framework, which would impose new obligations on some service providers.

The costs of this option also include the direct and indirect costs associated with:

- the problems that are either not addressed or are only partially addressed by this option (see Table 11.2); and
- the problems that are created by this option.

One potential problem associated with this option is that it introduces a new risk: that is the risk of regulatory error. That is, when applying the market power test there is a risk that the decision making body may exempt a pipeline from regulation that has substantial market power. If this occurred and the pipeline was to exert its market power, then a shipper would need to apply to have the exemption revoked, which could take some time and leave the shipper exposed to the exercise of market power in the intervening period. There is also a risk that the decision making body may decide not to exempt a pipeline that does not have substantial market power. The costs associated with this risk are, however, expected to be lower than the risk of exempting a pipeline that has substantial market power, because as noted in section 7.2.1, Part 23 (even in a strengthened form) is relatively light handed in nature. That is, while the information disclosure element of Part 23 may impose some costs on service providers, the costs and risks associated with arbitration are very low because arbitration is unlikely to be triggered if market power is not being exercised.

From a risk perspective, the risk rating associated with this option is estimated to be 'medium'. This risk rating is lower than what it is under Option 1, because the likelihood of the outstanding problems is rated as 'likely' while the consequences are expected to be 'moderate'. See Appendix A for more detail on the preliminary risk analysis that has been carried out.

11.4 Option 3: Regulation of all 3rd party access pipelines plus pipelines not providing 3rd party access if they pass the test

The threshold for regulation under Option 3 is the same as Option 1. That is all pipelines providing third party access would be subject to some form of regulation and there would be a mechanism that shippers could use to seek access to pipelines that are not providing third party access.

While the starting point is the same, there are a number of important differences between Option 3 and Option 1. For example, in a similar manner to Option 2, the coverage test would be replaced with a hybrid market power-NGO test and a single decision making body (either the ACCC or the AER/ERA) would be responsible for making third party access, greenfield exemption and form of regulation decisions. The coverage test would

also have no role to play in form of regulation decisions, so it would be easier to move between the two forms of regulation available under this option.

Option 3 also provides for a range of improvements to be made to the information disclosure requirements to facilitate more informed negotiations. It also provides for a number of improvements to be made to the negotiation frameworks and dispute resolution mechanisms to facilitate more timely and effective negotiations and to strengthen the bargaining position of smaller shippers.

Further detail on this option, including the costs, benefits and risks associated with this option, is provided below.

Description of option

Under this option, the following would apply.

- **When economic regulation would apply and how the decision is made:**
  - All pipelines providing third party access (including those pipelines that have obtained a greenfield exemption) would be subject to some form of regulation.
  - A pipeline that is not providing third party access could only be required to do so if the decision making body (either the ACCC or the AER/ERA) is satisfied the hybrid market power-NGO test in Box 7.6 is met.
  - Pipelines that are yet to be commissioned could obtain a 15-year exemption from coverage if the decision making body is satisfied the hybrid market power-NGO test is not met.
- **Forms of regulation and movements between forms of regulation:**
  - Like Option 2, there would be two forms of regulation available under this option, both of which would be based on the negotiate-arbitrate form of regulation with:
    - the heavier handed form of regulation based on full regulation; and
    - the lighter handed form of regulation based on a strengthened Part 23 (i.e. Part 23 as it currently exists plus the safeguards available under light regulation).
  - Movements between the lighter and heavier handed forms of regulation would be based on the application of the existing form of regulation test (see section 3.1.1), which the decision making body would be responsible for applying. Any interested person (including the regulator) could apply to have the form of regulation changed.
  - The relevant regulator would be responsible for monitoring the behaviour of service providers (see section 8.3.1) and referring a pipeline for a form of regulation assessment if it suspects market power is being exercised.
- **Information disclosure requirements:**
  - Non-exempt pipelines would be subject to the information disclosure requirements that currently apply under Part 23 (see Table 9.1), with the only difference being that service providers would be required to publish the individual prices (including key terms and conditions) paid by shippers rather than weighted average prices. The quality, reliability, accessibility, usability and other information deficiencies would be addressed in the manner described in Box 11.1.

- Exemptions from the obligation to publish some of the information set out in Table 9.1 (i.e. the historic financial and demand information) would be available to pipelines that are used to supply a single shipper or have a nameplate capacity less than 10 TJ/day. Service providers of these pipelines would, however, still be required to publish the basic set of information set out in Box 11.1.

- **Negotiation frameworks and dispute resolution mechanisms:**
  - A single negotiation framework would be implemented that would apply under both forms of regulation, as described in Box 11.2.
  - The dispute resolution mechanism applying under:
    - the lighter handed form of regulation would be based on the commercially-oriented dispute resolution mechanism in Part 23; and
    - the heavier handed form of regulation would be based on the regulatory-oriented dispute resolution mechanism applying under full regulation but amended in the manner set out in Box 11.2.
  - The threat of arbitration for smaller shippers would be strengthened by making the threat of stronger regulation more credible, requiring service providers to publish individual prices[262] and improving the quality, reliability, accessibility and usability of information. It would also be strengthened by:
    - amending the cost provisions so that:
      - service providers' costs cannot be awarded against smaller shippers (this only applies under full regulation); and
      - at most smaller shippers can only be required to pay half of the dispute resolution body's costs;
    - allowing user groups to intervene in arbitral proceedings; and
    - giving smaller shippers the option of having the dispute heard by the regulatory dispute resolution body rather than a commercial arbitrator on pipelines subject to the lighter handed form of regulation.

Benefits, costs and risks associated with option

In a similar manner to Option 2, this option addresses most of the problems that have been identified with the current regulatory framework (see Table 11.2). The adoption of this option would, for example:

- facilitate more efficient investment in and use of pipelines by improving the ability to access pipelines that are not providing third party access;
- reduce the risk of under-regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers;
- reduce the costs associated with the current governance arrangements by according a single organisation responsibility for making decisions;
- reduce the complexities, costs and administrative burden associated with maintaining three forms of regulation;

[262] This information would provide smaller shippers with greater visibility of the prices that shippers with a greater degree of bargaining power have negotiated, which they can then use in their negotiations with service providers.

- reduce shippers' search and transaction costs and facilitate more informed, effective and timely negotiations between service providers and shippers; and
- strengthen the credibility of the threat of arbitration for smaller shippers and shippers using pipelines that are subject to the heavier handed form of regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers.

While the description of the latter two of these benefits looks similar to those under Option 2, the benefits are expected to be greater than they are under Option 2 because Option 3 provides for a range of additional measures to improve the information disclosed by service providers and to strengthen the position of smaller shippers.

The costs of this option include the incremental costs associated with:

- making the changes to the legislative and regulatory instruments required to give effect to the changes;
- more pipelines that are not providing third party access potentially being required to do so if they pass the new hybrid market power-NGO test;
- transitioning the 5.5 pipelines that are currently subject to light regulation to either the new lighter handed or heavier handed form of regulation;
- monitoring the compliance of pipelines that are subject to the lighter handed form of regulation with the additional safeguards that would be added to Part 23;
- administering the form of regulation test, with more applications expected to be made once the hurdle posed by the coverage test is removed;
- more pipelines becoming subject to the heavier handed form of regulation;
- the relevant regulator playing a more active monitoring role;
- the new information disclosure obligations that would apply to:
    - pipelines subject to the heavier handed form of regulation; and
    - pipelines that are providing third party access that are used to supply a single shipper or that have a nameplate rating less than 10 TJ/day, who would be required to report the basic information set out in Box 11.1.
- the improvements to the information disclosure obligations outlined in Box 11.1 and the requirement to publish individual prices rather than weighted average prices; and
- the implementation of a single negotiation framework, which would impose new obligations on some service providers.

The costs of this option also include the direct and indirect costs associated with the problems that are not addressed by this option (i.e. the risk of over-regulation, the risk to greenfield investment incentives and dynamic market power - see Table 11.2).

From a risk perspective, the risk rating associated with this option is estimated to be 'medium'. This risk rating is lower than what it is under Option 1, because the risk ratings associated with the outstanding problems (i.e. the risk of over-regulation, the risk to greenfield investment incentives and dynamic market power) are rated as 'low' to 'medium'. See Appendix A for more detail on the preliminary risk analysis that has been carried out.

11.5 Option 4: Regulation of all pipelines

The main difference between Option 4 and the other three options is that it would be mandatory for all pipelines to provide third party access on non-discriminatory terms. All pipelines would therefore be subject to some form of regulation under this option. There would therefore be no need for a test for regulation or associated governance arrangements. The other distinguishing features of this option are that:

- the heavier handed form of regulation would be based on the direct price (or revenue) control form of regulation, rather than a negotiate-arbitrate model; and
- dynamic market power would be addressed by including new rules in the NGR to facilitate interconnections and to prohibit the cross-subsidisation of new capacity.

Apart from these key differences, which have consequential effects for other parts of regulatory framework, Option 4 is quite similar to Option 3. For example, under Option 4 the coverage test would have no role to play in form of regulation decisions, so it would be easier to move between the two forms of regulation available under this option. A single decision making body (either the ACCC or the AER/ERA) would also be responsible for making form of regulation decisions.

Option 4 also provides for a range of improvements to be made to the information disclosure requirements to facilitate more informed negotiations. It also provides for a number of improvements to the negotiation framework and dispute resolution mechanism applying under the lighter handed form of regulation to facilitate more timely and effective negotiations and to strengthen the bargaining position of smaller shippers.

Further detail on this option, including the costs, benefits and risks associated with this option, is provided below.

Description of option

Under this option, the following would apply.

- **When economic regulation would apply and how the decision is made:**
  - All pipelines (i.e. new pipelines, existing pipelines and pipelines that have obtained a 15-year greenfield exemption) would be required to provide third party access on non-discriminatory terms.
- **Forms of regulation and movements between forms of regulation:**
  - There would be two forms of regulation available under this option:
    - the heavier handed form of regulation would be based on the direct price (or revenue) control form of regulation; and
    - the lighter handed form of regulation would be based on a strengthened Part 23 form of regulation (i.e. Part 23 as it currently exists plus the safeguards available under light regulation).
  - Movements between these two forms of regulation would be based on the form of regulation test, which the decision making body (either the ACCC or the AER/ERA) would be responsible for applying. Any interested person could apply to have the form of regulation changed.

- The relevant regulator would be responsible for monitoring the behaviour of service providers and could refer a pipeline for a form of regulation assessment if it suspects market power is being exercised.

- **Information disclosure requirements:**
  - Non-exempt pipelines would be subject to the information disclosure requirements that currently apply under Part 23 (see Table 9.1), with the only difference being that service providers would be required to publish the individual prices (including key terms and conditions) paid by shippers rather than weighted average prices. The information deficiencies, quality, reliability, accessibility and usability issues that have been identified with this information would be addressed in the manner described in Box 11.1.
  - Exemptions from the obligation to publish some of the information set out in Table 9.1 (i.e. the historic financial and demand information) would be available to pipelines with no third party shippers, single shipper pipelines and small pipelines with a nameplate capacity less than 10 TJ/day. Service providers of these pipelines would, however, still be required to publish the basic set of information in Box 11.1. For pipelines that have no third party shippers, the obligation to publish this information would only commence once a third party seeks access.
- **Negotiation framework and dispute resolution mechanism:**
  - The negotiation framework applying under the lighter handed form of regulation would be based on the framework described in Box 11.2.
  - The threat of arbitration for smaller shippers using pipelines subject to the lighter handed form of regulation would be strengthened by making the threat of stronger regulation more credible, requiring service providers to publish individual prices and improving the quality, reliability, accessibility and usability of information. It would also be strengthened by:
    - amending the cost provisions so that:
      - service providers' costs cannot be awarded against smaller shippers (this only applies under full regulation); and
      - at most smaller shippers can only be required to pay half of the dispute resolution body's costs;
    - to prevent smaller shippers paying more than half the dispute resolution body's costs;
    - allowing user groups to intervene in arbitral proceedings; and
    - giving smaller shippers the option of having the dispute heard by the regulatory dispute resolution body rather than a commercial arbitrator.

Benefits, costs and risks associated with option

The benefits of this option are that it would:

- improve access to pipelines that are not currently providing third party access;
- reduce the risk of under-regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers;
- reduce the costs associated with the current governance arrangements by removing the requirement for third party access or greenfield exemption decisions to be made;
- reduce the risks associated with service providers exercising dynamic market power;

- reduce the complexities, costs and administrative burden associated with maintaining three forms of regulation;
- reduce shippers' search and transaction costs and facilitate more informed, effective and timely negotiations between service providers and shippers; and
- strengthen the credibility of the threat of arbitration for smaller shippers and shippers using pipelines that are subject to the heavier handed form of regulation and, in so doing, pose more of a constraint on the exercise of market power by service providers.

The costs of this option, on the other hand, include the incremental costs associated with:

- making the changes to the legislative and regulatory instruments required to give effect to the changes;
- more pipelines that are not providing third party access being required to do so;
- transitioning the 5.5 pipelines that are currently subject to light regulation to either the new lighter handed or heavier handed form of regulation;
- monitoring the compliance of pipelines that are subject to the lighter handed form of regulation with the additional safeguards that would be added to Part 23;
- administering the form of regulation test, with more applications expected to be made once the hurdle posed by the coverage test is removed;
- more pipelines becoming subject to the heavier handed form of regulation;
- the relevant regulator playing a more active monitoring role;
- the new information disclosure obligations that would apply to:
    - pipelines subject to the heavier handed form of regulation; and
    - pipelines that are providing third party access that are used to supply a single shipper, or that have a nameplate rating less than 10 TJ/day and pipelines that have no third party shippers but that have been approached by a prospective shipper, who would be required to report the basic information set out in Box 11.1;
- the improvements to the information disclosure obligations outlined in Box 11.1 and the requirement to publish individual prices rather than weighted average prices; and
- the implementation of a new negotiation framework under the lighter handed form of regulation, which would impose new obligations on some service providers.

While the description of many of these costs look similar to those set out under Option 3, the magnitude of the costs is expected to be much greater under this option because it provides for a greater number of pipelines to be subject to some form of regulation.

In addition to the costs listed above, the costs of this option include the direct and indirect costs associated with the problems that are either not addressed by this option (i.e. the risk of over-regulation and the risk to greenfield investment incentives) (see Table 11.2) or are created by this option. For example, extending regulation to pipelines that are not currently providing third party access could have a deleterious effect on investment in both new and existing pipelines and impose significant costs on the service providers of these pipelines. Basing the heavier handed form of regulation on a direct price (revenue) control model could also:

- result in a loss of flexibility for those shippers that require more bespoke services than may be available under this form of regulation; and

- adversely affect investment because shippers would no longer be able to agree to pay a different amount for new capacity even in cases where it would be prudent to do so.

If this form of regulation was to apply to contracts that are already on foot, then it could also have a deleterious effect on the contracting parties and the perceived risk of the regulatory framework.

From a risk perspective, the risk rating associated with this option is estimated to be 'high', because the likelihood of the new risks created by this option are rated as likely and the consequences are estimated to be 'major'. See Appendix A for more detail on the preliminary risk analysis that has been carried out.

11.6 Questions on policy options

The box below sets out a number of questions that SCO is interested in obtaining stakeholder feedback on.

Box 11.3: Questions on policy options

37 Of the four policy options that have been identified in Chapter 11, which option do you think should be implemented (i.e. Option 1, Option 2, Option 3 or Option 4) and why?

38 If there are other policy options or refinements to these policy options that you think should be considered, please explain what they are, what they would involve and what the advantages, disadvantages, costs, benefits and risks are with these options.

39 Do you agree with the advantages, disadvantages, costs, benefits and risks that have been identified for each option in sections 11.2-11.4?

If not, please set out what other advantages, disadvantages, costs, benefits and/or risks that you think are associated with each option?

40 If you think any of the policy options out in Chapter 11 could be implemented through alternative means (i.e. non-regulatory), please explain how you envisage this would work.

41 If options 2, 3 or 4 were implemented and 'light regulation' removed, which of the following transitional arrangements do you think should be employed for the 5.5 pipelines that are currently subject to this form of regulation:

(a) grandfather the existing light regulation arrangements until an application is made for the form of regulation to change on the 5.5 pipelines?

(b) deem all light regulation pipelines to be subject to full regulation?

(c) deem all light regulation pipelines to be subject to the new lighter handed form of regulation (i.e. the strengthened Part 23)?

(d) require the decision making body to carry out an assessment of whether the pipelines should be subject to the heavier handed or lighter handed form of regulation using the form of regulation test?

Please explain your response to this question.

42 Are there any other transitional arrangements that need to be considered? If so, please outline what they are.

12. How the regulatory impact assessment will be conducted

The purpose of a RIS is to identify whether there is a need for regulation or government action, and if so, what form this should take, with the preferred option being that option that yields the greatest net benefit for the community.

To help identify the option that will yield the greatest net benefit, the following analyses will be undertaken:

- a risk analysis;
- a cost-benefit analysis (CBA);
- a regulatory burden analysis, which will be carried out using the Commonwealth Regulatory Burden Measure (CRBM) compliance costing tool; and
- a competition effects analysis (CEA).

The risk analysis will be carried out by SCO, while the CBA, CRBM and CEA will be carried out by Price Waterhouse Coopers (PwC). The remainder of this chapter outlines how the regulatory impact assessment will be carried out for the Decision RIS.

12.1 Risk analysis

The purpose of the risk analysis is to, amongst other things:[263]

- understand the risks associated with the status quo, both in terms of the sources of the risks and the magnitude of those risks;
- determine the extent to which risk will be reduced as a result of the policy options; and
- assess whether the policy options are the most effective way to deal with the risk.

A preliminary risk analysis has already been conducted to identify the relevant risks (including the likelihood of the risk arising and the consequences if they do transpire) and where Energy Council action would reduce the risks.

The risk analysis covers both the risks associated with the status quo, which are related to the problems set out in Chapters 7-10 (as summarised in Chapter 6), and those associated with the policy options outlined in Chapter 11. The results of this analysis are set out in Appendix A.

As this Appendix shows, the most significant risks (i.e. those risks rated as high or severe) are that:

- the use of the coverage test for third party access decisions may result in under-regulation and inefficient investment in and use of pipelines;
- pipelines that should be subject to a heavier handed form of regulation will not be (i.e. the risk of under-regulation), which can result in shippers being more susceptible to

[263] COAG, Best Practice Regulation – A Guide for Ministerial Councils and National Standard Setting Bodies, October 2007, pp. 18-19.

exercises of market power with consequential effects for economic efficiency and consumers more generally;

- shippers have to negotiate on the basis of incomplete, inaccurate and/or asymmetric information, which can hinder the price discovery process, give rise to higher search and transaction costs and make shippers more susceptible to market power;
- smaller shippers may be more exposed to exercises of market power (because the threat of arbitration initiated by these shippers is not considered credible); and
- some elements of the full and light regulation dispute resolution mechanism may be undermining the threat of arbitration.

The final results of the risk analysis will be set out in the Decision RIS.

12.2 Cost-benefit analysis (CBA)

A CBA is an assessment tool that compares the costs associated with a potential intervention with the benefits. It is typically used to compare options in order to identify a preferred option. The CBA is incremental in that it looks at additional costs and benefits over and above a status quo scenario (the absence of an intervention – see Box 12.1).

Box 12.1: Status quo scenario

A critical part of a CBA that is often overlooked is the specification of the status quo, which forms the basis against which an incremental analysis of policy options is assessed. The status quo scenario is not the same as a 'do nothing scenario'.

For the CBA to identify incremental costs and benefits it is important to be clear on any relevant planned regulatory change which are independent of the policy options within the RIS, for example any planned changes at a State or Territory level. Equally any forthcoming private sector changes (such as an industry action plan) should be reflected in the status quo scenario. In addition, any actions that are being taken by market participants outside the regulatory framework should also be recognised.

The purpose of the CBA is to assess the impacts of a potential intervention, either direct or indirect, from the point of view of society, as noted in the Office of Best Practice Regulation's CBA Guidance Note*:* [264]

> *"…a CBA involves a systematic evaluation of the impacts of a regulatory proposal, accounting for all the effects on the community and economy, not just the immediate or direct effects, financial effects or effects on one group."*

The key steps for undertaking the CBA include:

- Confirming the policy options to be assessed and the status quo option.
- Defining the appropriate appraisal period and discount rate.
- Logic mapping to identify the costs and benefits associated with each policy option.
- Gathering information on the likely costs and benefits.
- Undertaking the CBA.

[264] Office of Best Practice Regulation, Cost-Benefit Analysis Guidance Note, 2016.

Appraisal period and discount rate

The timeframe for the CBA should be based on the life of the proposed regulations. In keeping with the Office of Best Practice's CBA Guidance Note, unless the regulations have long-term benefits or costs (such as educational or environmental regulations), 20 years should be the maximum timeframe for the CBA. In this case, a 20 year appraisal period is likely to be appropriate given the long-term nature of investments made by service providers, shippers, retailers, gas users and producers. However, this needs to be balanced against the uncertainty involved in forecasting costs and benefits over a long time period, particularly in the energy sector. A 20 year appraisal period will be therefore be used in the central case and sensitivity analysis will be conducted using both a 10 year and 15 year appraisal period.

The discount rate reflects the time value of money and allows present and future cash flows to be considered on an equivalent basis, where future cash flows are 'discounted' back to present dollar terms. The Office of Best Practice requires the use of an annual real discount rate of 7% and sensitivity analysis to be conducted using lower- and upper-bound values of 3% and 10%, respectively.[265]

Identification of costs and benefits

A key step in the CBA is to identify the stakeholders that are likely to be affected by the policy options, which in this case include service providers, shippers, producers, gas users, regulators, government agencies and the broader community.

Once the affected stakeholders are identified, consideration can be given to effect that each measure in the policy options is likely to have on the stakeholders. This involves identifying the logic chain of effects arising from a policy measure, which may have an intermediate effect and an outcome. For example, reducing the information asymmetries faced by shippers will ensure that they have access to the information they require to make informed decisions, which reduces the deadweight loss associated with an inefficient allocation of resources. In this example, the ability to make more informed decisions is an intermediate effect and the reduction in deadweight loss is the outcome that will be valued in the CBA.

Having regard to the policy options that have been identified, it is likely that there will be multiple policy measures that contribute to the same benefit and certain policy measures that contribute to more than one benefit. Logic mapping is therefore an important step in the CBA process to avoid double counting of benefits.

The types of costs and benefits that are likely to be associated with Options 2-4 are summarised in Table 12.1**,** while Table 12.2 shows the indicative distributional allocation of these costs and benefits between different stakeholders. The distributional effects also include transfers, which are financial impacts rather than net economic changes, so are not counted in the cost benefit analysis but are experienced by stakeholders.

[265] Office of Best Practice Regulation, Guidance Note: Cost-benefit analysis, February 2016, p. 7.

Table 12.1: Costs and benefits of the policy options

Costs	Benefits
A. Administration (staff) costs relating to compliance, legal and financial advice to understand reform changes	G. Reduction in administration (staff) costs relating to legal advice, representation and duplication of regulatory effort
B. Administration (IT) costs for compiling, reporting and processing data	H. Increased access to gas and levels of production due to more efficient pipeline utilisation
C. Administration costs (staff) relating to governance, monitoring and information provision responsibilities	I. Improved levels of gas production and investment in exploration and reserves
D. Administrative costs (staff) relating to new reform implementation and enforcement	J. Broad productivity benefits to the economy from lower gas prices to consumers due to lower transportation costs
E. Cost of participating in the process of a recommendation or decision under each reform category	K. Medium to long-term investment in the sector due to greater certainty
F. Capital costs for upgraded pipelines or equipment to comply with new regulations	L. Environmental benefits including from a result of lower gas prices and increased competitiveness with coal

Table 12.2: Indicative distributional allocation of costs, benefits and transfers to stakeholders

Stakeholder	Costs	Benefits	Transfers
Service providers of unregulated pipelines and Part 23 pipelines	A, B, F	G, K	Possible decrease in revenue due to lower prices resulting from increased shipper bargaining power
Service providers of existing full regulation pipelines	A,D	G, K	Possible decrease in revenue due to lower prices resulting from increased shipper bargaining power
Users (primarily shippers, retailers, commercial users and producers)	A	G, H, I, K	Possible reduction (increase) in cost of pipeline services due to lower revenue (increase in regulatory burden)
Government and Regulators	C, D	G	Cost shifting between NCC/Minister and ACCC or AER/ERA
Broader community	-	J, L	Possible reduction/increase in general taxation

Gathering information on costs and benefits

Once the potential costs and benefits have been identified, the next step is to undertake a data and evidence gathering task to inform the CBA. This step will involve:

(a) Direct data collection from affected parties (e.g. service providers, shippers, gas users, producers, regulators and government agencies) through consultation or a survey.

(b) Sourcing data from prior RIS' and reviews that have been undertaken in this area and having regard to information on compliance costs in other industries (e.g. electricity) if insufficient information is available from (a).

(c) Data extrapolation, which involves the use of trends in observed data to forecast beyond the observed data, and data partitioning, which involves separating the dataset into two (or more) sets to determine whether each set can yield more accurate data individually.

(d) Where necessary, using conservative assumptions on the costs and benefits.

Conducting the CBA

The CBA will be undertaken using the available data and in accordance with the Office of Best Practice Regulation's *CBA Guidance Note.*[266] In addition to an analysis of a central case for each package of policy options, a sensitivity analysis will be undertaken that examines the change in costs and benefits if key areas of uncertainty, or assumptions, are varied.

At a high-level the CBA will:

- Determine the direction of impacts (i.e. initial qualitative assessment).
- Quantify, where possible, the magnitude of impact[267,268] in aggregate.
- Profile costs and benefits of the central case over the appraisal period, which involves applying a discount rate to the costs and benefits across the appraisal period in order to reach present values that can be directly compared.
- Consider the composition of the costs and benefits[269] for any key winners and losers, which may not be immediately apparent from the summary outputs.

The CBA will also test the sensitivity of the results to:

- the appraisal period – the central case will assume an appraisal period of 20 years while the sensitivity analysis will test the effect of adopting a 10-year and 15-year appraisal period; and
- the discount rate – the central case will assume a real discount rate of 7% while the sensitivity analysis will test the effect of adopting a 3% and 10% discount rate.

It will also test the sensitivity of the results to other inputs where:

- there is uncertainty in the estimated value;
- the input has a material effect on calculated outcomes; and
- there is a clear rationale for why the variable may be lower or higher.

In keeping with the Office of Best Practice's guidelines, the sensitivity analysis will also test the best and worst case scenarios. These scenarios will be based on the cumulative effects of the multiple sensitivity analyses.

The output of the CBA will, assuming there is sufficient quantitative data available to place a monetary value on the key costs and benefits, be a number of summary metrics including the cost-benefit ratio, net present value and internal rate of return for each package of policy options. Any impacts that have been assessed qualitatively will be

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266 Accessible at: https://www.pmc.gov.au/resource-centre/regulation/cost-benefit-analysis-guidance-note

267 Where there are data gaps which prevent a monetary value being placed on an impact, then a qualitative analysis will be presented alongside the CBA results. As per Office of Best Practice Regulation's *CBA Guidance Note:*

"The fact that some impacts may be very difficult to quantify in dollar terms does not invalidate the CBA approach. In such cases, a detailed qualitative analysis will often be most appropriate in place of dollar values."

268 This stage is likely to overlap with the CRBM. See the next sub-section for details of methodology for the CRBM.

269 This stage is likely to overlap with the CEA, which covers the qualitative angle of the distributional analysis. See the sub-section on CEA for details of the methodology for this analysis.

presented alongside the quantitative CBA results. The results of the CBA will be set out in the Decision RIS.

12.3 Commonwealth Regulatory Burden Measure analysis

The CRBM is a web-based tool that has been developed by the Office of Best Practice Regulation to estimate the incremental compliance costs associated with a change in regulation using an activity-based costing methodology.[270] A CRBM analysis will be undertaken for each policy option set out in Chapter 11.

The CRBM is a bottom-up calculation. That is to say, it is dependent on data (or assumptions) being input on capital costs, labour costs[271] and quantities of capital/labour required as a result of a policy option. The quality of the CRBM outputs is therefore dependent on the quality of the inputs.

A key element of the CRBM analysis will involve the collection of input data, which will, to the extent possible, come from:

- information provided by stakeholders (e.g. service providers, shippers, regulators and other affected parties); and
- data arising from consultation with gas market participants.

The key output of the CRBM will be a present value of the regulatory burden for each policy option. The results of the CRBM analysis will be set out in the Decision RIS.

12.4 Competition effects analysis

The CEA will involve a qualitative assessment of the impact of each of the policy options on competition across the gas market. The key stakeholder groups that will be considered in this analysis are:

- service providers (existing and prospective); and
- shippers, gas users and producers.

The CEA will qualitatively assess the competition related implications of each policy option using available documentation related to the reforms, literature about the gas market more generally and guidance related to competition analysis such as the Office of Best Practice Regulation's *Competition and regulation guidance note.* This analysis will consider the potential effects of each policy option on:

- the relative bargaining power of shippers and service providers;
- the search and transaction costs associated with contracting gas pipeline services;
- the potential for collusive behaviour in competitive segments of the market;
- changes to any barriers to entry that could promote or deter market entry; and
- the long-term outlook for investment in the sector.

[270] The tool is available from - https://rbm.obpr.gov.au/help.aspx?path=4.Using+the+Compliance+Cost+Calculator.txt

[271] Capital costs and labour costs can be either 'start-up' costs and/or ongoing costs.

The CEA will assess the extent to which each policy impact affects each stakeholder group using the following seven-point scale:

- Major negative.
- Moderate negative.
- Minor negative.
- Neutral.
- Minor positive.
- Moderate positive.
- Major positive.

As part of this assessment, consideration will be given to whether policy options could restrict competition. The Office of Best Practice Regulation's Competition and regulation guidance note identifies four ways in which regulation can restrict businesses from competing, which include:

- Limiting the number or types of businesses: A regulation that limits the number or types of businesses in a market will mean that some businesses will be unable to enter that market and compete.
- Limiting the ability of businesses to compete: A regulation specifying a product's price, quality, the location where it can be sold, or how it is promoted, will limit the ability for businesses to compete against each other.
- Reducing the incentives for businesses to compete: Regulations can affect the behaviour of businesses not only by changing their ability to compete, but also by altering their incentives to act as rivals.
- Limiting the choices and information available to consumers: Regulation that limits the choices and information available to consumers may dissuade businesses from entering a market or reduce competition in the market.

The results of the CEA will be set out in the Decision RIS, along with an holistic assessment of each option that takes into account the potential long-term effects of the options.

12.5 Questions for stakeholders

Box 12.1 sets out a number of questions that SCO is seeking stakeholder feedback on.

Box 12.2: Questions on the regulatory impact assessment

43 Do you agree with the risks that have been identified for:

(a) the status quo in Table A.2?

(b) identified for Options 2-4 in Table A.3?

If not, please explain why, or if you think there are other risks that should be accounted for, please explain what the risks are and how significant you think the risks are under each option.

44 Do you:

(a) agree with the categories of costs and benefit categories set out in Table 12.1, or are there other categories that you think should be considered in the CBA?

(b) have any information on the costs and benefits outlined in Table 12.1? If so, please elaborate on the source and quantum of those costs and benefits.

(c) agree with the proposed discount rate and appraisal periods to be used for the central case and sensitivity testing? If not, please explain why.

(d) think there are other input variables that should be subject to a sensitivity analysis? If so, please explain what those inputs are.

45 Do you have any information on the compliance costs associated with the policy options set out in Chapter 11 that could be used for the CRBM? If so, please elaborate on the source and quantum of the costs.

46 What, if any effect, do you think the policy options summarised in Chapter 11 will have on competition in the gas market and, in particular on:

(a) the relative bargaining power of shippers and service providers?

(b) the search and transaction costs associated with contracting pipeline services?

(c) the potential for collusive behaviour in competitive segments of the market?

(d) changes to any barriers to entry that could promote or deter market entry?

(e) the long-term outlook for investment in the sector?

13. Evaluation, implementation and review

13.1 Evaluation and conclusion

The Consultation RIS has been prepared to assist with the identification of an appropriate course of action and to facilitate stakeholder feedback. The feedback received through this process will inform the development of a Decision RIS.

As noted in section 1.1, the Decision RIS will first consider whether there is a problem that warrants action. If the case for action is established, consideration will then be given to the objectives of this action and the set of feasible options that could be implemented to address the identified problem. The costs and benefits of each option will then be assessed having regard to stakeholder feedback provided through this consultation process, and the results of the regulatory impact assessment as described in Chapter 12. The option that yields the greatest net benefit for the community, taking into account all the impacts analysed in the regulatory impact assessment, will be the preferred option.

The preferred option and the results of the regulatory impact assessment will be published in a Decision RIS. The Decision RIS will also set out how any reforms are to be implemented, monitored and reviewed. The Decision RIS is expected to be provided to the Energy Council for its consideration in the first half of 2020 and then published.

13.2 Implementation

If the case is made for the regulatory framework applying to gas pipelines to be reformed and a regulatory solution is found to yield the greatest net benefit, then changes to the NGL, Regulations and NGR will be required. SCO intends to consult with stakeholders on any such changes once the Energy Council has considered the Decision RIS and made a decision on how to proceed.

At the completion of consultation on any amendments to the NGL, Regulations or NGR, the package of changes to these legal instruments will be submitted to Energy Council for its approval. If the package is approved, then:

- the required changes to the NGL will be progressed through the South Australian Parliament by the South Australian Minister for Energy and Mining; and
- once the changes to the NGL are proclaimed, the required amendments to:
  - the Regulations will be made by the South Australian Governor; and
  - the NGR will be made by the South Australian Minister for Energy and Mining as initial rules.

13.3 Monitoring and review of any reforms

The effectiveness of any reforms that are made to the regulatory framework will be monitored and reviewed by SCO. It is also expected to be monitored by the ACCC as part of its gas market inquiry, which is scheduled to run until 2025.

In addition to these reviews, it will be open to market participants and other interested parties to submit a rule change to the AEMC if any of the reforms implemented through the NGR are found not to be working as intended.

Appendix A Risk analysis of the status quo and other options

Table A.1: Risk Matrix

Likelihood	Consequence				
	Minor	Moderate	High	Major	Critical
Highly Likely	Medium	High	High	Severe	Severe
Likely	Low	Medium	High	High	Severe
Possible	Low	Medium	Medium	High	Severe
Unlikely	Low	Low	Medium	High	High
Rare	Low	Low	Low	Medium	High

Description of risk likelihood

Likelihood description	Chance of risk occurring	Qualitative description of risk occurring
Highly Likely	>80%	The impact of the risk is expected to occur in most circumstances if the proposed option is implemented or is currently occurring
Likely	60-79%	The impact of the risk will probably occur if the proposed option is implemented
Possible	29-59%	The impact of the risk might occur at some time if the proposed option is implemented
Unlikely	10-29%	The impact of the risk could occur but considered unlikely or doubtful if the proposed option is implemented
Rare	<10%	The impact of the risk may occur in exceptional circumstances if the proposed option is implemented

Description of risk consequence

Consequence description	Consequence of risk occurring on gas market
Critical	Eventuation of the risk would have a critical impact on the efficient transportation of gas and the efficient operation of the gas market, by: (a) making it extremely difficult to obtain access to transportation services, or to obtain access at a reasonable price (i.e. the price that would prevail in a workably competitive market); (b) severely impeding the incentive to invest in pipelines; or (c) imposing excessive costs (e.g. administrative, compliance, search and transaction costs etc) on decision makers, regulators, service providers and/or shippers.
Major	Eventuation of the risk would have a major impact on the efficient transportation of gas and the efficient operation of the gas market, by: (a) making it very difficult to obtain access to transportation services, or to obtain access at a reasonable price (i.e. the price that would prevail in a workably competitive market); (b) substantially impeding the incentive to invest in pipelines; or (c) imposing significant costs (e.g. administrative, compliance, search and transaction costs etc) on decision makers, regulators, service providers and/or shippers.
High	Eventuation of the risk would have a high impact on the efficient transportation of gas and the efficient operation of the gas market, by: (a) making it difficult to obtain access to transportation services, or to obtain access at a reasonable price (i.e. the price that would prevail in a workably competitive market); (b) impeding the incentive to invest in pipelines, or (c) imposing relatively high costs (e.g. administrative, compliance, search and transaction costs etc) on decision makers, regulators, service providers and/or shippers.
Moderate	Eventuation of the risk would have a moderate impact on the efficient transportation of gas and the efficient operation of the gas market, by either: (a) making it somewhat difficult to obtain access to transportation services, or to obtain access at a reasonable price (i.e. the price that would prevail in a workably competitive market); (b) impeding the incentive to invest in pipelines; or (c) imposing moderate costs (e.g. administrative, compliance, search and transaction costs etc) on decision makers, regulators, service providers and/or shippers.
Minor	Eventuation of the risk would have a minor impact on the efficient transportation of gas and the efficient operation of the gas market, by: (a) making it difficult to obtain access to transportation services, or to obtain access at a reasonable price (i.e. the price that would prevail in a workably competitive market); (b) impeding the incentive to invest in pipelines; or (c) imposing minor costs (e.g. administrative, compliance, search and transaction costs etc) on decision makers, regulators, service providers and/or shippers.

Table A.2: Risks associated with the status-quo

Risk Description	Impact	Risk Owner	Existing Controls	Likelihood	Consequence	Risk Rating
Inappropriate regulation of pipelines (Chapter 7)	Some pipelines may be subject to economic regulation when they don't have the requisite degree of market power (i.e. the risk of over-regulation), which can give rise to unnecessary regulatory and compliance costs	Energy Council	n.a.	Possible	Moderate	Medium
	The application of regulation to pipelines with a greenfield exemption may distort the incentives service providers have to invest in new pipelines.	Energy Council	n.a.	Possible	Minor	Low
	The use of the coverage test for third party access decisions may result in under-regulation and inefficient investment in and use of pipelines.	Energy Council	n.a.	Highly likely	High	High
	Inefficient governance (including lack of information gathering or other investigatory powers), which can duplicate effort and result in unnecessary costs and delays to decision making.	Energy Council	n.a.	Highly likely	Minor	Medium
Inappropriate forms of regulation (Chapter 8)	Pipelines that should be subject to a heavier handed form of regulation will not be (i.e. the risk of under-regulation), which can result in shippers being more susceptible to exercises of market power with consequential effects for economic efficiency and consumers more generally.	Energy Council	n.a.	Highly likely	Critical	Severe
	Unnecessary complexity in the existing forms of regulation resulting in administrative, compliance and regulatory costs.	Energy Council	n.a.	Highly likely	Moderate	High
	Exercises of dynamic market power are not effectively constrained, which could further entrench incumbent service providers' market power.	Energy Council	n.a.	Possible	Moderate	Medium
Inadequate Information disclosure requirements (Chapter 9)	Shippers have to negotiate on the basis of incomplete, inaccurate, confusing and/or asymmetric information, which can hinder the price discovery process, give rise to higher transaction costs and make shippers more susceptible to market power.	Energy Council	The existing compliance and enforcement framework could be used to address some but not all of the information deficiencies that have been identified.	Highly likely	Major	Severe
Inadequate negotiation frameworks and dispute resolution mechanisms (Chapter 10)	Unnecessary costs and delays on negotiating parties and hindered ability of shippers to negotiate.	Energy Council	n.a.	Likely	Minor	Low
	Vulnerability of smaller shippers to exercises of market power (because the threat of arbitration initiated by these shippers is not considered credible).		n.a.	Highly likely	Major	Severe
	Inefficient and ineffective elements of the full and light regulation dispute resolution mechanism, which undermine the threat of arbitration.		n.a.	Highly likely	High	High

Table A.2: Risks associated with proposed options (refer to section 11 for detailed information on implementation options)

Treatment	Treatment owner	Residual Risk Likelihood	Residual Risk Consequence	Residual Risk Rating	Risks of adopting options other than status quo
Implement Option 1 – Maintain the status quo	Energy Council	Highly likely	Major	Severe	n.a.
Implement Option 2 – Regulation of pipelines with substantial market power	Energy Council	Likely	Moderate	Medium	▪ Higher administrative costs for regulators and decision makers ▪ Higher compliance and reporting costs for service providers ▪ Continued existence of some information deficiencies resulting in higher search and transaction costs and making shippers more exposed to market power. ▪ Smaller shippers potentially still exposed to exercises of market power.
Implement Option 3 – Regulation of all third party access pipelines plus pipelines not providing third party access if they pass test	Energy Council	Possible	Moderate	Medium	▪ Higher administrative costs for regulators ▪ Higher compliance and reporting costs for service providers ▪ Unnecessary regulatory and compliance costs in cases of over-regulation. ▪ Reduced greenfield investment incentives
Implement Option 4 – Regulation of all pipelines	Energy Council	Likely	Major	High	▪ Higher administrative costs for regulators ▪ Higher compliance and reporting costs for service providers ▪ Unnecessary regulatory and compliance costs in cases of over-regulation. ▪ Reduced flexibility for shippers requiring more bespoke services on pipelines subject to the heavier handed form of regulation ▪ Reduced greenfield investment incentives ▪ Reduced investment on pipelines subject to the heavier handed form of regulation because shippers are unable to agree to pay a different cost for new capacity, even where it may be prudent to do so.

Appendix B ACCC and Brattle Group recommended improvements to financial reporting guideline and reporting template for non-scheme pipelines

The tables below provide a summary of the ACCC and Brattle Group's recommendations on the improvements that could be made to Part 23 and the financial reporting guideline applying to non-scheme pipelines. These improvements are intended to improve the quality, reliability and accessibility of the information that is reported by service providers.

Table B.1: ACCC recommendations for the financial reporting guideline and reporting template

Area	ACCC Recommendations
Weighted Average Prices Information	To improve the WAP information that is currently reported by service providers, the AER should consider amending its Guideline to require: ▪ WAPs to only include charges that are comparable to those reflected in the relevant standing price and therefore to exclude any penalty charges (however described) ▪ WAP categories to align as closely as possible with standing prices (for example, by requiring volumetric and capacity charges to be reported as a single WAP if that is how the standing price is expressed) ▪ service providers to identify any amendments made to the reporting template since the information was last published, and explain the reason for the amendments within the template itself, as well as in the basis of preparation (amendments should be signed by a competent officer of the company) ▪ an officer of the company to complete a statutory declaration to certify that the WAPs calculations are true and correct when the information is published and when any amendments are made to the WAP information. To improve the accessibility of this information, the AER should consider amending its reporting template to include a summary tab that provides a "quick glance" view of the WAPs and the standing price for the equivalent point in time.
Basis of Preparation	To improve the standard of the bases of preparation, the AER should consider providing service providers further guidance on the objective of the basis of preparation and the standard that is expected in these documents (including the information to be reported and examples of how service providers are to demonstrate that any estimates have been arrived at on a reasonable basis and represent the best estimate possible in the circumstances).
Requirement to republish information	To improve useability and provide greater confidence in the information reported, the AER should consider amending the Guideline to require service providers to identify and explain the basis of any amendments to previously published information in the template and the basis of preparation.

Area	ACCC Recommendations
Recovered Capital Method Asset Valuation	The AER should consider amending its Guideline and/or financial reporting template to: ▪ require greater transparency by, for example requiring service providers to publish: - how the pipeline's return on capital has been calculated and the rate of return assumed in each year (including all the parameters underpinning the calculation of the rate of return) - how net tax liabilities have been calculated - the total shared operating expenditure and shared assets incurred by the service provider's parent company and how these costs have been allocated across all the assets owned and/or operated by the parent company. ▪ limit service providers' discretion by, for example: - only allowing previously regulated service providers to use the DAC estimated by the regulator - specifying whether mid-year adjustments of capital expenditure are permissible - specifying the method to be used to allocate the parent company's shared operating expenditure, shared assets and any shared revenue to the pipeline - specifying how 'other revenue' derived from the operation of pipeline assets are to be treated. ▪ address other gaps that have been identified by, for example requiring: - service providers to explain material changes in operating expenditure - service providers to report information on the actual volume of gas transported by the pipeline in each year and the amount of capacity contracted on a firm basis in the year, so that shippers can use this information to calculate effective prices. ▪ improve the standard of the financial information that is reported by requiring an officer of the company to sign off on the contents of the reporting template and basis of preparation when the financial reports are published and when any amendments are made to the financial reports. To improve the accessibility of the information, the AER should also consider amending the reporting template to include a summary tab that includes a "quick glance" view of some of the key financial information, including the service providers' RCV.

Source: ACCC, Gas inquiry 2017-2020 – Interim Report, July 2019, Table 6.4.

Table B.2: Brattle Group's recommendations on the financial reporting guideline and template

Issues	Findings / Recommendations
Financial reporting template	The Brattle Group recommended that: ▪ The AER amend its financial reporting template to: - require greater transparency of the inputs used to calculate the RCV, including the assumed rate of return, the calculations of net tax liabilities and the timing assumed for capital expenditure and provide more guidance on how the latter two inputs should be estimated; - include additional fields that enable the depreciated book value to be reconciled with the RCV; - include a field that allows service providers to indicate if the information is reported consistently with the Guideline or deviates from the Guideline; - include a summary tab at the front of the template that includes the key reported information, such as the proportion of shared assets to total assets, shared costs to total costs, ratio of the RCV and the depreciated book value method; and - adopt consistent labelling of information (i.e. so it is clear when the same information is to be used across different tables), consistent structuring of tables and where information is used across multiple tables it should be linked and not hard-pasted. ▪ The AER review the additional information that some service providers have included in their financial reports to understand their significance and to determine whether the degree of disaggregation provided for in the financial reporting template is appropriate, or further changes are required. The Brattle Group also suggested that the AER: - ask service providers to provide more detail on the "catch-all" items that have been added to the template such as "other shared costs", "other assets", or "other direct costs"; and - require service providers to disclose the magnitude of any adjustment they make to a reported figure (e.g. to include 'other direct costs' or 'gross capex').
Other information to be reported	The Brattle Group also recommended that service providers be required to report on: ▪ whether the expected future capital maintenance requirements for a pipeline are likely to be in line with, significantly above or significantly below the recent history reflected in their RCV calculations; and ▪ the amount of available capacity.
Basis of preparation	The Brattle Group recommended that the AER develop a template for the basis of preparation that non-scheme pipelines are required to prepare to provide for more consistency in the level of information reported and to improve the usability of the information .

Source: Brattle Group, Financial Information Disclosed by Gas Pipelines in Australia Under Part 23 of the NGR, August 2019, pp. 116-121.