



**Transmission Access Framework  
Progress towards a Statement of  
Proposal**

August 2007

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# **1 Executive Summary**

Building on its previous work, Gas Industry Co is preparing a Transmission Access Framework Statement of Proposal (SoP) which will describe in detail the proposed future arrangements for gas transmission access (the “transmission access framework”). The purpose of this paper is to provide a narrative introduction to the major components of the framework and to provide examples to explain how it is expected to operate in practice.

Gas Industry Co proposes that the transmission access framework will be in the form of “light regulation”, where rules or regulations made under the Gas Act (Rules) would set out the requirements for “standard services” to be offered by each Transmission Network Owner (TNO). The Rules would require each TNO to describe its service offerings in a set of “standard terms” contained in its “operating code” and published on its website. TNOs would be given a grace period of a year to comply with the new arrangements and make any necessary changes to their existing service offerings. The Rules would also establish arrangements for monitoring and enforcing these requirements.

A review of the principles found in overseas access regimes has been conducted to inform the Rule development process. A copy of that review is attached to this paper. A draft set of Rules will accompany the SoP, and will be consulted on before a recommendation is made to the Minister.

Each TNO will also be responsible for the ongoing development of its operating code, including consulting on proposed changes and deciding which changes should be made. As with the other provisions of the operating code, a changed provision will be open to challenge by anyone who believes that it does not comply with the Rules.

In contracting to provide a standard service, a TNO will be permitted to vary a limited range of “negotiable” standard terms where it is economically efficient to do so. Other terms can not be varied. Varied standard terms must be disclosed, unless approval is obtained from the Rulings Panel for non-disclosure.

Following the grace period, any person may allege a breach of the Rules (whether in relation to standard terms or disclosed varied terms) to a compliance regime, which Gas Industry Co believes can be modelled on the draft compliance Regulations recently proposed for switching and registry.

Any person may similarly allege a breach of the operating code. To assist with compliance monitoring, Gas Industry Co may from time to time commission an independent audit of the delivery of standard services. Audits would be conducted on areas which are of concern to shippers and interconnected parties, but which are not open to their review. For example, an audit might review the operations of balancing agents, or the operation of ring-fencing protocols.

## 2 Background

Gas Industry Co's gas transmission access review can be traced through its various publications on the subject:

- June 2006 - Transmission Access Issues Review (the Issues paper)
- October 2006 - Transmission Access Issues Review Submissions Analysis and Work Programme (the Issues Submissions Analysis paper)
- March 2007 - Analysis of Options for an Access Framework for Governance of Gas Transmission (the Options Analysis paper)
- June 2007 - Submissions Analysis Paper - Analysis of Options for an Access Framework for Governance of Gas Transmission (the Options Submissions Analysis paper)

In addition Gas Industry Co's work has been informed by:

- engagement with industry participants through its involvement in:
  - MDL's various industry forums considering the Maui pipeline balancing difficulties;
  - Vector's Transmission Code forums;
  - the development of the Memorandum of Understanding concerning Gas Industry Co's roles under the Maui Pipeline Operating Code (MPOC); and
  - various industry disputes in relation to pipeline access;
- feedback from interested parties on Gas Industry Co's discussion papers;
- a review of principles applicable in overseas access regimes (the "International Review"); and
- Gas Industry Co's policy development work in relation to other aspects of the gas market.

The International Review has provided insight into the core elements common to overseas regimes, the level of consistency across different regimes, and the adequacy of the principles contained in the existing New Zealand Pipeline Access Code (NZPAC). A "draft for discussion" copy of the International Review is attached.

Stakeholder feedback and other information obtained through Gas Industry Co's involvement in the activities described above have contributed to the refinement of the regulatory objective and the preferred approach for meeting it. The regulatory objective is:

*"To define a transmission access framework that facilitates competition in the upstream and downstream gas markets, recognising the natural*

*monopoly characteristics of gas pipelines.*

*The access framework will address matters such as:*

- *new entrant access rights to pipeline services;*
- *the management of multilateral arrangements; and*
- *the management of conflicts of interest.”*

The preferred approach for meeting this objective broadly follows the Light Regulation option described in the Options Analysis paper. It will be presented in detail in the SoP, which will be published once Gas Industry Co's proposals are further developed. The SoP will also explain why transmission access warrants regulatory attention, and describe the consultative and analytical process which has led Gas Industry Co to propose the approach set out there.

This report provides an introduction to the major components of the transmission access framework and, in particular, the elements of governance which will underpin the future arrangements for gas transmission access.

### **3 Transmission Access Framework**

Conceptually the transmission access framework is most easily described as a system containing:

- Rules – the overarching requirements;
- Standard Terms – the detailed multilateral access arrangements for standard services which are set out in each TNO's operating code; and
- Varied Standard Terms – variations to standard terms agreed between a transmission network owner (TNO) and a shipper or interconnected party.

These are serviced by common governance processes providing for compliance and enforcement, audit and, where required, approval of variations to standard terms. This is illustrated in Figure 1 below.

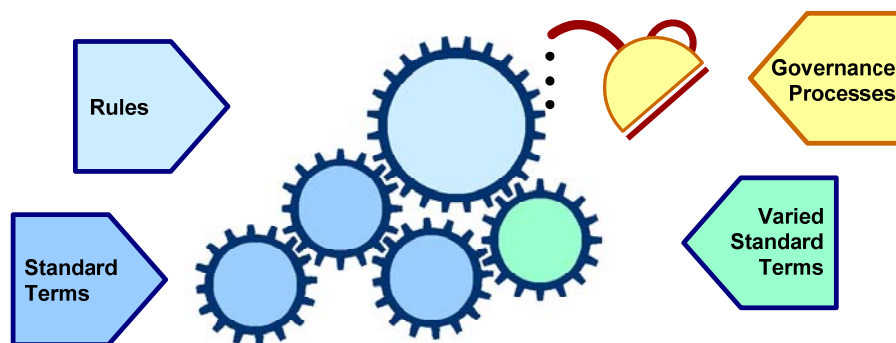


Figure 1 – Transmission Access Components

Rules would be drafted with reference to overseas experience, Gas Industry Co's knowledge of the New Zealand gas market, feedback provided by stakeholders, and the outcomes sought by Government. The Rules would be made by way of rules/regulations under the Gas Act.

The Rules would describe certain "standard services" which TNOs would be expected to provide. The services under consideration are:

- Transportation;
- Balancing; and
- Interconnection.

Each TNO would be required to set out in its operating code the standard terms on which it will offer the standard services. It is expected that, in part, the operating code would be a collation of various subordinate documents, such as technical operating procedures. Although, it was suggested in previous discussion papers that codes might be subject to different regulation from procedures, it is now considered that this distinction is not helpful, as discussed in Section 6 below.

The Rules would permit certain standard terms to be varied by negotiation, where this variation would not be expected adversely to affect third parties: for example, where an interconnected party wished to install equipment of a higher specification than standard. So, a contract for a standard service would, firstly, refer to all of the standard terms in the operating code and, secondly, set out which of these terms had been varied and how.

Governance processes are required to allow for changes to be made to the operating code, for code-related disputes to be resolved, and for consideration to be given to allowing contracts containing varied standard terms to remain confidential. These processes are discussed in Sections 6 and 7. Section 8 provides more detail on how these arrangements will work.

From time to time Gas Industry Co may supplement the Rules with "safe harbour" guidelines. If used, such guidelines would provide an indication of the kind of arrangements which Gas Industry Co believes would meet the Rules. The Rules would require a Rulings Panel to give consideration to such guidelines in making any rulings on alleged breaches (ie claims that the standard services as defined in a TNO's operating code did not meet the requirements of the Rules). Where a TNO follows a Gas Industry Co guideline on a particular matter, Gas Industry Co would not allege any breach of the Rules in respect of that matter. However, safe harbours do not provide an absolute assurance of compliance. Even where a guideline is followed, other parties may still consider that the TNO has not complied with the Rules, and allege a breach.

To put these discussions in context a broad description of the possible content of the Rules is first provided.

## 4 Content of the Rules

The Rules are currently being developed. They will be influenced by Gas Industry Co's analysis of the industry context, stakeholder feedback, current problems facing the industry, possible problems which are likely to emerge, and the objectives of reform. The Rules also need to reflect best practice, and the International Review is proving to be very helpful in that respect.

One feature common to all of the markets reviewed was a requirement that TNOs develop and publish standard terms for a number of core services. Gas Industry Co believes this approach is also valid for New Zealand, and proposes to accept the recommendation of the International Review that TNOs be required to offer standard services for transportation, balancing and interconnection.

The extent to which variations to these standard services can be negotiated does differ between the markets reviewed. Potentially negotiated arrangements can enhance economic efficiency. However, the ability to negotiate raises concerns about discrimination, particularly in relation to affiliates. Gas Industry Co believes the best approach for New Zealand is to permit negotiation of certain aspects of standard services but to set high standard for disclosure, or approval, of non-standard contracts, particularly for negotiated arrangements with affiliates.

Another key finding of the International Review was the importance of robust dispute resolution arrangements. Gas Industry Co has observed that disputes in New Zealand, particularly those related to new entrant access, sometimes remain unresolved for want of a suitable resolution process. It can be argued that the Commerce Act provides adequate safeguards for new entrants but in practice the high cost and uncertain outcomes of Commerce Act actions appears to deter all but major complaints. Gas Industry Co favours developing a robust, accessible, and flexible dispute resolution procedure, without depriving parties of their rights of appeal.

In relation to ring-fencing, the International Review notes that contractual, accounting and operational separation of owners from affiliates is common to all markets reviewed. The review notes that there is a trade off between the degree of disclosure and the degree of prescriptiveness with which separation is enforced. Considering the small size of New Zealand operations, Gas Industry Co is aware of the potential to impose costs on the industry through overly prescriptive requirements in this area. A greater degree of transparency is therefore likely to be sought.

The draft conclusions of the International Review are summarised in Table 1. It should not be assumed that all the draft recommendations made in the International Review will be accepted, but they will provide strong guidance.

**Table 1 – Recommended Principles from International Review**

<b>Area</b>	<b>Recommended Principles</b>
Access to Standard Services	<ul style="list-style-type: none"> <li>• TNO must publish standard terms</li> <li>• TNO must offer access to all comers on standard terms</li> <li>• TNO may negotiate non-standard terms which are economically efficient</li> <li>• TNO must publish information on non-standard deals with affiliates</li> <li>• TNO must publish Queuing Policy</li> <li>• Dispute resolution process for access disputes should be established</li> </ul>
Scope of Standard Services and terms	<ul style="list-style-type: none"> <li>• TNO to offer transportation, balancing and interconnection services as standard</li> <li>• Requirements for service standards to be specified</li> </ul>
Administration of Service Terms	<ul style="list-style-type: none"> <li>• Changes to standard terms should be subject to regulatory oversight</li> <li>• TNO to publish operating procedures</li> <li>• TNO to demonstrate compliance with its published policy and users may request independent audit of pipeline operations</li> <li>• Dispute resolution process for operational or contractual disputes should be established</li> </ul>
Ring-fencing of TNO from affiliates	<ul style="list-style-type: none"> <li>• Services to affiliates must be provided on same basis as to non-affiliates</li> <li>• TNO must be separated operationally from affiliates</li> <li>• TNO must not disclose user information to affiliates</li> <li>• TNO must provide pipeline information on same basis to affiliates as non-affiliates</li> <li>• TNO must disclose ring-fencing arrangements and report on compliance with these</li> </ul>



## 5 Governance of Rules

### 5.1 Rule Changes

The Rules will be developed and changed through the process prescribed by the Gas Act. This process sits within the legislative framework where the Gas Act empowers Gas Industry Co to make recommendations on rules and regulations to the Minister of Energy who, having taken advice from officials, will determine whether or not to support them.

In respect of changes to the Rules, it is envisaged that Gas Industry Co would consider a Rule change proposal from any person, or propose one itself. In either case Gas Industry Co would proceed by reviewing/consulting on the matter under consideration and, if thought necessary, submit a Rule change recommendation to the Minister, having considered the benefits and costs of the reasonably practicable options. The Minister would consult with officials to determine whether to support the change or not, thereby providing an important check and balance on Gas Industry Co's recommendation.

Where a recommended Rule change is not accepted by the Minister, Gas Industry Co may revise the proposal, re-consult and submit a revised recommendation to the Minister. A further discipline on Rule changes is provided through the ability to challenge Gas Industry Co or the Minister in the Courts where it is thought that the process specified in the Gas Act has not been followed. The rule change process is outlined in Figure 2 below.

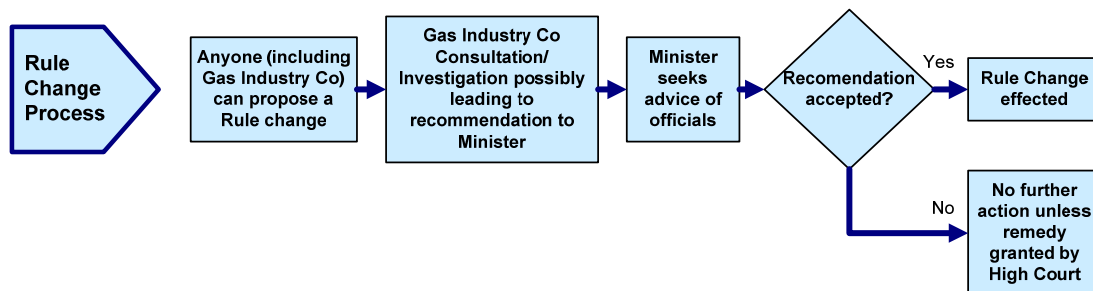


Figure 2 - The Rule Change Process

### 5.2 Rule Breaches

It is proposed that anyone may allege a breach and pursue an action where they believe that:

- A code or procedure contained in the operating code breaches a Rule: for example, where a person seeking to connect to the transmission system might consider that a TNO's welding procedure is unduly onerous and therefore breaches a provision in the Rules that the procedure should accord with the standard which would be expected of a "reasonable and prudent operator".
- A code or procedure is missing from the operating code: for example, where the TNO has not developed a welding procedure for new interconnections, even though the Rules require that the TNO develop such a procedure.

On some matters Rules would only establish principles. However, where Gas Industry Co considered that it was necessary or beneficial to do so, it may wish to recommend Rules which are more prescriptive.

Where a Rule is prescriptive, it would be expected that the matters specified in that Rule would be repeated in the operating code, so that it forms a complete description of the standard services (without parties needing to also refer to the Rules). For example, if a Rule were to specify that a TNO must give two months' notice of a price change, the TNO would be required to incorporate that provision into its operating code as part of its standard transportation service offering.

It is expected that parties would take responsibility for identifying suspected Rule breaches, notifying them to the TNO and, where necessary, pursuing the alleged breach through the compliance procedure. However, where Gas Industry Co became independently aware of a suspected breach it would then take responsibility for alerting the TNO to its concerns and, if necessary, seeking compliance.

When notified of an alleged breach, the TNO will be obliged (by the Rules) to investigate it and respond to the party making the allegation. It may be that the alleged breach is addressed at this stage, without recourse to the compliance regime.

Where an alleged Rule breach is referred to the compliance regime, Figure 3 provides an overview of the Rule breach process.

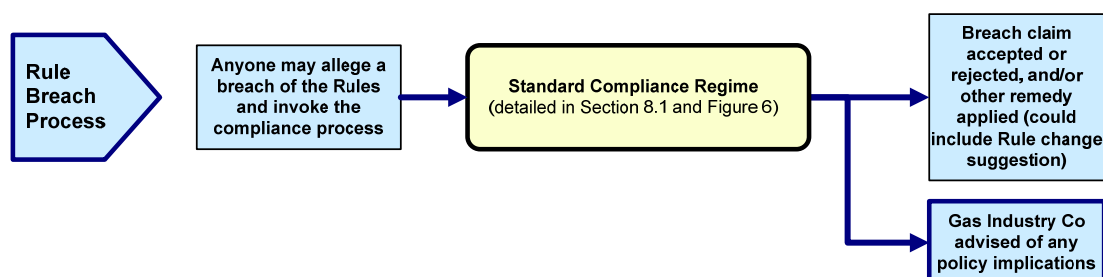


Figure 3 - The Rule Breach Process

## **6 Governance of Operating Codes**

In previous discussion papers, Gas Industry Co has considered codes to be on a different governance tier from procedures. The rationale for that approach was that codes were at a higher level - dealing with the broad operation of the access regime - while procedures were essentially technical - covering such matters as meter testing, welding, processes for booking capacity, confidentiality of information, and so on. However the boundary between codes and procedures is not clear, and both have the potential to pose barriers to entry, or allow the superior negotiating strength of a TNO to be exercised. On reflection, therefore, Gas Industry Co has come to the view that it is not helpful to attempt to distinguish “codes” from “procedures” and govern them differently. Therefore, the two separate governance tiers previously envisaged have been merged into a single “operating code” tier.

Under the Light Regulation option described in Gas Industry Co's Options Analysis Paper, both codes and procedures would be administered by TNOs. This will remain the same. The operating code – containing codes and procedures – will be the responsibility of the relevant TNO. The content of the operating code would need to conform to the Rules, just as before. However, in terms of governance, it is now proposed that anyone may claim that a provision of an operating code breaches the Rules and have that claim investigated and ruled upon. There will be a single dispute process for all operating code provisions, whether these are commercial, operational or procedural in nature.

On the other hand, processes for making changes to the operating code may vary, at the discretion of the TNO, according to the type of provision being considered. For example, conceptual aspects may be developed through industry workshops, whereas more technical aspects may be considered by technical committees. From a policy perspective the important thing is that, regardless of how the operating code is developed, it must conform to the Rules and be subject to a consistent, robust and effective compliance process.

In summary, this paper does not distinguish between the governance of codes and procedures and has a common governance approach to all provisions of the operating codes.

### **6.1 Operating Code Changes**

Like the Rule change process, the suggested code change process allows anyone to propose a change. However, while Rule changes are proposed to Gas Industry Co, a code change is proposed to a TNO. It is anticipated that a person proposing a change would be required to provide the TNO with:

- precise and complete details of their proposed change;
- their reasons for the proposed change;
- their assessment of the effect of the proposed change on other parties and the operation of the operating code; and
- any other supporting information they believed is relevant.

The TNO would then be required (by the Rules) to consult on the proposed change, and publish a code change decision together with the reasons supporting that decision.

Note that this is quite different to the code change process currently set out in the MPOC and the related Memorandum of Understanding between MDL and Gas Industry Co<sup>1</sup>. There it is Gas Industry Co which consults on proposed changes and makes a recommendation to the TNO – MDL. MDL then has a qualified right to accept or reject that recommendation. In that case the TNO is not undertaking the role of managing the detailed development of the access arrangements, except for its right of veto on recommended changes. The approach proposed in this paper puts the TNO back in the driver's seat. It is the TNO which will consider proposed changes and make changes to the code as it sees fit. However, each TNO's decision would be open to challenge by anyone who believes that it might breach the Rules, or was arrived at without properly following the code change procedure set out in the TNO's operating code.

Another difference from the existing MPOC arrangement is that currently MDL has discretion over which standard terms (in particular, procedural terms) to include in the MPOC and which to leave out. Only the former are subject to the MPOC change process. The latter – that is all operating procedures which MDL has developed but which are not included in the MPOC – may be changed unilaterally by MDL, without any consultation. The proposed approach is that *all* operating procedures relating to standard service provision would be included in the operating code and be governed by the same code change process.

A further difference from the current MPOC situation is that, while at present only Parties to the MPOC may propose a code change, it is proposed that under the new Rules any person can propose a code change. The rationale for this position is that other persons, such as new entrants or end users, may have a legitimate interest in a code provision, and possibly more incentive than incumbent parties to propose a pro-competitive change.

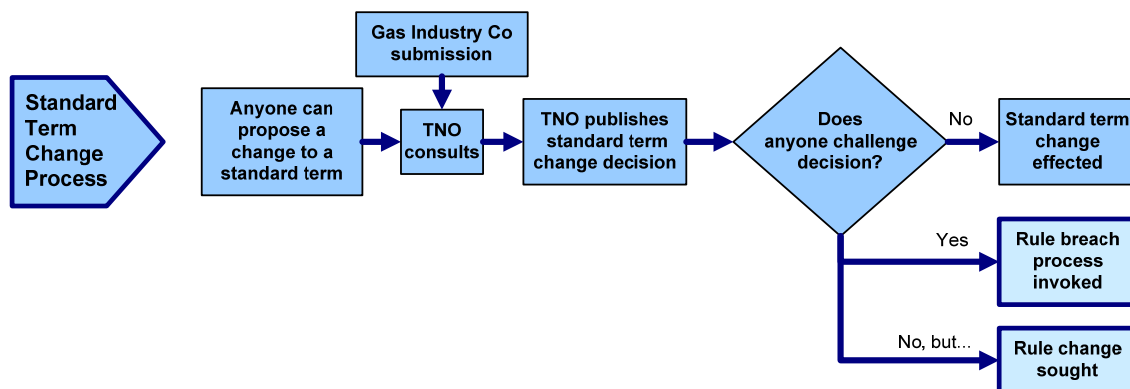
As previously discussed, Gas Industry Co considers that procedures can raise similar concerns over the imbalance of negotiating strength, conflicts of interest, and new entrant access, as are raised in respect of codes and so should be subject to the same governance arrangements. However, it is recognised that there are many procedures which address quite technical matters and where a different consultation process may be required than for the (possibly more legal and commercial) matters addressed in codes. For example, technical procedures may involve the participation of standing technical committees and external technical experts. The principle should be that the consultation process should be appropriate to the subject matter.

Although not illustrated here, there is also likely to be a need for urgent changes to codes or to procedures to be adopted quickly: either through an accelerated change process, or by allowing an immediate change followed by a review to confirm that the change was justified.

The operating code change process is outlined in Figure 4 below.

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<sup>1</sup> And previously envisaged for the "light regulation" option



**Figure 4 - The Operating Code (Standard Term) Change Process**

Although each TNO is responsible for managing its own operating code, it can be seen from Figure 4 that Gas Industry Co will still have a role. Gas Industry Co may wish to make a submission to the TNO for several reasons. For particular code change proposals, Gas Industry Co might want to represent the views of consumers where it believes these would otherwise not be adequately represented. It may also wish to advise the TNO if it thought that a code change would cause Gas Industry Co to consider Rule changes.

## 6.2 Operating Code Breaches

The proposed code breach process is essentially the same as for Rule breaches. It involves anyone being able to allege a breach of a code and invoke the compliance process. A code breach may arise in relation to:

- Access to a standard service, where a TNO has not properly followed its procedures through which standard service provision is offered to and agreed with new users; or
- Delivery of a standard service, where a TNO has not complied with the standard terms for providing that service.

As mentioned earlier, it is envisaged that in relation to multilateral matters this compliance regime will supersede other compliance arrangements specified in existing contracts, and that the new compliance regime will be established through regulations. However, decisions of the Rulings Panel will be open to appeal.

As with alleged Rule breaches, the party alleging the code breach must notify the TNO in the first instance. When notified of an alleged breach, the TNO will be obliged (by the Rules) to investigate it and respond to the party making the allegation. It may be that many alleged breaches are addressed at this stage, without recourse to the compliance regime.

Where an alleged code breach is referred to the compliance regime, the breach process is outlined in Figure 5 below.

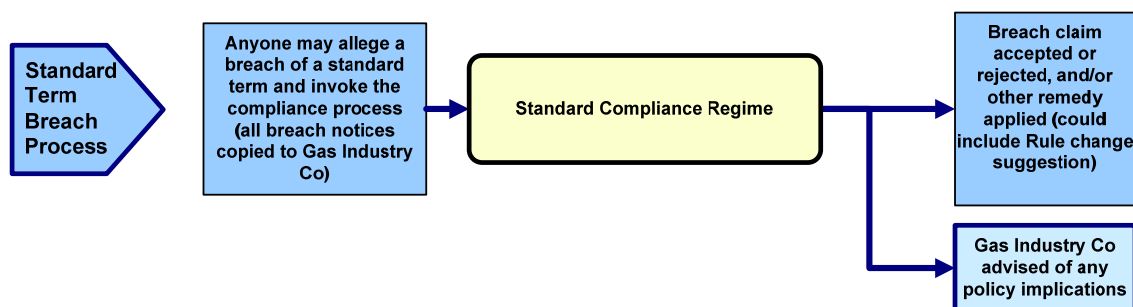


Figure 5 - The Operating Code (Standard Term) Breach Processes

### 6.3 Getting to Compliant Operating Codes

The discussion above relates to code changes and breaches but does not address the question of how a compliant operating code is established in the first instance. There are two possible routes to compliant operating codes. One is to allow some transitional period and then to submit the operating code to an approval process. The other is to determine compliance on a case by case basis, considering issues only when they are raised.

The first approach raises a number of questions. For example, what does “approval” mean? Is it just an acknowledgement that, at face value, the operating code appears to comply with the Rules? Or would it provide some protection for TNOs against disputes raised in relation to compliance with the Rules?

Another question is the nature of the approval process itself. It would probably need to comprise both a technical and a legal review, and possibly a consultation on the findings. Also, if matters arose which could not be agreed between the TNOs and Gas Industry Co, a dispute resolution procedure would need to be invoked. This would be a lengthy and difficult process which would leave the status of the operating code unclear until it was complete.

On the other hand, if there was to be no “blessing” of the operating code, every dispute could be fought on two fronts; in terms of compliance with the operating code, and in respect of whether the relevant operating code complied with the Rules.

Gas Industry Co has concluded that it is best not to have a formal approval process but to allow a period of a year for TNOs to develop a compliant operating code. This development may include some changes to existing operating codes (MPOC and VTC), inclusion of other existing operational procedures into the operating code, and development of any new codes or procedures required by the Rules.

At the end of this period there may well be a flurry of activity as various provisions are challenged, but this will be more manageable than the “one big tick” approach.

## 7 Governance Processes

### 7.1 Compliance and Enforcement

The breach processes described in relation to Rules and operating codes require the existence of investigative and rulings functions. These will all be contained within a standard compliance regime. It is envisaged that this regime will supersede other compliance and dispute resolution arrangements currently specified in transmission contracts.

On considering the requirements of the compliance regime it is clear that it would have many aspects in common with the arrangements proposed in the draft compliance regulations for switching and registry. The suitability of these regulations to transmission access disputes is explored in Appendix A. In essence, Gas Industry Co's conclusion is that, although the draft regulations for the switching and registry rules were tailored for that particular purpose, they provide a very good starting point for the development of transmission access compliance regulations.

Figure 6 summarises the high level compliance processes. The abbreviation MA stands for Market Administrator. The MA function is to assess the materiality of alleged breaches and to refer material breaches to an Investigator, and seek settlement of non-material breaches. The MA, the Investigator, and the Rulings Panel personnel, would all be appointed and remunerated by Gas Industry Co. These matters are explored in more detail in Appendix A.

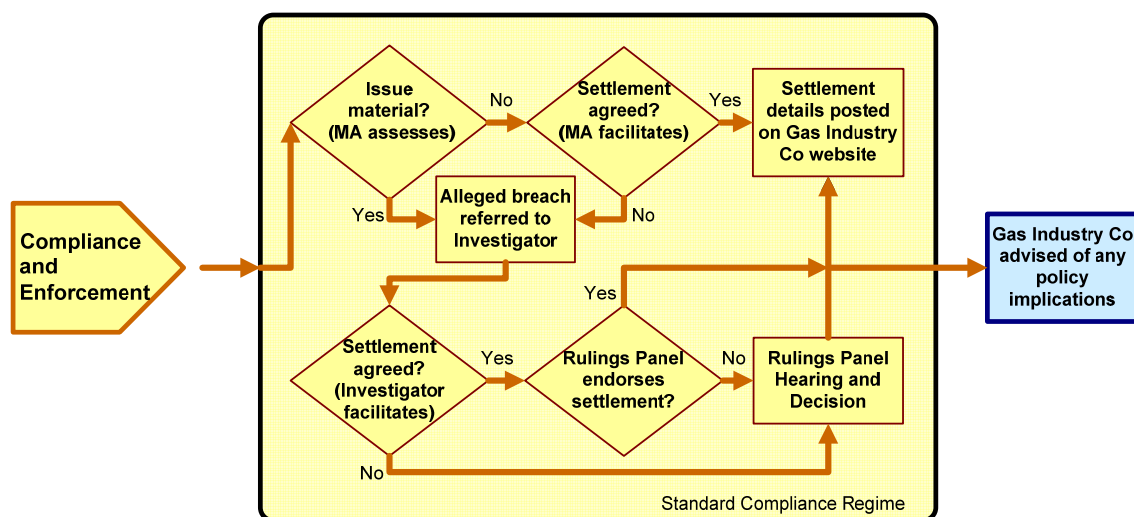


Figure 6 - The Compliance and Enforcement Process

### 7.2 Auditing

Gas Industry Co considers that auditing will be an occasional function, directed at particular areas of concern as they might arise. For example, Gas Industry Co may wish to appoint a person to report on whether pipeline balancing is being conducted in accordance with the operating code, or whether ring-fencing

is operating as described in the operating code. These investigations generally would not relate to any alleged breach, rather they would be aimed at casting light on aspects of transmission access which are of general concern but which no individual shipper or welded party would have the right or resource to investigate.

Where potential breaches of Rules or operating codes are found these would be referred to the compliance regime. However, the main objective of this auditing role is to identify matters that may have operational or policy implications. Even where an audit found that there was full compliance with the Rules and operating codes, it may find that the actual Rules or code provisions were leading to undesirable outcomes. In this circumstance the auditor would advise Gas Industry Co of any policy implication, or an industry participant of any operational issues. Figure 7 below provides an overview of the auditing process.

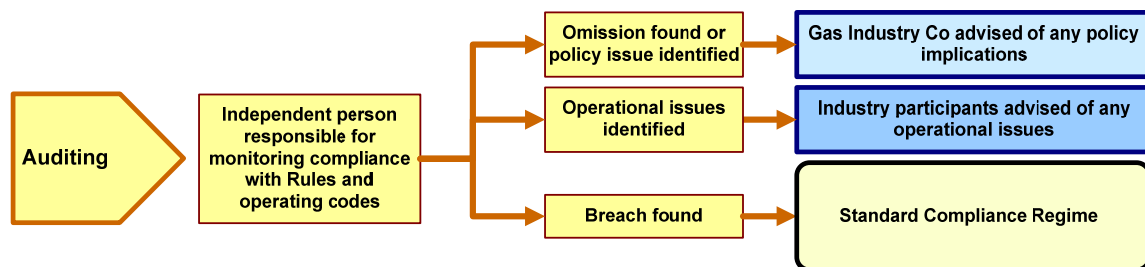


Figure 7 - The Auditing Process

### 7.3 Disclosure of Contracts Containing Varied Standard Terms

Where a new user contracts with a TNO for the provision of standard services, the default position would be that the contract would contain (implicitly or explicitly<sup>2</sup>) the relevant standard terms set out in the operating code. However, in some instances the user may seek to negotiate variations to these standard terms.

It is proposed that the Rules would identify which standard terms may be varied ("negotiable terms") and which may not ("non-negotiable terms"). The Rules would also place restrictions on how the negotiable terms may be varied to ensure that they do not adversely affect other users and that they do not conflict with or over-ride non-negotiable terms. Of course, notwithstanding these restrictions, any varied terms would also need to be agreed between the TNO and the user. There would be no obligation on the TNO to agree such variations, although they would be obliged to develop and comply with a negotiations procedure so that such negotiations would be undertaken in good faith.

To ensure that a contract containing varied terms complies with the Rules, Gas Industry Co's first preference is for such contracts to be disclosed. Anyone could then allege that a varied term may breach a rule in the same manner as

<sup>2</sup> The contract would probably just refer to the standard terms set out in the relevant codes, rather than list them explicitly in the contract.



they may allege that an operating code provision (a standard term) may breach a rule. However, there may be situations where disclosure is inappropriate. For example, the variations may be of a trivial nature while the contract matter is highly confidential. In such a case disclosure would be commercially damaging to the user. Therefore, there should be an opportunity for contract parties to seek an exemption from disclosure from the Rulings Panel.

In considering exemption from disclosure, the Rulings Panel would not be directly ruling on the compliance of the varied terms with the rules. Instead, it would be weighing the cost of disclosure (in terms of loss of confidentiality) against cost of non-disclosure (in terms of loss of transparency and the potential for the varied terms to be non-compliant). So, the possibility of non-compliance would be just one factor in its considerations.

In respect of contracts with affiliates, it is noted that the International Review recommends that TNOs disclose any non-standard deals. A possible alternative would be to allow the Rulings Panel to take user affiliation into account when considering an application for contract disclosure.

Figure 8 below provides an overview of the disclosure of varied standard terms process.

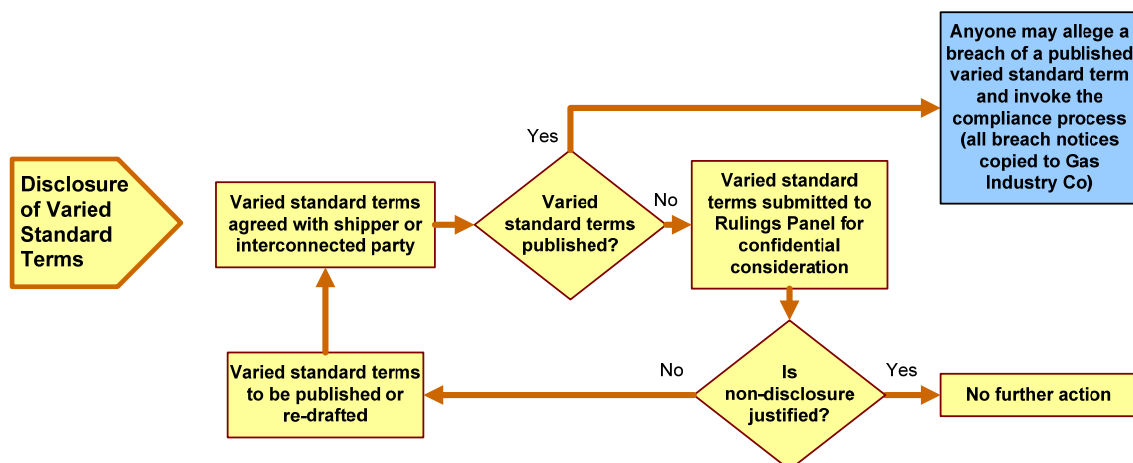


Figure 8 – Disclosure of Varied Standard Terms Process

## 8 Examples of How the Regime Would Apply

To get a better appreciation of how the regime described above might work in practice, it is helpful to consider some examples.

### 8.1 Example 1 – dispute over failure to respond to a flow order

Due to a compressor failure, a TNO is unable to deliver to Scheduled Quantities and requires an immediate reduction of flow to preserve linepack. The TNO advises Shippers and interconnected parties that a contingency event has occurred and issues Operational Flow Orders (OFOs) to all affected interconnected parties requiring an immediate 50% reduction in flow.

After several hours the flows at all delivery points except DP1 have substantially reduced. By this time the compressor problem has been resolved and the compressors are brought back into operation. The TNO advises that flows can return to their original nominated amounts. Subsequently the TNO requests an explanation for why the interconnected party at DP1 did not respond to the OFO. The interconnected party at DP1 responded that:

- a. it believed that the TNO had not acted as a Reasonable and Prudent Operator (RPO) in issuing the OFO, because it could have waited until it knew whether the attempted repairs at the compressor station were effective and, had it done so, no OFOs would have been necessary;
- b. it would not have been acting as a RPO if it had responded to the OFO because the operation of its plant required a staged shutdown; and
- c. no-one had suffered any loss as a result of DP1 not responding to the OFO.

Under the new access framework, this situation might develop as follows:

1. The TNO complains to the Market Administrator that its operating code has been breached<sup>3</sup> because of DP1's failure to immediately reduce its flow as the OFO required.
2. The Market Administrator determines that the alleged breach is material and refers the matter to an Investigator.
3. The Investigator agrees with DP1 that it was not "reasonable and prudent" for the TNO to have requested an "immediate" reduction in flow, and that it could have allowed up to 2 hours for the flow reduction to occur. The parties agree to pursue a change in the procedure for issuing OFOs, requiring that "wherever practicable, interconnected parties should be allowed at least 1 hour to respond to an OFO." This settlement is agreed by the parties and submitted to the Rulings Panel for approval.

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<sup>3</sup> Or, to be exact, that the interconnected party at DP1 has breached the terms of its interconnection contract with the TNO which, inter alia, require it to respond to OFOs

4. The Rulings Panel considers evidence and concludes that, although the proposed settlement was appropriate for the future, it did not address the breach which had occurred. The Rulings Panel holds a hearing on the matter. It finds that DP1 had made no attempt to respond to the OFO, even several hours after it had been issued and was therefore in breach of the code. The Rulings Panel determines that DP1 should meet costs and pay a pecuniary penalty of \$10,000.

## **8.2 Example 2 – dispute over delayed interconnection**

A new entrant has built facilities to interconnect with a transmission pipeline. It believes that its new receipt point station complies with all the technical requirements of the TNO. The TNO's Technical Operator informally agrees, but seems to the new entrant to be delaying the project at every key sign-off point – documents go missing, meetings are missed, new requirements are introduced. The Technical Operator (an agent of the TNO) claims the delays arise because it is doing its job thoroughly while being short of staff.

On the day scheduled for commissioning of the new station the new entrant still does not have permission to proceed, because the Technical Operator has not processed the documentation supplied by the new entrant 10 days earlier. The new entrant stands down its commissioning staff. Permission to proceed is obtained two days later and the commissioning finally occurs a week after that.

Under the new access framework, this situation might develop as follows:

1. The new entrant complains to the Market Administrator that the TNO's interconnection procedure has breached the Rules because it has not adequately specified deadlines for key sign-offs. Also, it claims that the delays amount to a failure by the TNO to act as a reasonable and prudent operator (RPO), as is required by Rules. The new entrant assesses its additional costs and lost gas sales as a result of the delay at \$20,000 and \$300,000 respectively.
2. The Market Administrator assesses the issues to be material and refers the alleged breaches to an Investigator. The Investigator considers that the TNO's interconnection procedure does breach the Rules and that the behaviour of the TNO's agent, the Technical Operator, does not appear to be to the standard of an RPO.
3. Settlement is not agreed and the matter is referred to the Rulings Panel. The Rulings Panel holds a hearing and decides against the TNO. It concludes that the Rules had been breached since the TNO's procedures did not specify timeframes for interconnection processes. Also, it considered that the TNO's agent, the Technical Operator, knew that time was critical to the new entrant, but had made no attempt to advise it of possible delay, as a RPO would be expected to do. The TNO is ordered to meet costs, pay a pecuniary penalty of \$10,000 in respect of the Rule breach, and to pay the new entrant \$250,000 in compensation.

### 8.3 Example 3 – dispute over new delivery point location

A new entrant wishes to establish a delivery point at a factory it is supplying with gas. The factory is close to a transmission system and to a distribution system. The new entrant wishes to establish a dedicated supply point off the transmission system (and avoid distribution charges), but the TNO insists that it connect to either an existing nearby delivery point off the transmission system or to the distribution system.

Under the new access framework, this situation might develop as follows:

1. The entrant complains to the Market Administrator that it is willing to meet all the costs of connection to the transmission system but that the TNO says that it has an existing delivery point only one kilometre away from its site and its policy is not to build delivery points at closer than 5km intervals. The TNO suggests that the new entrant could either connect at the TNO's existing delivery point (one kilometre away from the entrant's factory), or connect the factory directly to the distribution system.
2. The entrant believes that the 5km rule in the TNO's operating code must breach the Rules which state that:
  - a. the TNO shall provide an interconnection service as a standard service; and
  - b. the TNO may negotiate varied standard terms which are economically efficient.
3. The TNO insists that its standard terms for interconnection - which include a policy not to build a new connection to its transmission pipelines closer than 5km to an existing connection point - comply with the Rules. This policy is clearly stated in its code.
4. The Market Administrator reviews the facts and advises the new entrant that it considers that the issue is not material because it would affect very few market participants and it had not prevented or delayed the new entrant from gaining access (since other alternatives had been proposed).
5. A meeting is arranged with the new entrant and the TNO to explore the issues and settle the matter if possible. The TNO presents evidence to show that (even if it did not have a 5km policy) developing a new delivery point would be more costly than either of the alternatives. However the new entrant insists that, since it is willing to meet the full cost of establishing the new connection, the cost of alternatives is not relevant.
6. The new entrant requires the Market Administrator to refer the matter to an Investigator who confirms the facts and, since the parties are still unwilling to agree, refers the matter to the Rulings Panel.
7. The Rulings Panel holds a hearing and finds that the obligation on the TNO was to provide a standard interconnection service. It also had discretion to negotiate variations to that standard service where it was economically efficient to do so. Since the TNO's standard service did meet the requirements of the Rules, it found no evidence of a Rule

breach. It questions whether the TNO's 5km policy will always be appropriate and advises Gas Industry Co that this may be a policy issue worthy of review. The new entrant is ordered to meet costs.

#### **8.4 Example 4 – ring fencing Rule change proposals**

An industrial customer is located close to a transmission pipeline but currently uses only fuel oil and electricity. It is tendering to renew its energy supply contracts. Its current electricity supplier – Supplier A - believes that it can establish a co-generation facility on the site and undercut the customer's current fuel costs. It enters into a confidentiality undertaking with the customer. The customer agrees to keep the co-generation concept confidential in recognition of its supplier's efforts to firm up the concept and to tender on that basis.

Supplier A is also an existing shipper on the transmission pipeline. It enters into discussions with the TNO to establish the feasibility and cost of building a dedicated new delivery point on the pipeline. The TNO is slow to produce the necessary information and Supplier A later hears that another supplier – Supplier B – has approached the customer with a similar proposal. Supplier B is affiliated with one of the TNOs.

Supplier A writes to the TNO claiming that there must have been a breach of the "treatment of confidential information" provisions of its operating code.

Under the new access framework, this situation might develop as follows:

1. When the TNO receives the complaint it appoints an independent auditor to investigate the claim, in accordance with its operating code. The independent auditor investigates the claim and finds that Shipper A's new delivery point enquiry had been mentioned in the TNO's board papers and that one board member was also an employee of Supplier B. However, the board member denied any wrongdoing. The auditor advises the TNO of its findings and recommends that future project investigations only be referred to the board when they are past the conceptual stage.
2. The TNO provides a copy of the auditor's report to Supplier A and to Gas Industry Co and proposes that the Rules are changed to put the auditor's recommendation into effect.<sup>4</sup>
3. Gas Industry Co consults on the proposal and concludes that the change is worthwhile. It adds the proposed change to a list of other proposed Rule changes and submits them to the Minister for approval.
4. The Minister agrees to the Rule change recommendations and the changes are Gazetted. The Rule change comes into effect 28 days later. The Rule change provides for the TNO's to have another three months in

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<sup>4</sup> Depending on the actual provisions of the TNO's operating code, there could have been a Code breach here. If the operating code provided that confidentiality of information shall be protected then the example presents prima facie evidence of a breach which, regardless of the auditor's report, Shipper A may wish refer to the compliance regime. However, if the operating code just provided that the TNO shall take certain steps in order to attempt to preserve confidentiality and those steps were taken, then there would not have been a code breach. This is the assumption made in this case since the objective was to illustrate how a Rule change might be effected.

which to change their codes and procedures and for the new arrangements come into effect one month later.

The high level processes of a standardised compliance regime are represented in Figure 6. At this stage it is proposed that the compliance regime for the transmission access framework could be closely modelled on the compliance arrangements designed for switching and registry and downstream reconciliation, as described in the Draft (Compliance) Regulations 2007. Figure 9, in this Appendix A, maps out the draft compliance processes proposed for switching and registry, and, considers how suitable that regime may be to transmission access.



## A1 – Compatibility of Compliance Roles

In the draft compliance regulations “participants” are registry participants. For transmission access the “participants” should include anyone who has an interest or potential interest in gas transportation. There does not seem to be any benefit in constraining participation to a narrower class. For example, if participation was confined to existing TNOs and users, this would exclude new entrants seeking access for the first time. Yet these new entrants - not yet in the “club” - may have valuable insights into the operation of Rules and operating codes. New entrants may also have legitimate cause to claim breaches of Rules and operating codes.

The draft compliance regulations **require** “participants” and “registry operators” to notify suspected breaches. Any consumer or other person may also notify suspected breaches. For transmission access it would also seem appropriate that TNOs (including the agents of TNOs – the technical, system and commercial operators), interconnected parties and shippers should be **required** to notify suspected breaches. The draft regulations also **allow** for consumers and other persons to notify suspected breaches. This also seems appropriate for transmission access as it could be imagined that consumers, and persons who might become interconnected parties or shippers, may all have valid concerns about transmission Rules and operating codes.

The draft compliance regulations allow for the “registry operator” to be a service provider appointed by the Gas Industry Co. There are no such appointments envisaged at this stage in relation to the transmission access framework. However, it is conceivable that service providers may be relevant in the future. For example, if a single balancing regime ever emerges, it may be appropriate for the balancing agent to be appointed by, and report to, Gas Industry Co.

In the draft compliance regulations the “market administrator” is either Gas Industry Co or a person appointed by it. The market administrator receives and filters complaints, resolving those which do not raise material issues and referring the others for investigation. It is proposed that, in the transmission access framework, Gas Industry Co could initially perform this role.

The draft regulations allow for Gas Industry Co to appoint an “investigator” to investigate breaches. The investigator must try to settle all matters referred to it, and may appoint an “auditor”, “technical expert” or other persons thought fit to give it advice. This would also be appropriate in relation to transmission access.

A “Rulings Panel” has the role of determining breaches by approving a recommended settlement referred to it by an investigator or, if such a recommendation is not acceptable to it, determining the matter itself. It can also propose rule changes to Gas Industry Co. An additional role of a Rulings Panel in the transmission access context could be to advise Gas Industry Co of any policy implications arising from its work.



## A2 – Suitability of Compliance Process

The compliance process set out in the draft compliance regulations is mapped out in Figure 9 above. If the draft compliance regulations were to be adopted for transmission access, Figure 9 can be viewed as a more detailed version of the high level processes presented as the “Standard Compliance Regime” in Figure 6.

Generally the processes seem quite suitable for use in the transmission access domain.

## A3 – Suitability of Compliance Outcomes

Compliance is often considered in terms of a compliance pyramid, as depicted in Figure 10 below. At the pinnacle are the few situations where non-compliance is wilful, or relates to a critical provision of a Rule, code or procedure. Lower down the pyramid are the more numerous situations where parties may wish to comply, but meet with obstacles which prevent them from doing so. Clearly different remedies are necessary in that circumstance.

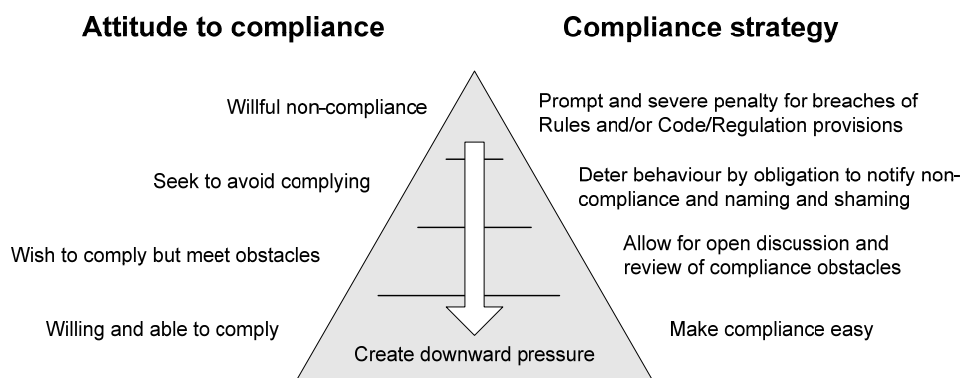


Figure 10 - The Compliance Pyramid

If the draft compliance regulations were to apply to transmission access, they would need to provide the flexibility necessary to allow for a range of remedies. The Rulings Panel does appear to have that flexibility. In particular, it can:

- receive and decide on recommendations from the investigator about breaches;
- accept early resolution where a breach is admitted;
- accept or reject settlements between parties to the dispute;
- decide whether a matter should proceed to a hearing that may result in a formal order by the Rulings Panel (e.g. a civil pecuniary penalty to be paid to Gas Industry Co);

- decide whether to proceed to hold a hearing or to receive written submissions and decide the dispute on the papers;
- make rulings (e.g. order compensation, impose civil pecuniary penalty, and order costs) as provided by the Act;
- make other such orders set out in s43X of the Act (e.g. recommend rule changes, issues warnings, impose record keeping requirements); and
- arbitrate on bilateral disputes.

## A4 – Conclusion

In general the switching and registry compliance regime appears to be a good fit to transmission access. Although the roles defined under the draft regulations are specific to switching and registry, they can be easily mapped across to transmission access. For example:

<b>Switching and Registry Role</b>	<b>↔</b>	<b>Transmission Access Role</b>
Participants	-	TNOs and Users
Registry Operators and Allocation Agents	-	TNO's Agents (Technical, System and Commercial Operators)
Registry Operator	-	None at present
Market Administrator	-	Market Administrator
Investigator	-	Investigator
Auditor	-	Auditor
Technical Expert	-	Technical Expert
Rulings Panel	-	Rulings Panel

The compliance processes and outcomes also appear to be a good match to transmission access. In particular the compliance regulations allow for the involvement of an investigator, technical expert or auditor where necessary. They also provide for a wide range of outcomes.

At present the draft compliance regulations only relate to a set of rules (the switching and registry rules). To be applicable to transmission access, the compliance regulations would need to apply to Rules, operating codes and related contracts.

# International Review of Access Principles: Executive Summary

## 1 Background

### 1.1 Framework for Gas Access

Gas Industry Co (GIC) is reviewing gas transmission access arrangements to ensure that they meet the objectives set out in the Gas Act and the Government's Gas Policy Statement.

As an initial step in this review, GIC published an Issues Paper after interviewing industry participants to identify issues from a range of different perspectives.

Following consultation and consideration of submissions in response to the Issues Paper, GIC concluded that a variety of work streams were required to address the issues identified. One work stream involved defining the high level principles of pipeline access, and the legal framework within which those principles would be managed (the "access framework"). GIC's analysis of a range of access framework options was published in March 2007 in a consultation paper entitled [\*Analysis of Options for an Access Framework for Governance of Gas Transmission\*](#) (the "Options Analysis Paper").

All options considered in the Options Analysis Paper include a set of high level principles with which the various subordinate arrangements (such as multilateral and/or bilateral contracts and operating procedures) would need to accord. GIC received a number of submissions from industry participants in response to its Options Analysis Paper, which have been summarised by GIC in its [\*Submissions Analysis Paper\*](#).

Notwithstanding the important issues raised through the consultation process, GIC has commissioned Harding Katz Pty Ltd and Dave Smith of Creative Energy Consulting to conduct an international review of the open access principles adopted by other jurisdictions in relation to gas transmission networks. The purpose of this international review is to assist GIC in the development of the preferred approach identified in the Options Analysis Paper by:

- describing the principles that have been adopted by gas access regimes in the EU, US and Australia; and
- considering the applicability of these principles to New Zealand, taking account of the particular circumstances of the New Zealand gas market.

It is important to note, therefore, that the international review takes the conclusions of the Options Analysis Paper as a starting point. As such, the international review is intended to assist stakeholders in understanding how the preferred approach identified in the Options Analysis Paper might be developed further. The broader issues that industry participants have raised in response to the Options Analysis Paper will be addressed separately by the GIC.

This document is the executive summary of the international review and is accompanied by a detailed “powerpoint” slide pack. The status of both documents is “draft for discussion” within GIC.

## **2 Approach**

### **2.1 Selection of Markets**

There are many overseas gas markets, employing a wide range of legal and regulatory arrangements for transmission access. Given the wide range of approaches adopted in overseas gas markets, our approach was to focus our review on a small number of jurisdictions that were likely to be most relevant to the New Zealand market, assuming that the conclusions of the Options Analysis Paper are adopted.

Following a broader assessment of twelve overseas jurisdictions, we selected and considered gas transmission access principles in three overseas jurisdictions which have adopted formal transmission access arrangements. These are

- the United States;
- the European Union; and
- Australia.

Whilst we also considered other infrastructure industries where access issues arise (for instance, airports and ports), given the conclusions of the Optional Analysis Paper we considered that the review would be most informative if it addressed the operational issues that were specific to the gas sector.

### **2.2 Overview of Markets Reviewed**

This section provides an overview of the main characteristics of the three markets reviewed.

#### ***Australia***

The “National Third Party Access Code for Natural Gas Pipeline Systems” was established in 1997. It sets out access principles for gas transmission across Australia. The content and governance of these principles is currently under review and it is the proposed arrangements which are reviewed in this paper.

Access principles will be specified in the National Gas Law (NGL) and in the National Gas Rules (the Rules). The Rules may be changed from time to time by the rule-making body, the Australian Energy Market Commission (AEMC), which also has responsibility for the National Electricity Rules. The Rules, which embody the access principles along with other detailed provisions, are interpreted, applied and enforced by the Australian Energy Regulator (AER), a body empowered by the NGL.

The proposed arrangements introduce more “light-handed” regulatory models for certain pipelines with the objective of encouraging investment in new pipelines and greater interconnection between the gas markets in each State. They also bring the legal

framework into line with that already established for electricity market regulation, with a view to promoting convergence across the energy sector.

### ***The European Union***

The recent development of access principles in the EU relates to the “single gas market” initiative to establish common and competitive gas marketing and transport arrangements across the EU. High level principles have been established in the EU “Gas Directive” which has statutory force across all member states. These are supplemented by some “Guidelines for Good TPA<sup>1</sup> Practice” (GGP) which are being developed on a voluntary basis by a representative forum of pipeline owners, users and regulators.

Unlike in Australia and the US, regulation in the EU is established at the member level. Member governments are required to establish regulatory arrangements to ensure compliance with the principles in the Gas Directive. Compliance with the GGP requirements is monitored but not enforced at an EU level.

The “single market” objective underlies many of the access principles, so there is an emphasis on promoting competition, uniformity and physical interconnectedness. Because there is no “federal” regulator, principles are generally more prescriptive than in the other markets to ensure uniformity. On the other hand, the EU guiding philosophy of “subsidiarity<sup>2</sup>” ensures that they, nevertheless, remain at the level of principles, with the detail left to be determined at the country level.

### ***The United States***

Tariff regulation of pipelines by the Federal Energy Regulatory Commission (FERC) was established in the 1930s, but it was only in the 1990s – with the landmark “Order 636” – that service unbundling and third party access became mandatory. The primary objective of open access was to ensure that benefits from upstream deregulation of production flowed down to the gas consumer. Access principles are contained in a chapter of the “Code of Federal Regulations” which are developed, applied and enforced by FERC.

Given the size and maturity of the US gas market, gas supply and transportation is more competitive than in the EU and Australia and some of the access principles have been adapted over time to reflect this: for example by progressively deregulating the secondary capacity markets. On the other hand, in the wake of Enron (which was a gas and electricity marketer and transporter), additional “ring-fencing” regulations have been introduced which are more detailed and prescriptive than in the EU and Australia and which encompass both gas and electricity: eg a gas transporter must be ring-fenced from an electricity marketer.

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<sup>1</sup> Third Party Access

<sup>2</sup> Subsidiarity means that issues should be managed as locally as possible, so the EU should only be involved where regulation cannot be performed effectively at the country level.

## **New Zealand**

New Zealand is a small market, even compared to Australia, and so it cannot so easily afford the regulatory overheads seen in the overseas markets. Ownership in the gas market is highly concentrated, with strong cross-ownership between production, transportation and marketing.

Access Principles have previously been developed in New Zealand, through the “Gas House” process that developed the New Zealand Pipeline Access Code (NZPAC). Using our taxonomy (described below), we have used the NZPAC as a point of reference when examining the approaches adopted in the overseas markets.

### **2.3 Taxonomy of Access Principles**

To review the three jurisdictions effectively we have developed a *taxonomy* of access principles, which provides a common approach for grouping and comparing the access principles across the jurisdictions. In effect, the taxonomy provides a “table of contents” that can later be used for developing access principles in New Zealand. The main “chapter” headings are:

- access to standard services;
- scope of standard services and standard terms;
- administration of service terms; and
- ring-fencing.

In the full report, we have further broken down these chapters into sections and sub-sections, to examine and compare the principles in some detail. It is noted that principles are sometimes drafted differently across the three jurisdictions. The appropriate drafting for New Zealand (alongside the governance arrangements<sup>3</sup>) will need to be given careful consideration as the access framework is developed further.

### **2.4 Approach to identifying lessons for New Zealand**

It will be appreciated that the three overseas markets reviewed differ from New Zealand in some important respects, particularly in relation to:

- the size, structure and ownership of the various sectors of the gas markets;
- the objectives of the legislators and regulators that developed the legal frameworks; and
- the arrangements in place for governing the access principles.

Given this, our review firstly identifies and describes these features. This description of the jurisdiction provides important contextual background information regarding the

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<sup>3</sup> In the context of this paper, the term “governance arrangements” has the meaning set out in section 2.4 below.

overall rationale and objectives of the access regime. This background information is useful in considering the relevance of the identified access principles for New Zealand.

In developing our recommendations for New Zealand, we have adopted the following approach:

1. Where our review has identified a common principle across each of the three jurisdictions, we have taken the view that this provides strong evidence that the principle represents “good practice”. Unless there are unique features of the New Zealand market that suggest that the principle is not appropriate for New Zealand, we have recommended that the same principle should be adopted in New Zealand.
2. Where the markets employ different approaches, we examine whether these can be explained by reference to the different characteristics of the markets and, if so, whether this provides guidance on the appropriate approach for New Zealand. For example, if the different approaches seem to be driven by the different sizes of the three markets, we would consider more closely the appropriateness of the approach taken by the market with a similar size to New Zealand, ie Australia.

Where the above analysis does not provide strong guidance in relation to a particular principle, we have used our knowledge and understanding of the New Zealand market to identify an appropriate approach for New Zealand.

It is also noted that the final decision in relation to the choice of access principles will be informed by the governance arrangements. In relation to access arrangements, governance arrangements describe the institutional framework for:

- establishing the policy direction;
- establishing the rules that define the roles and responsibilities of the pipeline owners, pipeline users and the industry regulator(s);
- assessing whether access arrangement proposals comply with the rules;
- monitoring compliance with and enforcing the rules;
- assessing the appropriateness of rule changes; and
- resolving disputes in relation to non-compliance with the Rules or contracts.

In the broadest sense, therefore, the governance arrangements define how the access principles will operate in practice. As such, the design of an access regime must address both the governance arrangements and the access principles, thereby ensuring that they work together appropriately. At this stage, we understand that the GIC has not reached firm conclusions regarding any new governance arrangements required to establish the legal framework for transmission access<sup>4</sup>. As a result, the

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<sup>4</sup> Recognising that governance arrangements at the highest level are in place: ie the establishment of GIC under the Gas Act and its powers to make and enforce new rules where needed to achieve the objectives in the Gas Act and in government policy statements.

recommendations set out in this report are necessarily provisional, and the strength of these recommendations will vary from principle to principle.

To assist GIC and other stakeholders in assessing the strength of our recommendation in relation to each principle we have “colour coded” as follows:

- *green* means that we have made a recommendation, based on our examination of international access principles, in relation to principles or matters that are likely to be unaffected by other decisions that are yet to be made on governance arrangements;
- *amber* means that we have made a recommendation, based on our international analysis and our understanding of local issues, but key details of the recommendation are more dependent on the resolution of governance arrangements and /or other local issues; and
- *red* means that we are unable to make a recommendation in respect of particular principles until further details of the governance arrangements are progressed, or other relevant issues are resolved.

Where red and amber qualifications are attached to our recommendations, we identify the key issues or matters that need to be resolved before further detailed recommendations can be made. The paper also provides examples of how the choice of governance arrangements may impact on the access principles.

### **3 Summary of key findings**

#### **3.1 Access to Standard Services**

All of the markets reviewed require that the pipeline owner or operator (PO) to develop and publish standard terms – including standard prices, or “tariffs” - for a number of core pipeline services. The PO is then obliged to offer services on these terms to all-comers, to the extent that it has “spare” (ie uncontracted) capacity to do this. Where there is insufficient spare capacity, two of the reviewed markets require that the PO to establish a “queuing policy” to allocate capacity as it becomes available. This approach - of access, standardisation and queuing - is recommended for New Zealand.

The markets reviewed differ in terms of whether individual applicants are able to negotiate variations to the standard terms. The EU disallows negotiation whereas the US and EU allow it. The EU prohibition seems to reflect its greater emphasis on uniformity across member states and concerns about a PO discriminating in favour of its user affiliates. We note that the issue of uniformity is much less relevant in New Zealand, although concerns about discrimination are relevant.

It is important to note that the ability to negotiate terms may promote economic efficiency. For example, the use of spare pipeline capacity may be enhanced if discounts to standard tariffs can be offered. As a matter of principle, therefore, it seems appropriate that negotiated terms should be allowed where this is likely to promote economic efficiency. We also note that concerns over affiliate favouritism can be addressed through ring-fencing, as discussed below. Risks of unfair discrimination should also be mitigated by requiring the PO to publish information on affiliate deals.



Disputes between a PO and an applicant may arise, either in relation to access to standard terms or in negotiating variations to these terms. The reviewed markets have provisions for these disputes to be referred to the regulator for resolution, in some cases through binding arbitration. Our review of international markets suggests that a robust access framework should provide an access seeker with an effective means of resolving disputes with a PO regarding terms and conditions of access. We therefore consider that effective access dispute resolution provisions should be established in New Zealand.

It is not meaningful to establish principles for dispute resolution in the absence of a clear position on the governance arrangements. For example, approval of standard terms and conditions could be conducted for all access users through an ex ante (or “before the event”) approval process. Alternatively, access disputes on specific issues could be addressed as and when parties cannot agree acceptable terms and conditions. The content of the dispute resolution principles would therefore need to take account of the governance framework for dispute resolution.

### **3.2 Scope of Standard Services and Standard Terms**

Two alternative approaches are taken in the three jurisdictions to define standard services:

- In the EU and US, specific services such as firm transportation and balancing are listed; whereas
- In Australia, the access principles contain economic criteria that are applied to determine which services should be offered as standard.

Given New Zealand’s relatively small and immature regulatory sector, its small size and hence limited capacity to bear regulatory overheads, and its industry’s propensity for protracted litigation, we recommend that the “listing” approach should be adopted in New Zealand. Specifically, we recommend that the following services should be offered as standard:

- *Transportation*: moving gas between specified receipt and delivery points;
- *Balancing*: managing the pipeline in the face of small, unintended imbalances between receipt and delivery quantities; and
- *Interconnection*: establishing and operating welded points on the pipeline to connect it with producers, distributors, large consumers and other pipelines.

It is also necessary to consider to what extent the features and specifications of these services should be standardised: ie whether it is sufficient just to require that the PO offer a standard transportation service or whether there should also be requirements in regard to how that service is defined. For example, the principles could require that the transportation service must be offered at a specified “firmness” or for specified durations. Alternatively the standard service requirements could be defined by the PO or the regulator, subject to satisfying pre-defined criteria. It is noted that the arrangements across the jurisdictions differ:

- Australia has no explicit requirements;

- the US has some high-level requirements; and
- the EU has more detailed requirements.

For similar reasons to those set out earlier in this section, we consider that the arrangements in New Zealand should provide detailed guidance in relation to standard service requirements. We note that these requirements or specifications will be designed to address specific commercial and operational concerns in New Zealand, the details of which need to be addressed by GIC in consultation with pipeline owners and users.

### **3.3 Administration of Service Terms**

This area is concerned with how service terms are developed, implemented and enforced. In the reviewed markets, standard services and terms are developed by the PO and then must be approved by the regulator as being in compliance with the access principles.

As noted earlier, the governance arrangements will determine the roles and responsibilities of the various parties in terms of proposing, reviewing and approving standard terms and conditions. In designing appropriate governance arrangements, a key question is whether situations currently exist (or are likely to arise in the future) in which pipeline operators and users are unable to reach agreement on matters relating to access, and whether it is now appropriate for the GIC to adopt the role of arbiter on these matters. These questions are outside the scope of the international review and are matters for the GIC to consider. It is worth noting at this stage, however, that the GIC's position on these governance issues is likely to affect the drafting of the access principles.

It is also noted that standard terms already exist<sup>5</sup> in New Zealand and so a transitional issue arises as to how compliance with the access principles might be verified or how any non-compliance might be addressed. This issue is quite specific to New Zealand and our international review is unable to provide any guidance in this area.

A related issue is the question of how the process for future changes to the standard terms should be administered. In the reviewed markets, changes are proposed by the PO and must then be approved by the regulator. A similar arrangement may also be appropriate for New Zealand, although it is not entirely clear who, in that case, the "regulator" might be<sup>6</sup>. Alternatively, the GIC may wish to take a less active role in approving subsequent changes to the standard terms once these have been settled initially. Under this approach, the GIC may consider it appropriate for the arrangements to allow the parties to negotiate mutually beneficial changes to the standard terms without GIC involvement. The choice of approach is essentially a governance issue.

The EU and US require certain pipeline operating procedures to be published: specifically those concerned with congestion management. None of the reviewed markets specified requirements in relation to the development of operating procedures

<sup>5</sup> Standard terms for the MDL pipeline are contained in the MPOC, whilst standard terms for Vector pipelines are being developed through the "Vector Transmission Code" initiative, which is likely to be substantially complete before the access principles have been fully developed by GIC.

<sup>6</sup> In the reviewed markets, independent energy regulators have been established whose role and governance is somewhat different to the co-regulatory model used in NZ.

and monitoring of compliance with these procedures. We note, however, that significant concerns have been expressed in New Zealand in relation to operational issues.

To address these concerns, the GIC should consider an approach that requires all operating procedures to be published. In addition, the PO could be required to demonstrate that it is complying with its published policy or users could be given the right to commission an independent audit of pipeline operation. The precise form of these principles depends on the governance arrangements adopted by the GIC – and in particular whether it takes a more active or passive role in resolving the outstanding issues in relation to operating procedures.

### **3.4 Ring-Fencing Arrangements**

In all of the markets reviewed, there is substantial cross-ownership between pipeline owners and users, as there is in New Zealand, and so ring-fencing arrangements are required to prevent POs favouring – or being perceived to favour – their user affiliates. There are a number of aspects to these arrangements, which feature in all of the markets reviewed.

Firstly, there is *contractual separation*, which means that services must be offered to affiliates at arms-length and on the same basis (although not necessarily on exactly the same terms) as to non-affiliates. This is required in all of the reviewed markets and is recommended for New Zealand.

Secondly, there is *accounting separation*, which means that separate financial or regulatory accounts must be kept for the pipeline business. This is required in all of the markets reviewed and is already a requirement in New Zealand under the information disclosure regulations administered by the Commerce Commission. We consider that mandatory accounting separation is appropriate for New Zealand.

Thirdly, there is *operational separation*, which prohibits or restricts sharing of employees and office space between the PO and its user affiliates and which requires that the PO has autonomy from the affiliates in operational decision-making. This is required in all of the reviewed markets, to varying degrees.

In considering the application of mandatory operational separation in New Zealand, the small size of the New Zealand market – and of individual gas businesses – needs to be taken into account, since some aspects of operational separation may be costly or impractical for small firms. Therefore, whilst we consider that operational separation is necessary in New Zealand, the requirements should generally be less onerous and less prescriptive than in the overseas markets. As noted in the comments in the previous section regarding administration of service terms, there is a case for stronger information disclosure requirements on POs regarding operational procedures. Such action would also provide stakeholders with confidence that the separation requirements are being complied with and are effective.

Finally, there is *information separation*, which controls the flow of information between the PO and its affiliates. All of the markets reviewed require that, firstly, no confidential user information received by the PO may be passed to its affiliates and, secondly, that pipeline information should be made available on the same basis to affiliates and non-affiliates. These requirements are appropriate for New Zealand. However, some mechanisms for implementing information separation – eg through separation of

employees – may be impractical for New Zealand and the detailed specification of the requirements will need to reflect this. Again, relatively prescriptive disclosure requirements are needed to offset this limitation.

## 4 Conclusions

This paper has provided an overview of the access principles adopted by three overseas jurisdictions in respect of access to gas transmission pipelines. The purpose of the review is to identify a set of principles which would be most applicable in the New Zealand context, taking the preferred approach identified in the Options Analysis Paper as a starting point.

The detailed content of the access principles for New Zealand gas pipelines is strongly dependent on the GIC's approach to governance and other issues that are specific to New Zealand. Therefore, in many cases, while our analysis of international markets assists in identifying the high level principles that would be applicable in New Zealand, key details of those principles cannot be developed in isolation from other decisions that are yet to be made on governance arrangements.

Notwithstanding this, we have developed a taxonomy that has assisted in synthesising the lessons for New Zealand from our international review, and within that framework, we have identified a set of high-level access principles which we consider to be applicable in the New Zealand context. The set of principles identified is summarised in the table below, and should provide a guide for future, more detailed work that GIC may undertake in developing the access framework, including the governance arrangements.

Area	Recommended Principles	Outstanding Issues
Access to Standard Services	<ul style="list-style-type: none"> <li>• PO must publish standard terms</li> <li>• PO must offer access to all comers on standard terms</li> <li>• PO may negotiate non-standard terms which are economically efficient</li> <li>• PO must publish information on non-standard deals with affiliates</li> <li>• PO must publish Queuing Policy</li> <li>• Dispute resolution process for access disputes should be established</li> </ul>	Dispute resolution process cannot be specified until governance arrangements are clarified
Scope of Standard Services and terms	<ul style="list-style-type: none"> <li>• PO to offer transportation, balancing and interconnection services as standard</li> <li>• Requirements for service standards to be specified</li> </ul>	Standard service requirements to be developed by GIC to address NZ-specific issues

Area	Recommended Principles	Outstanding Issues
Administration of Service Terms	<ul style="list-style-type: none"> <li>• Changes to standard terms should be subject to regulatory oversight</li> <li>• PO to publish operating procedures</li> <li>• PO to demonstrate compliance with its published policy and users may request independent audit of pipeline operations</li> <li>• Dispute resolution process for operational or contractual disputes should be established</li> </ul>	Dispute resolution process cannot be specified until governance arrangements are clarified
Ring-fencing of PO from affiliates	<ul style="list-style-type: none"> <li>• Services to affiliates must be provide on same basis as to non-affiliates</li> <li>• PO must be separated operationally from affiliates</li> <li>• PO must not disclose user information to affiliates</li> <li>• PO must provide pipeline information on same basis to affiliates as non-affiliates</li> <li>• PO must disclose ring-fencing arrangements and report on compliance with these</li> </ul>	Details of operational separation requirements to be developed, taking account of practicalities and constraints in NZ

# Gas Pipeline Access Principles

## **Overview of International Markets**

## Introductory Remarks

This presentation has been developed to provide a high-level overview of the different approaches taken by 3 overseas jurisdictions – the EU, US and Australia – to developing access principles. Please refer to the Overview and Executive Summary (in a separate “Word” document) for an explanation of the context for and purpose of this review.

For illustration and comparison, the corresponding provisions in the NZ Pipeline Access Code (NZPAC) are also presented.

“Access principles” are those rights and obligations that apply generally to all pipeline service offerings and behaviour within the jurisdiction.

The recommendations contained here are preliminary only, and are for internal discussion within GIC. More analysis is needed before coming to firm and final recommendations.

## Acronyms used in this Presentation

AA	Access Arrangement (Australia)
AEMC	Australian Energy Market Commission
AER	Australian Energy Regulator
FERC	Federal Energy Regulatory Commission (US)
FR	Full Regulation (Australia)
GD	EU Gas Directive
GGP	EU Guidelines for Good TPA Practice
IM	Information Memorandum (NZ)
LR	Light-handed Regulation (Australia)
NGL	National Gas Law (Australia)
NZPAC	NZ Pipeline Access Code
OBA	Operational Balancing Arrangement
OFO	Operational Flow Order
PO	Pipeline Owner or Operator
TPA	Third Party Access



## Section 1: Comparisons of Market Contexts

- The access principles must be considered in the context of the different markets and jurisdictions in which they apply.
- Considering the context helps to explain why jurisdictions have adopted different approaches to access.
- It can also help to inform whether particular approaches are appropriate for the NZ context.

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The access principles must be considered in the context of the different markets and jurisdictions in which they apply. Considering the context helps to explain why jurisdictions have adopted different approaches to access. It can also help to inform whether particular approaches are appropriate for the NZ context.

The market context is considered in three areas:

- policy objectives of the access regime and principles
- governance of the access principles within the access regime
- characteristics of the gas production, transport and sales markets

In relation to access arrangements, governance arrangements describe the institutional framework for:

- establishing the policy direction;
- establishing the rules that define the roles and responsibilities of the pipeline owners, pipeline users and the industry regulator(s);
- assessing whether access arrangement proposals comply with the rules;
- monitoring compliance with and enforcing the rules;
- assessing the appropriateness of rule changes; and
- resolving disputes in relation to non-compliance with the Rules or contracts.

In the broadest sense, therefore, the governance arrangements define how the access principles will operate in practice. As such, the design of an access regime must address both the governance arrangements and the access principles, thereby ensuring that they work together appropriately. At this stage, we understand that the GIC has not reached firm conclusions regarding the appropriate governance arrangements. As a result, the recommendations set out in this report are necessarily provisional, and the strength of these recommendations will vary from principle to principle.

## Policy Objectives and Concerns

What are the main objectives in introducing the access regime?

<b>NZPAC</b>	<b>Australia</b>	<b>EU</b>	<b>US</b>
<b>Objectives</b>	<b>Core Objectives</b>	<b>Core Objectives</b>	<b>Core Objectives</b>
<ul style="list-style-type: none"> <li>• To promote development of competitive gas markets by publishing minimum standards of disclosure and conduct for Owners and by facilitating Neutral and Non-Discriminatory access to Transport Systems by Users.</li> </ul>	<ul style="list-style-type: none"> <li>• ensure non-discriminatory open access</li> <li>• promote pipeline investment</li> <li>• promote electricity convergence</li> </ul>	<ul style="list-style-type: none"> <li>• ensure non-discriminatory open access</li> <li>• enhance inter-state interconnectedness</li> <li>• ensure greater uniformity across EU</li> </ul>	<ul style="list-style-type: none"> <li>• ensure non-discriminatory open access</li> <li>• promote downstream competition</li> </ul>
	<b>Other Objectives</b>	<b>Other Objectives</b>	<b>Other Objectives</b>
	<ul style="list-style-type: none"> <li>• mitigate pipeline market power</li> <li>• promote production investment</li> </ul>	<ul style="list-style-type: none"> <li>• mitigate pipeline market power</li> </ul>	<ul style="list-style-type: none"> <li>• promote electricity convergence</li> <li>• mitigate pipeline market power</li> </ul>
	<b>Regulatory Objective</b>	<b>Regulatory Objective</b>	<b>Regulatory Objective</b>
	<ul style="list-style-type: none"> <li>• economic efficiency and long-term consumer interests</li> </ul>	<ul style="list-style-type: none"> <li>• none specified</li> </ul>	<ul style="list-style-type: none"> <li>• none specified</li> </ul>

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**NZPAC:** This was developed at the instigation of users, to ensure that NGCT (now Vector) provided full information on access terms and conditions and to restrict the ability of it to discriminate in favour of its affiliates.

**Australia:** The original third party access code was developed to provide non-discriminatory third-party access on reasonable terms and, in particular, to regulate pipeline revenue to ensure that pipelines did not use their market power to earn excess returns. The new governance regime currently being developed takes the main provisions of the access code, but places them within a governance framework similar to – and common with – electricity. It also introduces new options for “light handed” regulation in order to promote pipeline investment, in response to the Productivity Commission review into the gas access regime.

**EU:** Initiatives in the pipeline access regime are tied to the EU objective of a “single gas market” across the EU. Key goals associated with this are customer choice – through non-discriminatory third-party access – and increased uniformity and interconnectedness between the various state-based arrangements.

**US:** The goal of FERC 636 was to provide non-discriminatory third-party access to pipelines in order to promote downstream competition and leverage the upstream competition created by the Wellhead Decontrol Act. Note that delivered gas prices had already been regulated for decades before FERC 636. FERC 2004 updated many of the ring-fencing arrangements to reflect the increased convergence between gas and electricity supply and the increased complexity of energy trading businesses.

**NZ now:** The Gas Industry Company is charged with making recommendations to the Minister of Energy to meet the Government's objectives for the gas sector as detailed in the Gas Act 1992 and the Government Policy Statement on Gas Governance October 2004. In particular, the Government Policy Statement requires:

- The establishment of an open access regime across transmission pipelines so that gas market participants can access transmission pipelines on reasonable terms and conditions.
- The establishment of consistent standards and protocols across distribution pipelines so that gas market participants can access distribution pipelines on reasonable terms and conditions.
- The establishment of gas flow measurement arrangements to enable effective control and management of gas.

## Institutional Arrangements

How are the arrangements governed and overseen?

Element	NZPAC	Australia	EU	US	NZ prospective
<i>Legislation</i>	Commerce Act Gas Act	National Gas Law (prospective)(a) Trade Practices Act	EU Gas Directive	Natural Gas Act Nat Gas Policy Act	Commerce Act Gas Act
<i>Regulations/Code of Conduct</i>	NZPAC	National Gas Rules (prospective)(a)	EU Gas Directive Guidelines for Good TPA Practice (b) (voluntary)	Code of Federal regulations, Chapter I (FERC)	New NZPAC
<i>Coverage of principles</i>	Vector pipelines	Covered pipelines (d) light-handed or full regulation (e)	All pipelines	inter-state pipelines	MDL and Vector pipelines
<i>Regulator(s)</i>	n/a	AER	National regulators	FERC	GIC – non-price CC – total PO revenue (and price)
<i>Principles Development</i>	Committee of Signatories	AEMC rule change review	Madrid Forum	FERC Orders and rule making	TBD(c)
<i>Principles Enforcement</i>	Voluntary dispute resolution	AER	Compliance Review	FERC	TBD(c)
<i>Principles Application</i>	Publish IM Voluntary	Access Arrangement for AER approval	Voluntary(f)	Rate Filing for FERC approval	TBD(c)

- a. the Federal Government has recently circulated “exposure drafts” of these documents for comment  
b. here TPA stands for “third party access” (not trade practices act)  
c. See GIC Framework Options paper  
d. There is a separate process to decide on coverage, based around the market power and influence of the pipeline  
e. “light-handed” principles apply to some covered pipelines, and “full regulation” applies to the remaining covered pipelines  
f. The Gas Directive is binding on member states; the GGP is not binding directly, although a regulator may adopt the principles and make them binding in a particular country

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The next area of context relates to the institutional arrangements – the legal framework - that govern and oversee the principles. The aspects of these arrangements that have been reviewed are:

- the relevant *legislation* and *regulations* that expresses and/or governs the principles and allows them to be promulgated and enforced
- the *coverage* of the principles, in relation to pipelines and pipeline owners
- the persons, processes or forums responsible for the development, application and enforcement of the principles

Note that the Australian arrangements are prospective: it is planned to implement them over the next year or so. The law and rules reviewed in this study are therefore initial drafts. The rules, in particular, may become more extensive as they are finalised. Some aspects of the NZ arrangements are yet to be determined and are the subject of the GIC’s Access Framework Options Paper. Decisions in this respect are likely to affect the content and style of the access principles: particularly in relation to the level of prescription and the role of the GIC or other regulatory bodies.

An important aspect of the access principles is the degree of prescription they involve. A low level of prescription leaves more discretion with the person who must interpret and apply these principles. If this person is the pipeline itself, less discretion is desirable. If it is a regulator, the degree of prescription will depend upon the role, powers, independence and expertise of the regulator, and also on the mechanism for resolving disputes arising from regulatory decisions. Since these matters are currently uncertain in NZ, the appropriate level of prescription is not entirely clear,

More prescription also ensures greater uniformity of access and services across the different pipelines. Where this is considered to be important – for example in the EU – greater prescription may be used.

## Market Characteristics

What are the main features of the gas and transportation markets

Element	NZPAC	Australia	EU	US	NZ prospective
<i>Annual Gas Sales (PJ)</i>	155	925	17945(e)	28490	155
<i>Pipeline Competition</i>	low	limited	low(a)	medium	low
<i>Cross-ownership with sales</i>	high(c)	medium	high(b)	high(b)	high(c)
<i>Cross-ownership with production</i>	medium(c)	low	low	low	high
<i>pipeline interconnectedness</i>	limited	medium	high	high	limited
<i>gas consumers</i> <i>P = power, I=industry, R=residential</i>	mainly P & I	mix of P, I, R	mix of P, I, R	mix of P, I, R	mainly P & I
<i>Balancing Facilities</i>	Maui swing	Low Storage, High Linepack(d)	myriad small and large storage	local storage	Limited

- a. most countries have a single pipeline owner  
b. most pipelines had historical provided bundled (delivered) gas;  
c. Vector only, as the NZPAC was developed prior to MDL open access  
d. except in Victoria, which has developed its own balancing regime  
e. OECD member states only

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The characteristics of the gas market in the relevant jurisdiction will also influence the access principles:

- The overall size of the market (as expressed in the *annual gas sales*) dictates the level of regulatory costs that the market can bear. NZ is small compared to the other markets considered.
- The level of *pipeline competition* will determine the extent to which competitive drivers alone will ensure efficient and transparent pipeline activities. NZ has very limited pipeline competition.
- The level of *cross-ownership* will influence the level of ring-fencing required and the amount of transparency needed to support that ring-fencing. NZ has a fairly high level of cross-ownership, particularly with production.
- The level of *pipeline interconnectedness* will determine the importance of efficient interconnection arrangements between the pipelines. NZ has limited interconnectedness, but the interconnections between MDL and Vector are used by a large part of the market.
- The types of *gas consumers* will influence the characteristics of gas demand: eg predictable or uncertain, constant or seasonal on daily, weekly and annual cycles. NZ has little residential demand and a fairly high proportion of power station demand.
- The availability of *balancing facilities* will influence the cost of balancing and the importance of efficient balancing arrangements. NZ has quite limited balancing facilities compared to the other markets considered and so balancing issues are of greater significance.

## Section 2: Comparison of Access Principles

### Research Framework

#### Taxonomy of Access Principles

- standardisation of service terms
- access process for new users
- ring-fencing (between pipeline owner and affiliates)
- administration (of standard terms and service contracts)
- scoping of standard services
  - transportation service
  - balancing service
  - interconnection service
  - other services

#### Reviewed Markets

- Australia
- the European Union
- the United States of America

Access Principles have been broken down into a “taxonomy”, so that each access principle in one market can be compared with principles in corresponding markets. The taxonomy also serves, broadly, as a “table of contents” for the access principles.

Approaches in the three overseas jurisdictions are compared to the approach in the NZPAC. Inclusion of the NZPAC is primarily for illustrative purposes: readers of this report may be more familiar with the NZPAC than with the other markets. We are not intending to use the research presented here to critique the usefulness or completeness of the NZPAC.

## Analysis Framework

### Colour coding of recommendations

*Green* - specific recommendation: recommend principles/approach based on international review and known NZ market context

*Amber* - general recommendation: specific approach depends upon NZ legal framework and roles and responsibilities of stakeholders within that framework.

*Red* - no recommendation: approach likely to be NZ specific and little can be drawn from international approach.

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“Analysis” slides are interleaved with “Research” slides for each element of the taxonomy. Thus, based on the approaches taken in the reviewed markets, together with an analysis of how these approaches relate to the market contexts, an approach for NZ is recommended.

Broadly speaking, our analysis framework is as follows:

- where the overseas jurisdictions have a common approach, this approach will generally be recommended for NZ, unless there are relevant unique elements of the NZ context which would militate against this;
- where the overseas jurisdictions have different approaches, we aim to explain these in terms of the different contexts;
- this assessment is used to inform the appropriate approach for NZ, which may or may not be based on one of the overseas jurisdictions;
- where it is not possible from this evidence and analysis to identify a specific, justifiable approach, the recommendation may be equivocal or specify further work to be undertaken.

Where the approaches vary between markets, each element is considered on its own merits.

## Standardisation of Service Terms: Research

How are pipeline services specified?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Offer and Publish Standard Terms</i>	Yes, in Information Memorandum (IM)	Yes, in AA or on website	Yes, using standard contract or network code	Yes, in rate filing
<i>Offer and Publish Standard Prices (tariffs)</i>	Yes, in IM tariffs & methodology	Yes, in AA or on website: tariffs and methodology	Yes: tariffs and detailed methodology	Yes, in rate filing, current and proposed tariffs
<i>Publish information on standard deals</i>	Not specified	Notify AER of all associate contracts	Not specified	Detailed customer register
<i>Offer Negotiated Service Terms or Prices (f)</i>	Yes (a)	Optional (b)	Prohibited	Yes(c)
<i>Resolve disputes on negotiated terms</i>	No specific requirement	Disputes can be referred to AER for binding arbitration or other forms of resolution	Not applicable	Dispute can be referred to FERC who may resolve them
<i>Publish information on negotiated deals</i>	Material terms	Not specified	Not specified	Customer, rate and service volume (e)

- a. PO must publish policy and criteria for negotiated price services in IM (LR)
- b. PO must not discriminate unless efficient or economically justified
- c. Rate filing must specify minimum and maximum tariffs for negotiation
- d. Show efficient, negotiation policy, restrictions on specific services
- e. Including specifying whether the customer is an affiliate
- f. On services where standard terms exist

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The above slide considers the extent to which standard pipeline services must be offered. Standardisation promotes access by providing a default or benchmark offering for a prospective user. It can also restrict discrimination between users, particularly between affiliates and non-affiliates. On the other hand, mandatory standardisation can also restrict the commercial and operational flexibility of the pipeline and reduce efficiency and customisation.

All the markets reviewed require core pipeline services to be offered on standard terms with respect to price and non-price matters. The methodology used to determine prices must be published. However, the markets differ in the extent to which individual users may negotiate special terms. The EU largely prohibits such deals, whereas Australia allows them to the extent that the discrimination is economically efficient and justified. The US allows price negotiation within specified ranges.

The markets also differ in the requirements for information on deals – standard and non-standard – to be published. The US requires publication of detailed information on *all* deals whilst Australia requires that the regulator is notified of deals with affiliates. The EU has no requirements in this area.

Finally, there is the question of how disputes or impasses in negotiations on non-standard deals may be resolved.

## Standardisation of Service Terms: Analysis

How are pipeline services specified?

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Offer and Publish Standard Terms</i>	Yes, for all	Common approach is to promote non-discriminatory access. Therefore, adopt same approach for NZ, using existing mechanism.	Yes
<i>Offer and Publish Standard Prices (tariffs)</i>	All publish tariffs and tariff methodology	Tariff is a critical element of standard terms. Methodology needed to assess future tariff movements. Adopt same approach for NZ, using existing mechanisms.	Yes: tariffs and methodology
<i>Publish information on standard deals</i>	From not specified to detailed customer register	In a small market, information on new deals is commercially sensitive. Discrimination is not a concern in relation to standard deals.	No requirements
<i>Offer Negotiated Service Terms or Prices</i>	From optional, to prohibited	Negotiated terms acceptable, so long as promoting economic efficiency, not used to favour affiliates (see below) and does not adversely affect other users (ie externalities). For clarity on price discounts, PO should publish a policy.	Optional. Must be in accordance with PO discounting policy
<i>Resolve disputes on negotiated terms</i>	May be referable to regulator for binding resolution	Since the offering of non-standard terms is voluntary, arbitration could only be on whether discounting policy is followed.	Requirement unclear: depends upon legal framework
<i>Publish information on negotiated deals</i>	From not specified to detailed requirements	Perceptions of affiliate discrimination could be addressed by publishing affiliate deals.	Only affiliate deals published: scope and detail unclear

It seems appropriate to adopt for NZ the common approach taken on standard services, that price and non-price terms should be developed and published. Indeed, given its small market turnover, standardisation may be more important to NZ than the other jurisdictions, although on the other hand, fewer users may mean standardisation is *less* important. The actual scope of services subject to this standardisation is considered further below [slides 18 and 19].

It is not clear what would be gained by publishing details of non-standard deals (and it is not clear why this is established in the US). Given likely confidentiality concerns, we propose not to require publication.

The markets do not provide a common approach to negotiated deals. We think non-standard terms should be permitted (but not required) where they promote economic efficiency and are not used to favour affiliates.

Price discounting is probably the most important non-standard term. To achieve greater transparency, we propose to require that the PO develops and publishes a discounting policy.

In relation to publication, non-standard deals are likely to have even greater commercial sensitivity than standard ones. For this reason, we do not recommend general publication requirements. However, given the potential concerns about favouring affiliates, we propose that all discounts, and other non-standard terms, agreed with affiliates should be published in some detail.



## Access Process for New Users: Research

How do users access the services?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Provide access to all users on standard terms</i>	Yes, subject only to prudential requirements (a)	Yes	Yes, subject only to credit worthiness requirements (b)	Yes
<i>Develop and Publish an Access Procedure</i>	Yes, in IM (c)	Not specified (d)	Yes	not specified
<i>Resolve Access Disputes</i>	May be referred to Code Committee, but resolution is not legally enforceable	Disputes can be referred to AER for binding arbitration or other forms of resolution	Unclear(e)	Disputes may be referred to FERC
<i>Develop and Publish Queuing Policy</i>	Yes, in IM	Yes (f)	Yes	Unclear

- a. But requirements must not be affected by past relationships, affiliations  
b. Creditworthiness guarantees, but these must not constitute undue entry barrier  
c. Minimum standards (eg timescale) specified in NZPAC  
d. But minimum standards specified in NGL  
e. Dispute resolution referred to in GD clause 25, but does not explicitly reference access disputes  
f. Queuing policy must be FIFO or by public auction

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Open access requires that all prospective users are offered access to spare pipeline capacity on standard terms and all of the reviewed markets require this. However, pipelines will generally place some obligations on users before entering into service contracts, such as appropriate prudential guarantees to ensure that the user represents an acceptable credit risk.

Access principles may – as in the case of the EU – specify what conditions the PO can place on users. Alternatively, the regulator may have discretion to decide whether the conditions are unduly onerous or discriminatory.

In the EU, the PO must develop and publish an access procedure, setting out the rights and obligations of the PO and users in the processes between the user first making an application and a service contract being executed. In Australia, maximum timescales for carrying out these processes are specified. The US is silent in this area. Without principles or policies on access procedures, there may be a concern that a PO does not provide timely or effective access in practice, even when it is provided in principle.

To further mitigate this concern, the markets [TBD] allow users unhappy with the access process to refer disputed matters to arbitration, which may or may not be binding on PO and user.

Finally, for the situation where there is insufficient spare capacity to satisfy all prospective users, the markets (apart from the US) require the pipeline to develop a queuing policy, to provide certainty and fairness whilst these users wait for new capacity to be developed.

## Access Process for New Users : Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Provide access to all users on standard terms</i>	Required, subject only to prudential requirements, in some cases	POs have a legitimate need to ensure that users meet reasonable prudential requirements, but these requirements should be published and should satisfy principles of non-discrimination.	Subject to specified prudential policy, which must satisfy non-discrimination principles
<i>Develop and Publish an Access Procedure</i>	From not specified, through minimum standards, to published policy	Published procedure promotes transparency and uniformity. Given historical problems with new welded points, procedure should specify maximum timescales. However, principles should not specify minimum standard, as these may depend on circumstances.	POs should publish procedure which, <i>inter alia</i> , specifies maximum timescales
<i>Resolve Access Disputes</i>	Generally referable to regulator or other dispute body	Given production cross-ownership, discrimination by denying or prolonging access is a significant concern. Dispute on adherence to or interpretation of access principles and policies should be able to be referred to binding arbitration.	Some specified dispute resolution process appropriate but details (eg whether binding) unclear
<i>Develop and Publish Queuing Policy</i>	Required or unclear	Required to ensure non-discriminatory access to future capacity. No need to specify policy, so long as consistent with non-discrimination principles.	Required to be published and conform to non-discrimination principles

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It is proposed to adopt the common approach of requiring all prospective users to be offered access to spare capacity on standard terms, since this is the essence of open access. It is also proposed that the conditions that a PO can place on prospective users are specified, since this reduces uncertainty and the need for regulatory involvement or discretion. The only relevant generic conditions that we are aware of relate to prudentials or credit-worthiness. However, there will also be conditions specific to particular services.

For certainty and clarity and to prevent potential discrimination, it is also appropriate that the pipeline be required to develop and publish an access procedure which should, *inter alia*, specify maximum timescales. It is not proposed to specify these timescales in the access principles.

In NZ, disputes have arisen in relation to development of new welded points on the MDL pipeline [ref issues paper?]. There has been a perception that disputes may have arisen – or been exacerbated – because of the conflicts of interests that arise in relation to MDL's production affiliates. Given this background, it is considered important that the prospective user be able to refer such disputes to binding arbitration and that this arbitration process can be undertaken swiftly.

Given that there is significant developable capacity available – particularly on the MDL pipeline – and also given the concerns regarding pipeline affiliates - it is appropriate that there be a requirement that the PO publish a queuing policy. The access principles would specify some principles that the policy should comply with, but not the particular policy itself.

## Ring Fencing: Research

How is the pipeline owner ring-fenced from affiliates?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Who is ring-fenced</i>	Person who owns, or sets policies for pipeline	Owner or operator of pipeline	Person responsible for ops, maintenance and expansion	Any interstate pipeline who transports gas for others
<i>Ring-fenced businesses or personnel</i>	Person in a "prescribed business relationship"	Gas producers, buyers and sellers	Gas producers, suppliers	Trader in transmission or energy markets (gas or electricity)
<i>Structural Separation</i>	Not specified	Separate legal entity (b)	Separate legal entity (b)	Not specified
<i>Contractual (a) Separation</i>	Yes	Yes	Yes	Yes
<i>Accounting Separation</i>	Information disclosure regulations	Yes, for each pipeline	Yes	Yes
<i>Operational Separation</i>	Not specified	Employee separation (c)	Employee separation and ops autonomy	Employee separation and ops autonomy
<i>Information Separation (d)</i>	Yes	Yes	Yes	Yes
<i>disclosure requirements</i>	Policies/procedures and confidentiality protocols	No specific requirements	Annual report on measures and outcomes	plan and schedule, detailed operational info (e)

- PO must provide services to affiliates on same terms as to non-affiliates
- But no restrictions on cross-ownership/vertical integration
- AER may also specify additional operational requirements
- No disclosure of customer information to affiliates; pipeline information available equally to affiliates and non-affiliates
- including organisational chart, names of shared employees, notification of employee transfers

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Where a company – or shareholders of affiliate companies – have commercial interests in both providing and using pipeline services, it is necessary to ensure some degree of separation – or ring-fencing – between the PO and any affiliate user(s) to ensure that the PO does not discriminate in favour of its affiliates. Various ring-fencing mechanisms are used in the markets reviewed.

*Structural Separation* may require the PO to be separate from the affiliate on a legal or ownership basis. The EU and Australia require legal separation (meaning that the PO must be in a separate company to the user affiliates); no markets require ownership separation.

*Contractual Separation* requires the PO to provide services to affiliates on a commercial arms-length basis: ie pursuant to a service contract. All of the markets require this.

*Accounting Separation* requires the PO to keep separate accounts. Again, all of the reviewed markets require this.

*Operational Separation* requires that the day-to-day operations of the PO be kept separate from the user affiliates. This may involve physical separation of employees, use of separate assets, separate decision-making processes and so on. All of the markets require operational separation, to varying degrees.

*Information Separation* requires, firstly, that user information gathered by the PO is not made available to its user affiliates and, secondly, that any information relating to pipeline services is made available equally to affiliates and non-affiliates. All the markets reviewed require information separation.

The effectiveness of these ring-fencing arrangements may be enhanced by requiring publication of the relevant policies and reporting on compliance with these policies. The EU and the US – but not Australia – require some degree of disclosure in this respect.

## Ring Fencing : Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Structural Separation</i>	From not specified to separate company	We have taken the existing industry structure as a given. We have not contemplated structural separation requirements.	Not applicable
<i>Contractual Separation</i>	Required	Essential to facilitate other ring-fencing mechanisms and to ensure non-discriminatory access between affiliates and non-affiliates.	Required
<i>Accounting Separation</i>	Required	This is primarily associated with price or revenue regulation and so is a matter for CC. Already covered by disclosure regulations.	Required somewhere, but not necessarily in access principles
<i>Operational Separation</i>	Employee separation required. different mechanisms for ensuring operational autonomy	Particularly important in NZ, as Vector operates both pipelines. However, smaller companies mean separation is more difficult and costly. Also, have multiple operators (SO, TO, CO). Too many "silos" will create operational inefficiencies. Need practical principles, clear policy and transparency. Impact of lesser requirements on operational separation can be offset by more stringent requirements on transparency.	Define principles for employee separation and operational autonomy. POs to develop policies
<i>Information Separation</i>	Required	Important for NZ to prevent discrimination between affiliates and non-affiliates.	Need principles and PO policy. Should be supported by appropriate operational separation
<i>Disclosure requirements</i>	Some require disclosure of policies and compliance reports	Given cost and impracticability of establishing rigorous separation in NZ, can make up for this with more detailed disclosure requirements. Therefore, require publication of policies, operational details and compliance reports.	Publish policy; operational information and compliance reports: details unclear

NZ, like the other markets, has a high degree of cross-ownership between PO and users and so ring-fencing is critical to prevent actual or perceived discrimination. On the other hand, the small size of the NZ market means that ring-fencing mechanisms will have a relatively higher, and potentially uneconomic, cost.

We assume that the industry structure is a given and beyond the scope of the access principles. Therefore, structural separation is not contemplated. It is noted that it is not a requirement of all of the reviewed markets.

Contractual separation, as a proxy for or ingredient of structural separation, is a common requirement in all the reviewed markets. We think that it is also necessary and appropriate for NZ.

Accounting separation is primarily associated with price and revenue regulation which is outside the scope of GIC's transmission access review. In any case, accounting requirements already exist in the disclosure regulations. Therefore, no requirements are to be included in the access principles.

Operational separation is important in the NZ context, as Vector is operator of both MDL and Vector pipelines as well as being a major user of these pipelines. On the other hand, strict operational separation may create practical difficulties and be costly. For example, assets and employees may need to be shared between the PO and its affiliates. Therefore, it is proposed that requirements are less onerous than in the reviewed markets. In recognition of the greater potential possibility for discrimination as a result, more onerous requirements may be placed in other aspects, as discussed below.

Information separation is common to the reviewed markets and should not be onerous to implement in NZ. It will therefore be a requirement in the access principles. However, it should be recognised that some potential mechanisms for implementing information separation – such as operational separation – may not be practical.

To make up for the relatively low level of ring-fencing requirements compared to the reviewed markets, it is proposed to require a high level of disclosure, both on policies and on compliance.

## Administration: Research

How are service terms and contracts developed and managed?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Development of Standard Terms</i>	Not specified	AER consults on proposed new AA	Consultation, approved by regulator	FERC approval
<i>Development of Operating Procedures</i>	Not specified	Not specified	Not specified	Not specified
<i>Publication of procedures</i>	Measurement and reconciliation only	Not specified	"Relating to use of the gas system", congestion mgmt	OFO policies
<i>Resolution of Contractual Disputes</i>	Yes: DR must meet minimum reqmts	Not specified	Not specified	Not specified
<i>Independent Audit of Contractual Compliance</i>	Audit of reconciliation process	Not specified	Not specified	Not specified

The access principles will govern service terms, contracts and provision. The above slide considers how this is done in the reviewed markets: specifically how service terms and procedures are developed and enforced.

In the markets reviewed, initial and modified standard terms must be formally approved by the regulator. However, there are no corresponding requirements in relation to operating procedures. In some instances, operating procedures must be published, in particular those that relate to congestion management (except for in Australia).

## Administration: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Pre-existing terms must comply with principles</i>	Not reviewed	Since standard terms and contracts already exist, need to address compliance issues and transitional arrangements.	Outside scope of review
<i>Development of Standard Terms</i>	Regulatory consultation and approval	Depends upon which legal framework is chosen by GIC. MPOC already requires GIC approval for changes, but pipeline also has veto. Both these processes may need to be changed.	Align with legal framework, once decided
<i>Development of Operating Procedures</i>	Not specified	No reason to depart from common approach. However, need to ensure that procedural changes do not have effect of changing standard terms. This is done through the scoping of these standard terms.	Not specified
<i>Publication of procedures</i>	From not specified, to congestion management procedures only	Access review reveals generally poor understanding of operational issues: eg balancing, congestion mgmt etc. Also, operator discretion under op codes may allow affiliate discrimination. Low cost of publishing procedures. Therefore, support general publication.	All operating procedures should be published, subject to practicability
<i>Resolution of Contractual Disputes</i>	Not specified	Issues of externalities and ring-fencing may justify some regulatory involvement, rather than just relying on litigation. However, access principles must be aligned with the legal framework and the concerns of users and POs. Therefore, no recommendation made.	Align with legal framework, once decided
<i>Independent Audit of Contractual Compliance</i>	Not specified	Given concerns over complexity, operator discretion and ring-fencing, better assurances should be provided to ensure that operating procedures are being followed.	Could require all operating procedures to be published and PO to demonstrate compliance with policy. Users could have right to audit pipeline operation.

In relation to development of standard terms, we note that there is a transitional issue as to how existing standard terms (ie the MPOC etc) are treated, given that there is potential for these to be in conflict with the access principles. This issue is outside the scope of our review.

The ongoing issue of how *future* changes to standard terms are managed will need to be addressed in the access principles but is also dependent upon the legal framework, so it is not clear to what extent the overseas approaches (which rely on an overseeing regulator) are appropriate. It is tentatively proposed that changes to standard terms should be subject to regulatory oversight and consented to by the PO, since this is broadly consistent with the overseas approaches and is current practice in the MPOC at least.

On operating procedures, there is no reason not to adopt the common approach of not specifying requirements on the development of operating procedures. However, the access review has revealed a number of concerns and misunderstandings surrounding pipeline operation. For these reasons – and given that it should not be costly- it is proposed to require that all operating procedures are published by pipelines.

We understand that a number of disputes have arisen historically in relation to service terms, and the process for resolving these through the courts has been long and costly. For this reason, we recommend that POs are required to establish dispute resolution processes, despite the fact that this is not required in the reviewed markets.

Similarly, although there are no corresponding requirements in the reviewed markets, we propose that users should have a right to require audits of operational processes which they are unable (through lack of information) to audit themselves. This will help to avoid or clarify future disputes and also provides an additional protection against potential discrimination, given the lower level of operational ring-fencing that has been proposed.

## Scoping of Standard Services: Research

What principles apply to service standardisation?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Offer specified services as standard</i>	"Posted price" services to "make use of capacity"	Where service sought by "significant part of market" (a)	Transportation service balancing service	Transportation service balancing service
<i>Unbundle services</i>	Yes, where reasonable and practicable	Yes, where reasonable	Yes	Not specified
<i>Allow Secondary Trading</i>	Capacity structure should facilitate trading	AA must allow subcontracting without PO consent	Capacity to be freely tradeable, without any undue obstacles	Capacity release obligations (b)
<i>Allow capacity segmentation</i>	No explicit requirements (d)	Not specified	Not specified	Yes, where operationally feasible
<i>Prevent hoarding</i>	Users shall not reserve services beyond expected use	Not specified (e)	PO shall actively discourage hoarding	Not specified

- a. AER may also specify standard services
- b. the PO is obliged to accept "release" capacity from a shipper and market this to other shippers; PO is revenue neutral
- c. this means capacity can be subdivided: eg A to C is subdivided into A to B and B to C. A portion can then be traded
- d. this might be implied by the "unbundling requirement"
- e. although note users' obligations to provide information on unutilised capacity

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In slide 11 we proposed that standard services must be offered and that ability of the PO and user to agree non-standard terms should be restricted. However, this raises the question as to which pipeline services must be offered as standard— and how these services are defined.

Australia relies on generic principles. It requires that services which are sought "by a significant part of the market" should be offered as standard. The other markets explicitly list and describe the standard services.

The reviewed markets also specify principles relating to the facilitation of secondary trading of capacity rights (all), unbundling of services (Australia and EU), segmentation of capacity (US) only, and anti-hoarding considerations (EU only). These issues are discussed below.

*Secondary trading* means the right of a user to reassign its contracted rights (in particular, booking of firm capacity) to other users, without the consent of the PO, to the extent that this does not affect the PO operationally or commercially.

*Unbundling* means that, where a user requires only certain parts or aspects of an offered service, the PO must offer just that part of the service at a standard price (obviously, less than the full service price). Capacity segmentation relates to unbundling after rights to the service have been contracted, so that part of the service may be reassigned to another user: in particular, a capacity booking to transport gas from A to C via B could be segmented into booked capacity between A and B and between B and C.

*Capacity hoarding* relates to a user contracting for strategic reasons for more of a service than they expect to use: eg to deny a competitor access to that service.

## Scoping of Standard Services: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Offer specified services as standard</i>	From specifying principles to specifying actual service types	Principles approach relies on regulatory discretion to interpret and apply principles. However, specifying actual service types only may leave uncertainty for services not specified. A hybrid approach would allow particular services to be specified, whilst providing generic principles as a catch-all to cover any other services.	Specify certain standard services and require that other services may be standardised.
<i>Unbundle services</i>	From not specified to required where reasonable and practicable	Unbundling requirement is consistent with requirement that all pipeline services offered as standard: eg if two pipeline services are bundled together, these must be offered separately as standard services in accordance with principles above.	Required
<i>Allow Secondary Trading</i>	Required, but specified in different ways	No reason to depart from common approach for NZ. Define requirements in sufficient detail to ensure consistency in trading between MDL and VT pipelines.	Required to comply with specified principles
<i>Allow capacity segmentation</i>	Only specified in US	Only applies to MDL pipeline, to limited extent. Much more significant in US. Can be achieved by user purchasing unbundled service. Therefore, requirement does not add much and may create practical difficulties.	No requirements
<i>Prevent hoarding</i>	From not specified, to obligations placed on user or PO	This relates to anti-competitive behaviour of users rather than PO, so not clear whether should be in access principles. However, PO could be required to offer interruptible service or other user-it-or-lose-it provisions which discourage hoarding.	Any anti-hoarding requirements should be placed on users rather than PO

The reviewed markets offer a choice, in relation to scoping the standard services: rely in principles and regulatory interpretation of these (as in Australia) or list the services explicitly in the access principles (EU and US). We propose a hybrid approach. By specifying that Transportation, Balancing and Interconnection services must be offered as standard (see following slides), we provide certainty over access to these essential services.

An unbundling requirement is proposed, similar to those in Australia and the EU. The absence of a specific requirement in the US is mitigated by more prescription on service offerings and the capacity segmentation requirement. In this context, no specific capacity segmentation requirement is proposed.

The common approach on secondary trading is proposed for NZ, which has similar objectives in this respect.

Hoarding is an anti-competitive practice associated with user (not PO) market power and so hoarding concerns are best addressed by the CC rather than through the access principles.



## Transportation Service: Research

What transportation services must be offered as standard?

Access Principle	NZPAC	Australia	EU	US
<i>requirement to offer standard service(s)</i>	No specific requirement	Not specified (a)	Yes	Yes
<i>Duration</i>	Allow users "on any day" to access spare capacity	Not specified (a)	"Long-term" and "short-term" services, down to one day	Firm services must be offered for peak and off-peak period
<i>Firmness</i>	No explicit requirements	Not specified (a)	Firm and interruptible	Firm and interruptible
<i>Backhaul</i>	Not specified	Not specified( a)	Not specified	Not specified
<i>delivery/receipt point flexibility</i>	Not specified	AA must include "notification requirements" (b)	Not specified	Yes (c)
<i>User nominations or notifications required</i>	Not specified	Not specified	Yes	Yes
<i>Disclosure requirements</i>	Technical and spare capacity	Spare and unutilised capacity (d)	Technical, spare and unutilised capacity (e)	Technical and available capacity (f)

- a. may be required by AER or if sought by significant part of market
- b. these allow users to change receipt or delivery point with PO consent, not unreasonably withheld
- c. the specific PO obligations are fairly complex
- d. user must provide information to PO, on request from another use
- e. utilise capacity published retrospectively
- f. PO must provide information on planned outages and impact on technical capacity

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The transportation service (ie receiving gas at a point A and delivering it to a point B) is the core pipeline service. It is explicitly required to be offered as a standard service in the EU and the US and is implicitly required in Australia, given that it will be sought by a large part of the market.

The EU specifies that services must be offered to a duration as short as a day. The US only requires separation of the service into peak and off-peak periods. There is no specific requirement in Australia.

The EU and US require that both firm and interruptible services are offered. Again, In Australia there are no specific requirements. None of the markets specifically require provision of a standard backhaul service.

The US and Australia include some requirements on receipt/delivery point flexibility: ie that a user that contracts a service from A to B should have the right, under certain circumstances, to transport gas to or from points other than A or B under the A-to-B contract. This flexibility would allow the shipper, for example, to buy from various producers in the short-term, or to supply under a single contract a portfolio of customers in different locations. The EU does not specify requirements in this respects, although provisions may exist at the national level.

The EU and the US allow POs to place obligations on users to nominate in advance their service utilisation. This facilitates, in particular, the provision of interruptible services

Finally, the reviewed markets have various requirements on disclosure of capacity. All require that spare capacity levels are published. Other provisions variously relate to disclosure of technical and utilised capacity.

## Transportation Service: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Requirement to offer standard service(s)</i>	Required, except in Australia	Should include this requirement explicitly, so that can specify particular standard requirements for transport service.	Required
<i>Duration</i>	Durations specified, except in Australia	Not specified in Australia to allow regulatory discretion and range of pipeline contexts. However, in NZ prefer more certainty and uniformity. Therefore, should be specified.	Required durations specified
<i>Firmness</i>	Firmness specified, except in Australia	Same rationale as for duration, so it should be specified. However, need to accommodate different approaches taken by MDL and Vector whilst recognising firmness concerns expressed by shippers	Required firmness specified
<i>Backhaul</i>	Not specified	Requirements and capacity for backhaul limited and location-specific in NZ, so difficult to establish principles. Gas swaps provide substitute, so long as allowed. No reason to depart from common approach.	No requirements
<i>Delivery/receipt point flexibility</i>	Requirements specified except in EU	Adopt middle ground of principled approach (as in Australia): ie change of DP or RP should be allowed with PO consent, not unreasonably withheld.	Required to conform to specified principles
<i>User nominations or notifications required</i>	Specified except in Australia	Operational issue. No nominations regime currently in Vector EU is looking to promote uniformity and efficiency. So, establish this as principle, rather than specify requirements.	Required to conform to specified principles
<i>Disclosure requirements</i>	Capacity disclosure required, to varying extent	As above, look for greater transparency in NZ, to offset lower level of ring-fencing. Prefer to establish principles rather than specific requirements.	Required to conform to specified principles

There is, in effect, a common requirement that transportation is offered as a standard service, although this requirement may be implicit or explicit. The explicit approach is recommended for NZ, since this allows specific principles to be drafted to apply to this service.

There is no common approach to specifying duration and firmness requirements for the standard service: whilst Australia does not even specify transportation as a service, the EU is quite prescriptive on transportation requirements. The relative emphasis in NZ on standardisation, in common with the EU, to promote operational efficiency and address ring-fencing concerns, means that NZ should probably be positioned closer to the EU than Australia. Therefore, we consider that duration and firmness requirements should be prescribed at some level, although we are not in a position to decide exactly what the prescriptions should be (eg should duration be one day, one month or one year?). On the other hand, by its nature, backhaul tends to be user and location specific, so it is not practical to prescribe standardise requirements.

The reviewed markets adopt different approaches on delivery/receipt point flexibility and user nominations. This is likely to reflect the different technical and commercial characteristics of these markets. Rather than attempting to be prescriptive on these operational matters, it is proposed to require that the PO develop standard provisions relating to these areas.

Similarly, disclosure requirements vary between the reviewed markets and a principle-based approach is recommended. The principles will be based on the level of transparency required for current and prospective users to plan and manage their service requirements and to verify PO compliance on service access and provision.

## Balancing Service: Research

What balancing services must be offered as standard?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Offer balancing services as standard</i>	Not mentioned	No explicit requirement(a)	PO must design "balancing rules" [note: requirement for access to storage GD19]	"Parking and loan" service
<i>No price discounting</i>	Not specified	No explicit requirement(b)	Yes	No explicit requirement (b)
<i>User obligations</i>	Not specified	Not specified	Users responsible for balancing receipts and deliveries	Not specified
<i>Transparent process for balancing gas procurement</i>	Not specified	Not specified	Transparent, non-discriminatory, market-based procedures	Not specified
<i>Cost neutrality</i>	Not specified	Not specified	Penalties must be redistributed to users	Penalties must be redistributed to users
<i>Notify users of imbalances</i>	Not specified	Not specified	PO must provide timely info to users where economic	PO must provide timely info to users where economic
<i>Balancing service contestable</i>	Not specified	Not specified	PO shall facilitate ex-ante balancing market	Yes

- a. may be required by AER or if sought by significant part of market  
b. although general requirements on non-discrimination would apply

The approaches taken on balancing services are analogous to those for transportation: the EU is quite prescriptive, Australia relies on the regulator applying the generic principles – and so has no explicit requirements - and the US is somewhere in between.

The EU is alone in specifying that balancing prices must be non-discriminatory, that users are obliged to endeavour to balance receipts and deliveries and that procurement of balancing gas must be transparent, non-discriminatory and market-based. The US and Australia have no explicit requirements in these areas.

The EU and the US require that revenue from any balancing "penalties" is redistributed to users. These markets also require that the PO provide timely information to users on their imbalances, to the extent this is economic, and that balancing service provision is contestable, in effect meaning that users are able to maintain balance independently, without drawing on the PO balancing service.

## Balancing Service: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Offer balancing services as standard</i>	Some or no requirements specified	It needs to be explicitly included as a standard service so that the additional principles set out below can be specified	Required
<i>No price discounting</i>	No explicit requirements	Vector and MDL have adopted "balancing pool" approaches, so must have non-discriminatory pricing to manage externalities associated with this: ie if one user contributes less to the pool, other users must contribute more.	Required
<i>User obligations</i>	Only specified in EU	Good faith obligations to remain in balance may be difficult to enforce. Incentives should be through pricing of balancing service	Not required
<i>Transparent process for balancing gas procurement</i>	Specified only in EU	Given cross-ownership between production (main balancing provider) and PO, need transparency to prevent PO favouring affiliates. However, do not want transparency to discourage balancing providers.	Required, subject to commercial confidentiality. Concerns. Details unclear
<i>Cost neutrality</i>	Required except in Australia	This is a price regulation issue.	Appropriate requirement, but not clear whether it should be in access principles
<i>Notify users of imbalances</i>	Required except in Australia	An issue of particular concern in NZ. Also, transparency supports non-discrimination. Therefore require transparency to the extent practical.	Required
<i>Balancing service contestable</i>	Required except in Australia	Not clear what this achieves. Any user should be able to manage imbalances by gas and capacity trading.	Not required

In relation to balancing services, it is proposed that NZ adopts an approach at the prescriptive end of the markets reviewed. This is because:

- balancing has a relatively high cost in NZ (which is likely to increase) due to the lack of balancing facilities such as storage and swing gas production;
- concerns have been expressed by users about the effectiveness and transparency of balancing service provision; and
- NZ has a high level of cross-ownership between POs and producers: the latter being the major source of balancing gas.

A PO will be required to provide balancing as a standard service. This allows the required provisions of this service to be specified in these Access Principles.

Balancing charges are typically managed as a "pool" (and currently are on the MDL and Vector pipelines) which means that balancing costs are allocated between users, so any discount to one user would affect other users. Therefore, price discrimination is explicitly prohibited.

Given ring-fencing and transparency concerns, the PO is required to disclose details of its balancing gas procurement, subject to commercial confidentiality. Indeed, additional requirements have been proposed to ensure that procurement is competitive and contestable.

It is not proposed to require obligations on users to manage their own imbalances as this obligation has limited practical meaning. The issue of cost neutrality – ie redistributing penalty revenue – relates to price regulation and so is outside the scope of these Access Principles.

Timely information on imbalances is vital for users to manage their imbalances and balancing charges and so is included as a requirement. Contestability of balancing service provision is already ensured through, unbundling and non-discrimination requirements. Therefore, an explicit requirement is not required.

## Interconnection Service: Research

What interconnection service must be as standard?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Offer interconnection services as standard</i>	Yes: new receipt and delivery points; measurement and reconciliation	Not specified	Allocation and OBA services at pipeline interconnection point [regulator can hear dispute on time taken for connection GD25.1(c)]	Interconnection with distributors only
<i>Service should be contestable</i>	PO has priority right at a delivery point, but not at a receipt point	Not specified	Not specified (a)	Not specified (a)
<i>OBAs at interconnection points</i>	Not specified	Not specified	PO should ensure "interoperability"	PO must enter into OBAs with interconnected pipeline
<i>Specify technical standards</i>	Published in IM	Not specified	Not specified	Not specified
<i>Manage gas quality at interconnection points</i>	Not specified	Not specified	PO must provide monitoring where operates connection assets	Not specified

a. Requirements likely to be specified at a national level in the case of the EU or state level in the case of the US

Interconnection services relate to the development and operation of welded points on the pipeline: ie points of interconnection between the pipeline and other pipelines, producers, directly-connected customers or distribution networks. The reviewed markets have limited principles relating to interconnection. This may be partly because these matters are addressed at a subsidiary level: ie at the country or state level. It may also reflect more limited cross-ownership between producers and pipelines in these markets, giving a PO a lower motivation to inhibit access to these services.

The major area of requirements is in the EU in relation to interconnection – and interconnectedness – between pipelines. Reflecting its importance as an objective, the EU is fairly prescriptive on the operation of pipeline interconnection points: requiring for example that OBAs are agreed (the US has a similar requirement in this respect). The US places obligations on POs connecting with distribution networks but not in other circumstances.

## Interconnection: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Offer interconnection services as standard</i>	Some requirements except in Australia	It needs to be explicitly included as a standard service so that the additional principles set out below can be specified	Required
<i>Service should be contestable</i>	Not specified	Likely to be limited benefit from requiring contestability, as few service providers anyway in NZ. Therefore, adopt common approach of not specifying contestability requirements.	Not required
<i>OBAs at interconnection points</i>	Required except in Australia	Large part of market uses MDL-Vector interconnection points. OBAs considered necessary in development of MPOC. In Australia, regulator would decide on OBA requirement on case-by-case, but in NZ we only have one "case". Therefore, requirement is appropriate	Required
<i>Specify technical standards</i>	Not specified	Technical standards could be used as an obstacle to access, which may arise particularly in relation to new production connection points (due to production-PO cross-ownership). Therefore, technical standards should be specified as part of standard interconnection service.	Required
<i>Manage gas quality at interconnection points</i>	Only specified in EU	Operationally important and would be specified as part of the standard interconnection service. However, no obvious need to specify requirements.	Not required

In contrast to the reviewed markets, interconnection service is an area of concern in NZ [ref issues paper etc]. Therefore it will be required to be offered as a standard service – recognising of course that there will need to be a number of additional, non-standard terms relating to the specific location and circumstances of the interconnection point.

The standard terms will be required to specify the required technical standards.

## Other Services: Research

What other services must be offered as standard?

Pipeline Obligation	NZPAC	Australia	EU	US
<i>Offer capacity trading services as standard</i>	Not specified	Not specified	Where request and funded by users	PO markets released capacity
<i>Offer gas trading services as standard</i>	Not specified	Not specified	Tariff/service design should facilitate gas trading	PO may not include tariff provisions which inhibit the development of market centres
<i>Offer allocation services as standard</i>	Yes	Not specified	Yes, where operated by PO	Not specified

The EU and US require the PO to offer additional services, apart from the transportation, balancing and interconnection services already discussed. In the US, pipelines are obliged to market capacity “released” by users: in effect, providing the platform for the secondary capacity market. In the EU, POs are also obliged to play a similar role if requested and funded by users.

PO are not required to provide similar services in relation to gas trading, although services must be defined in a way which does not inhibit the development of gas markets.

In the EU only, the PO is also required to provide an allocation service, in relation to receipt or delivery points operated by the PO.

## Other Services: Analysis

Pipeline Obligation	Range of Approaches	Assessment of Relevance for NZ	NZ Recommended
<i>Offer capacity trading services as standard</i>	Required in US; also in EU if requested/funded by users	Being considered in NZ by wholesale markets workstream. Can be provided by others, so long as PO provides appropriate capacity trading rights (covered by principle above).	Unlikely to be required
<i>Offer gas trading services as standard</i>	Service definitions should facilitate gas trading (except in Australia)	Should already be covered by other principles: service standardisation, capacity trading rights, delivery point flexibility.	Not required
<i>Offer allocation services as standard</i>	Only specified in EU	Already covered by allocation and reconciliation rules.	Not required

Provision of trading services – whether in relation to secondary capacity or gas – is contestable and there are a number of potential providers who may be better placed to do this than the PO. The requirements in the US were put in place in the 1990s, when this was not necessarily the case. In addition, having the PO provide such services just creates additional difficulties in relation to ring-fencing – in particular of information – and concerns relating to this may dissuade users from participating in a market operated by the PO. For these reasons, not only is a requirement to provide the service unnecessary, but it may actually be detrimental to market development. Therefore, no requirement is proposed.

A similar approach would be adopted for allocation, for similar reasons. However, allocation is being covered by rules being developed separately and so does not need to be covered by the access principles.

The more general issue of ensuring that service terms do not inhibit market development has been addressed under the “standardisation principles” section.



## Section 3: Summary of recommended principles

Area	Recommended Principles	Outstanding Issues
Access to Standard Services	PO must publish standard terms PO must offer access to all comers on standard terms PO may negotiate non-standard terms which are economically efficient PO must publish information on non-standard deals with affiliates PO must publish Queuing Policy Dispute resolution process for access disputes should be established	Dispute resolution process cannot be specified until governance arrangements are clarified
Scope of Standard Services and terms	PO to offer transportation, balancing and interconnection services as standard Requirements for service standards to be specified	Standard service requirements to be developed by GIC to address NZ-specific issues
Administration of Service Terms	Changes to standard terms should be subject to regulatory oversight PO to publish operating procedures PO to demonstrate compliance with its published policy and users may request independent audit of pipeline operations Dispute resolution process for operational or contractual disputes should be established	Dispute resolution process cannot be specified until governance arrangements are clarified
Ring-fencing of PO from affiliates	Services to affiliates must be provide on same basis as to non-affiliates PO must be separated operationally from affiliates PO must not disclose user information to affiliates PO must provide pipeline information on same basis to affiliates as non-affiliates PO must disclose ring-fencing arrangements and report on compliance with these	Details of operational separation requirements to be developed, taking account of practicalities and constraints in NZ