

Evaluation criteria for 2010 Interconnection Review

Gas Industry Co, as the 'industry body', may recommend gas governance regulations for this purpose and must consider the objectives specified in section 43ZN of the Gas Act. The principal objective is to:

ensure gas is delivered to existing and new customers in a safe, efficient and reliable manner

Other objectives specified in section 43ZN of the Gas Act are to:

- facilitate and promote the ongoing supply of gas to meet New Zealand's energy needs by providing access to essential infrastructure and competitive market arrangements;
- minimise barriers to competition;
- maintain and advance incentives for investment in gas processing facilities, transmission and distribution;
- ensure delivered gas costs and prices are subjected to sustained downward pressure;
- ensure risk relating to security of supply, including transport arrangements, are properly and efficiently managed by all parties; and
- maintain consistency with the Government's gas safety regime.

Criteria for evaluating interconnection arrangements

To derive useful criteria for evaluating interconnection arrangements, we must consider what the Gas Act objectives would require in that context. We consider interconnection to be an integral part of the gas supply chain, and thus find that the principle objective provides guidance as to a broad classification of the evaluation criteria. Since safety and reliability are closely related we will classify the evaluation criteria under the categories of:

- safety and reliability; and
- efficiency.

Within each of these categories we consider the other objectives listed in section 43ZN of the Gas Act and what they imply for interconnection arrangements.

Safety and Reliability

The construction of a new interconnection is a technically complex operation, typically involving a hot-tap connection to a live high-pressure pipeline. This is a hazardous operation with risk of serious harm and supply interruption.

The design and operation of interconnection facilities have a significant role in maintaining a safe and reliable gas supply. Receipt interconnection stations must be designed and operated to appropriate standards to manage the risk of non-specification gas entering the transmission system, which can affect both safety and the reliability of the gas supply. Delivery interconnection stations must remove contaminants (oil and dust) from the gas and maintain pressure into the downstream gas network within a safe range. All interconnection stations must have reliable and accurate metering systems.

The objectives relating to safety and reliability will be met where appropriate technical standards are set, responsibilities are defined, and there is a clear link between liability and control.

Efficiency

Efficiency is a principal objective and is reiterated in a number of the other objectives listed in section 43ZN of the Gas Act. Under the efficiency category, several criteria for evaluation have been identified, including:

Access to essential infrastructure

Providing access to essential infrastructure through an interconnection process is directly applicable to the objective of facilitating and promoting ongoing supply of gas. Arrangements that clearly set out the interconnection process, principles, and reasonable terms and conditions will contribute to this objective.

Cost

The cost of creating new interconnections is directly applicable to the objective of maintaining downwards pressure on delivered gas prices. Cost and prices are subject to sustained downward pressure if aspects of the interconnection arrangements are exposed to competitive pressure, and innovative solutions.

Interconnection arrangements are also relevant to the objective of providing incentives to invest in gas processing facilities, transmission pipelines, and distribution systems. While the interconnection facility is generally only a small part of an upstream gas field development project or downstream gas-fired installation, it nevertheless affects the overall economics of that project. In particular, project economics can be adversely affected where:

- facilities are required to meet unreasonably high technical standards ('gold-plating'); or
- where cumbersome processes or unreasonable withholding of approvals delays completion; or

- where interconnection issues are bundled with gas transport issues (see 'Independence' below).

Contestability

Providing contestability, where appropriate, is an efficient means of providing competition and therefore supports the objectives of providing downwards pressure on pricing and minimising barriers to competition.

Although interconnection is a process involving an access seeker and a TSO, some aspects of that process do relate to competition in related markets. For example, delayed interconnection can negatively affect competition in upstream gas markets. Competition in the market for constructing interconnection facilities may be reduced if that work is not contestable. These outcomes would mean associated costs are not subject to competitive pressure.

Independence

Independence of interconnection and transport arrangements supports the objective of providing access to essential infrastructure and competitive market arrangements. While there may be technical reasons to negotiate these arrangements co-dependently, ensuring this co-dependency does not create a barrier to competition is an important consideration (See also 'Costs' above).

Innovation

Technical and commercial innovation, such as the specification of metering equipment, supports the objectives of providing downwards pressure on pricing and minimising barriers to competition.

Clarity of process

A clear process, with defined responsibilities and timelines, contribute to the objectives of providing incentives to invest and to achieve the lowest cost and shortest time to completion.

Enforcement

Without a means of enforcement, interconnection arrangements cannot reliably achieve the objectives and it is therefore an important evaluation criterion. Enforcement includes contractual and regulatory means of achieving compliance with the Gas Act objectives, and a process for resolving disputes.

Table 1 summarises the evaluation categories, and the relevant evaluation criteria within these categories.

Table 1: Interconnection review evaluation criteria

Table heading	Table heading	Table heading
Safety and Reliability	Standards	Technical standards for design, construction, operation and maintenance activities should provide for a level of supply security consistent with good industry practice, and should not unreasonably prevent the use of alternative equipment or methods of construction.
	Responsibility and liability	Responsibilities and liabilities should be clear and, to the greatest extent practicable, liability should be linked to the ability to control.
Efficiency	Access to essential infrastructure	Parties wishing to interconnect to a transmission pipeline should be able to do so, subject to reasonable terms and conditions.
	Cost	Arrangements should promote interconnections that take place as quickly as possible and at the least possible cost.
	Contestability	The right to construct and own facilities should be contestable unless there are compelling technical or legal reasons against contestability.
	Independence	Interconnection and transport arrangements should not be unnecessarily interdependent.
	Innovation	Good industry practice and technology should be applied and innovation should not be stifled.
	Clarity of process	The process for interconnection should be described clearly including responsibility and timeframes.
	Enforcement	There should be effective enforcement of the interconnection arrangements and timely dispute resolution throughout the interconnection process.

The evaluation criteria and what is required of the interconnection arrangements are developed in more detail below.

Safety and Reliability

Standards

Interconnection arrangements should specify technical standards for interconnection equipment and methods of construction that comply with good industry practice and the relevant Standards and Codes of Practice. The requirements should cover design, construction, commissioning, testing, and operation of those assets. In particular, interconnection arrangements should:

- specify the standards for construction, operation, and maintenance;
- provide a clear process for the agreeing and maintaining the operational parameters (such as minimum and maximum delivery pressure and the operating flow range); and

- provide TSOs the ability to reject arrangements that would adversely affect the safety or the long-term integrity of the pipeline, or the pipeline's certificate of fitness.

Responsibility and liability

Interconnection arrangement should clearly define responsibilities and associated liabilities for all activities and approvals throughout the interconnection process. In particular, interconnection arrangements should:

- assign responsibility for design and approval activities;
- identify the personnel within each organisation who are responsible for contract negotiation;
- identify risks and assign liability for losses associated with those risks; and
- place liability with the party that has the ability to control the risk.

Efficiency

Access to essential infrastructure

- Interconnection arrangements should allow a party to access the transmission pipeline, subject to reasonable terms and conditions that are consistent with the objectives listed in section 43ZN of the Gas Act. To achieve this, interconnection arrangements should: provide open access to gas transmission pipelines;
- identify and publish the terms and conditions for providing access; and
- ensure that the terms and conditions are reasonable and consistent with the Gas Act objectives.

Cost

Interconnection arrangements should help to ensure that costs and prices are subject to sustained downward pressure. A TSO's arrangements should enable interconnections to take place as quickly as possible and at the least possible cost. To achieve this, interconnection arrangements should:

- identify the principles and standard terms for an interconnection;
- identify the overall process steps, milestones, and criteria for progressing the interconnection process;
- set reasonable timeframes and deadlines for commercial negotiations and technical reviews;
- support the use of existing infrastructure, subject to technical suitability;
- not needlessly duplicate facilities;
- allow matters in dispute to be referred to suitable decision maker (eg technical expert);

- allow TSOs to recover reasonable costs incurred; and
- not socialise costs unless there are social benefits.

The interconnection arrangements should promote contestability, independence, innovation, and clarity of process.

Contestability

Interconnection arrangements should promote contestability for the design and construction of equipment to provide downward pressure on cost. To achieve this, interconnection arrangements should:

- identify the principles that apply to contestability ;and
- allow ownership, design and construction to be contestable unless there are compelling technical or legal reasons against contestability.

Independence

Interconnection arrangements should be negotiated independently of transportation arrangements unless both parties agree that there are compelling technical reasons to negotiate both arrangements together. To achieve this, interconnection arrangements should:

- principally provide for interconnection to be independent of transport arrangements;
- identify the circumstances where co-dependent negotiation may be applicable; and
- allow co-dependent negotiation when *both* parties agree.

Innovation

Interconnection arrangements should:

- promote the use of good industry practices;
- allow TSOs to modify their standard interconnection arrangements to reflect changes in industry practices; and

allow interconnecting parties to propose alternatives, and allow for TSOs to consider those alternatives.

Clarity of process

Interconnection arrangements should clearly define the technical and commercial processes to enable these activities to be carried out as efficiently as possible, and in a timely manner. In particular, interconnection arrangements should:

- require TSO's to publish an interconnection policy including details of its interconnection process, information requirements, pro-forma contracts, policies and standards, technical review, principles, commercial prerequisites, and a dispute resolution process; and
- require TSO's to provide an interconnecting party with sufficient information to enable it to assess the likely availability of transmission capacity to of from the interconnection point.

Enforcement

Interconnection arrangements should have a means of enforcement at all stages. This should include a suitable dispute resolution process, which is available to both parties throughout the interconnection process.

To counter the exercise of unequal bargaining power, a means of ensuring that the TSO's terms and conditions are consistent with the objectives listed in section 43ZN of the Gas Act is required.

To achieve this, interconnection arrangements should:

- set out the provisions for enforcement and dispute resolution; and
- provides dispute resolution processes that:
 - may be applied to a pre-contract dispute relating to the TSO's terms and conditions;
 - take place in a timely and economic manner; and
 - include a fair and effective escalation process.