Jemena Gas Networks (NSW) Ltd - Initial response to the draft decision

Appendix 9.10

NERA: Treatment of Outsourcing Arrangements – Multinet Gas Distribution Partnership - October 2007

19 March 2010

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October 2007

Treatment of Outsourcing Arrangements

Multinet Gas Distribution Partnership

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Executive Summary

The idea that members of society benefit by specialising in what they do best has a long history and is one of the most important and powerful ideas in all of economics. Firms will not always be in the best position to provide every service they require in-house and may choose instead to call upon specialist providers, including law firms, advertising agencies, management consultancies and IT suppliers. In doing so, they recognise that it is likely to be cheaper and/or easier in the long-run to pay for that specialist expertise than to supply the service themselves. In other words, a firm may be able to obtain significant efficiency gains through outsourcing arrangements.

Gas distribution is no different from any other industry in this regard. Each of the Victorian gas distributors outsources varying degrees of the operation of their networks to third party providers. As the Victorian Essential Services Commission (ESC) has recognised, the procurement of specialist external skills is entirely consistent with accepted and good industry practice.[1] However, while outsourcing arrangements can ordinarily be expected to deliver significant efficiency related benefits there is a risk that regulated service providers may have an incentive to pay an artificially inflated contract price in circumstances where:

§ the interests of the regulated service provider and the contractor are sufficiently aligned so as to create an incentive to transfer profits from the regulated service provider to the contractor; or

§ the contractor agrees to confer monetary, or other benefits, on the regulated service provider in return for the regulated service provider agreeing to pay an artificially inflated contract price.

For the past eighteen months the ESC has been undertaking the challenging task of constructing a regulatory framework for the appropriate treatment of outsourcing contracts. The development of this framework has been a process of continual refinement. Nonetheless, the overarching objectives of that framework have continued to be:

§ to facilitate the distinction between outsourcing contracts that can be presumed to be to be consistent with section 8.37 and 8.16(a)(i) of the *National Third Party Access for Natural Gas Pipeline Systems* (Code), and thus likely to reduce a service provider's forward-looking costs and those intended to misstate true costs and shift profits (hereafter referred to as the 'presumption threshold'); and

§ for those contracts that cannot be presumed to comply with sections 8.37 and 8.16(a)(i), to construct a methodology for comparing the contract price with an estimate of the cost that *would have been incurred through in-house provision* to establish whether or not the contract price is less than or equal to this 'counterfactual' cost benchmark.

In this report I set out my proposed framework for addressing these issues, and contrast it with the alternative frameworks put forward by the ESC in its Draft Decision, and by Mr Jeffrey Balchin in his statement prepared for the ESC.

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1 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p39.

Proposed Assessment Framework and Approach

Figure I sets out an assessment framework that I consider will achieve the dual aims identified above and fulfil the objectives of the Code. My proposed presumption threshold focuses upon two key issues:

- whether the interests of the parties were sufficiently aligned at the time the contract price was negotiated or renegotiated, such that they could be considered to be operating as a *single economic entity* with the resultant incentive to engage in transfer pricing; and
- if the parties could not be considered to be a single economic entity, whether there were *other compensatory payments* made to sustain an artificially inflated contract price.

In my view, in reaching a conclusion on these issues consideration should be given to the circumstances that surrounded the contract at the time it was entered into and also to whether the incentives of the parties to engage in transfer pricing may have changed over time. The nature and frequency of any contract provisions governing reviews of its terms and conditions, and particularly its price, will be a critical element in this assessment.

Where it is concluded that a regulated service provider would not have an incentive to pay an artificially inflated contract price, then consideration must be given to whether the contract price wholly relates to the provision of the Reference Service and whether the contractual terms are consistent with the criteria set out in sections 8.37 and 8.16(a)(i), ie, acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of providing the service. If this is the case then the contract price should be viewed as consistent with section 8.37 and/or section 8.16(a)(i) and form the basis for establishing forecast non-capital expenditure and/or capital expenditure.

In those circumstances where it is found that a regulated service provider may have had (or currently has) an incentive to pay an artificially inflated contract price, then consideration must be given to whether such has been the case. Under my proposed framework this would be done in the second inquiry phase. As Figure I illustrates, the objective in the 'second inquiry phase' is to estimate what the cost of in-house provision *would have been* had the firm not outsourced the service. In my view, this suggests two counterfactuals that feasibly could be examined for the purpose of deriving forward-looking cost benchmarks:

- a 'status-quo' counterfactual, ie, in estimating the costs of in-house provision a distributor's business is taken 'as is', including any related businesses, and assumes a fully in-sourced business; and
- a 'stand-alone business' counterfactual in which the distributor is not assumed to have any other operations and to operate a fully in-sourced business.

The 'status quo' counterfactual reflects the scenario in which the *starting point* for estimating in-house costs is the status quo structure, *including all related businesses*. The task is to estimate the costs, including additional labour and capital costs that would be incurred in delivering the service in-house from this initial *reference point.* To the extent that any scale and scope economies or other efficiencies are likely to be obtained through the continued operation of other *existing* businesses, these would need to be taken in to account.[2]

The second counterfactual outlined above assumes that a service is provided in-house by a fully in-sourced stand-alone service provider that owns and/or operates the single regulated pipeline system. In other words, even if a provider *does* presently operate related businesses, these are ignored for the purposes of estimating the in-house cost of providing the reference service. Any scale or scope economies or other efficiencies a provider might be expected to obtain through operating those businesses in conjunction with the pipeline are *not* factored into cost estimates.

In principle the 'status quo' counterfactual is likely to be preferable because it provides the firmest reference point against which to estimate costs.

In Figure I two alternative methods for estimating the hypothetical risk-adjusted cost of in-house provision are described although it should be noted that this does not necessarily represent an exhaustive list. The first method uses contractor's costs as the starting point and adjusts these to reflect differences in relative efficiencies between the contractor and the regulated service provider while the second method involves a ground-up estimate of the cost of in-house provision.

Once an estimate of the hypothetical risk-adjusted cost of in-house provision is established the framework then requires it to be compared with the contract price to ascertain whether the contract price is:

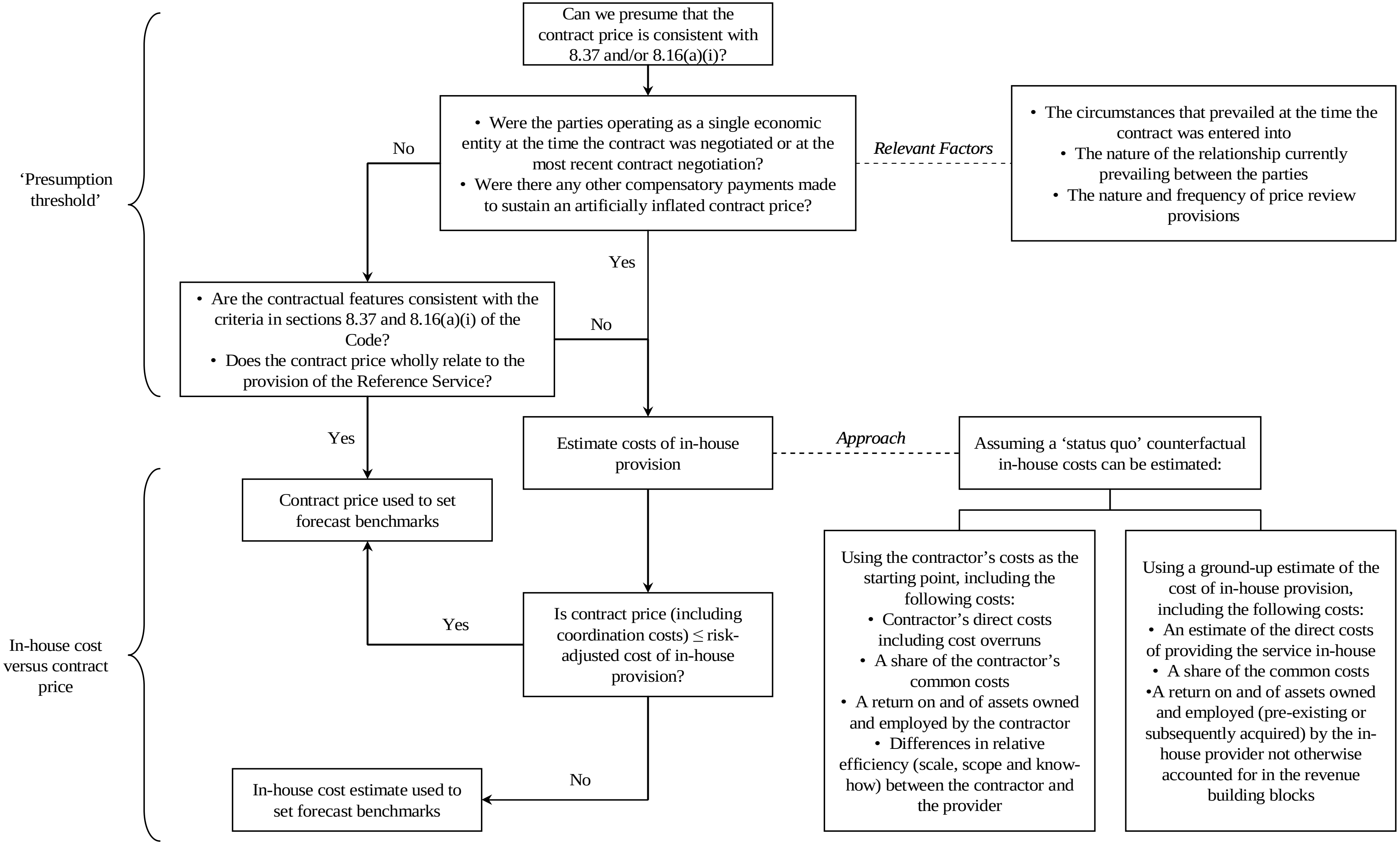
§ less than or equal to the risk adjusted cost of in-house provision and therefore *consistent* with the Code. In these circumstances the *contract price* should be used to establish forecast non-capital and/or capital expenditure requirements under section 8.37 and/or 8.16(a)(i) of the Code; or

§ greater than the risk adjusted cost of in-house provision and therefore *inconsistent* with the Code. In these circumstances the ***in-house cost*** estimate should be used to establish forecast non-capital and/or capital expenditure requirements under section 8.37 and/or 8.16(a)(i) of the Code.

The foregoing assumes that the in-house cost estimate coincides with the time that the contract price was negotiated. If this is not the case then before reaching a firm conclusion about the nature of the contract payment consideration should be given to whether *ex post* events may have altered the expectations surrounding the risk adjusted in-house cost from what they were at the time the service provider agreed to pay the contract price.

[2] Of course, if those related businesses *do not presently exist*, it is not assumed that the provider would seek to merge with other providers in order to obtain additional synergies. The distributor's business structure is taken 'as is', with or without related businesses.

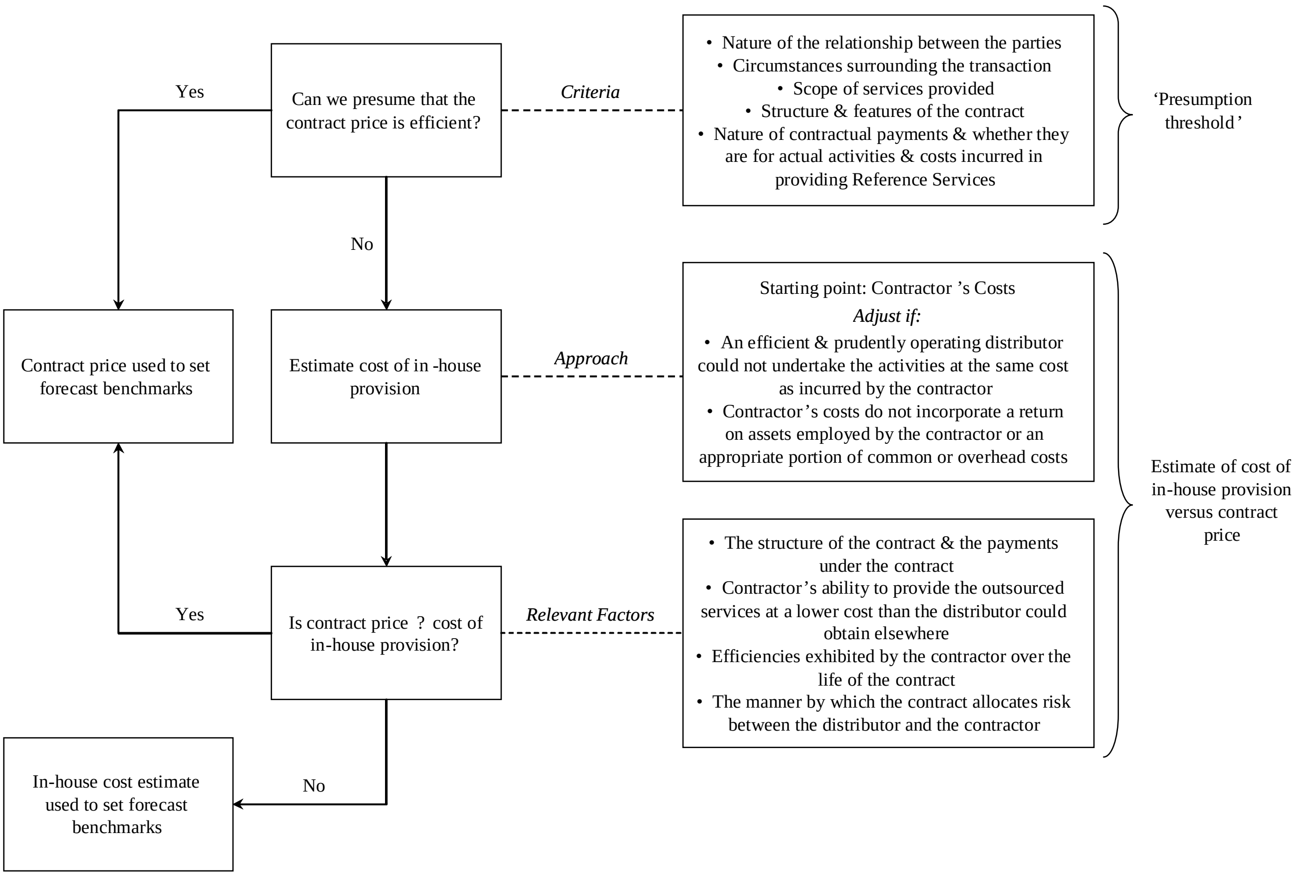
Figure I: Proposed Assessment Framework



ESC Framework and Approach

The framework described by the ESC, and the approach it ultimately implemented in its *Draft Decision* differs in some important respects to the framework I propose above. Unsurprisingly given the evolution in understanding of the regulatory implications of these arrangements, the ESC's framework has taken on a number of forms since the release of the ESC's *Consultation Paper No. 1* in May 2006. The most recent manifestation is outlined in Figure II below.

Figure II: Summary of ESC Framework



The ESC's framework consists of a two stage inquiry process which entails:

§ distinguishing between those contracts that can be *presumed* to be consistent with sections 8.37 and 8.16(a)(i) and those that cannot (the 'presumption threshold'); and

§ comparing the contract price with the estimated cost of in-house provision for those contracts that cannot be presumed to be consistent with section 8.37 and 8.16(a)(i). In this context the cost of in-house provision is estimated using the contractor's actual costs as a *starting point.* A 'counterfactual' analysis is then undertaken to establish whether an efficient and prudently operating distributor could itself undertake those activities for the same costs having regard to whether:

- the contractor's costs incorporate a return on the assets employed by the contractor or an appropriate portion of common costs;[3] and
- the contractor is able to achieve economies of scale, scope and other efficiencies (such as 'know-how') ***not otherwise available to the in-house provider***.[4]

Whilst I agree in principle with much of the ESC's framework, in my view there are a number of shortcomings that should be addressed before it can be expected to result in the appropriate treatment of outsourcing contracts. Specifically:

§ the ESC appears to have misconstrued sections 8.37 and 8.16(a)(i) of the Code and constructed its framework so as to allow ***only*** 'prudent and efficient costs' to be incorporated into reference tariffs.[5] In my opinion there is an important distinction between 'acting in a prudent and efficient manner' consistent with sections 8.16(a)(i) and 8.37 and actually achieving efficiency corresponding to a perfectly competitive market. No firm can realistically be expected to achieve hypothetical 'perfect' efficiency in every facet of its operations in perpetuity. In a workably competitive market some firms simply will be better at some things than others, as Parker J emphasised in *Re: Dr Ken Michael; ex parte EPIC Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 (23 August 2002) (hereafter: *Re: Dr Ken Michael*):[6]

> 'I am left with the clear impression that in the field of competition policy, especially market regulation, the prevailing view and usage among economists is that a reference to a competitive market is to a workably competitive market. In the particular context of the promotion of a competitive market for natural gas it would be surprising if what was contemplated was a theoretical concept of perfect competition, as the subject matter involves very real-life commercial situations. Workable competition seems far more obviously to be what is contemplated …
>
> … with workable competition market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although *not necessarily achieving theoretically ideal efficiency*.' (emphasis added)

Parker J's findings accord with sound economic theory and are wholly consistent with my interpretation of sections 8.37 and 8.16(a)(i) of the Code;

§ the use of the term 'related party' in the presumption threshold is of limited practical utility because considerable uncertainty surrounds its meaning and application. It also gives insufficient consideration to:

- the potential for the relationship between parties to develop over time and so with it the incentives to engage in transfer pricing; and

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3 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p54.

4 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p52 footnote 30.

5 See for example: Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, pp2 and 7.

6 *Re: Dr Ken Michael; ex parte EPIC Energy (WA) Nominees Pty Ltd & Anor* [2002] WASCA 231 (23 August 2002), para [124] and [128].

   – the potential for 'unrelated' parties to agree to an artificially inflated contract price where compensatory payments are made to support the arrangement.

- the precise the nature of the ESC's assumed counterfactual in-house provider under its proposed 'case-by-case' approach is unclear, and in particular:
   – whilst it recognises there may be scale and scope economies or other efficiencies available to the contractor that are unattainable under in-house provision it does not explain how those contractor-specific efficiencies will be measured; and
   – if the proposed 'case-by-case' approach is intended to provide the ESC with scope to adopt materially different counterfactuals for otherwise comparable providers, this would be unwelcome.

I also disagree with the approach ***actually*** adopted by the ESC in its *Draft Decision*, which departs substantially from its stated framework. In relation to the Operating Services Agreement (OSA) between Multinet and Alinta Asset Management (AAM) the ESC's draft decision was that:

- it was not satisfied that the contract payment reflected 'prudent [sic] incurred efficient costs, consistent with good industry practice so as to achieve the lowest sustainable level of costs to provide the Reference Services';[7] and
- it contended that there was no evidence before it that demonstrated the OSA has delivered, or was more likely to be able to deliver lower costs than Multinet would have incurred if the services were provided in-house and no evidence that Multinet management held the view that the OSA would reduce expected costs when the contract was entered into.[8]

Having reached this view, the ESC proposed to equate the cost of in-house provision with AAM's ***actual costs***.[9] However, in the absence of information on AAM's actual costs, it sought to estimate them from publicly available information, by reference to the ***reported margins*** across the whole of AAM's business obtained from its Australian Securities and Investments Commission (ASIC) returns for the years 2004, 2005 and 2006. Specifically, the ESC reduced Multinet's reported costs by **9.2 per cent**, representing a low-end estimate of the profit before tax margin received by AAM across its portfolio of contracts.

In my opinion, there are a number of problems with the ESC's approach. First, it is not obvious that the ESC was correct to conclude that the presumption threshold had not been met. On the strength of the material I have sought and reviewed there is no basis to conclude that Multinet and AAM were operating as a 'single economic entity' when the OSA was entered into or that they are currently doing so. I have also reviewed affidavits prepared by three individuals that were, to varying extents, involved in the negotiation of the OSA and the capital markets transaction. Statements in each of these affidavits indicate that the $16 million transaction occurred independently of the negotiation of the OSA and so the payment was not made to support the agreement to pay an artificially inflated contract price.

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7 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p72.

8 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p76.

9 Including an allowance for common costs and the costs of assets employed by AAM not otherwise recovered in the return on capital allowance for Multinet.

Overall, I am of the opinion that Multinet had no incentive to agree to pay an artificially inflated contract price at the time the OSA was entered into and has no incentive to agree to such a price at the next contract price review.

Second, in my view, the ESC's analysis of the likely cost of in-house provision vis-à-vis the contract price is perfunctory and overlooks a number of important factors, including:

- a report provided to the ESC by Meyrick and Associates which indicates that AAM has been able to achieve greater levels of operation and maintenance efficiency than Multinet had previously been able to attain.[10] This implies that the OSA is more likely to have delivered lower costs than would have been the case had Multinet continued to operate the network;
- publicly available information which indicates that the fees set at the commencement of the contract were "in line with typical pre-acquisition operating expenditure levels".[11] Given the largely fixed cost nature of this contract and the resultant transfer of expenditure related risks this indicates that, on a risk-adjusted basis, the contract price was at the time lower than it had been when the services were provided in-house. This suggests that Multinet management did hold the view that the contract would reduce its forward looking costs; and
- information contained in affidavits that have been provided to me indicate that at the time of entering into the outsourcing arrangement with AAM, AMP Capital Investors (AMPCI) was concerned that the business would face cost increases as the business stabilised in the future and thus setting the contract price at historic levels through a fixed price contract was viewed as a 'good deal for AMPCI'.

Third, there is no reason to believe that deducting an average accounting margin that AAM earns across its portfolio of contracts – albeit at the 'lower end' of the range – will generate a cost estimate reflective of the full economic costs likely to be incurred by Multinet if it were to carry out the services specified in the OSA, since:

- as the ESC itself concedes, no explicit consideration has been given to the allowance required for common costs, or a return on or of assets owned by AAM and employed in the provision of the services - selecting a 'low-end' margin estimate does not, in my opinion, adequately address this issue;
- the margin earned by AAM across its portfolio of contracts may be brought about in large part through scale and scope economies or other efficiencies that Multinet could not achieve through in-house provision;
- the 9.2 per cent margin estimate has been calculated by recourse to that earned across AAM's entire portfolio of contracts. The diversity of clients and contract types across AAM's range of interests means it may earn superior margins on one contract while potentially also earning negative margins on another – an average margin is not especially

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[10] I have not reviewed the analysis conducted in this report and so am not in a position to reach an independent conclusion on either its robustness or its accuracy.

[11] AMP Capital Investors and Macquarie Bank, DUET Supplementary Product Disclosure Statement for the Initial Public Offering of DUET, 28 June 2004, pg. 94.

meaningful in this context, particularly given the fixed-price nature of the OSA, which exposes AAM to the risk of cost overruns;

- the approach appears to overlook the allowance that AAM would require to insure (either through an external underwriter or through self insurance) against the risks of cost overruns. This is a factor that must be taken into account when one seeks to estimate actual costs by deducting an estimated margin (that may include the allowance required to insure against such risks) from the contract price as the ESC has sought to do; and
- it would appear that the ESC's estimate of the margin earned by AAM over the period 2004-2006 is materially higher than the comparable earnings before interest and tax (EBIT) margins calculated by both NERA and the Allen Consulting Group (ACG). Both the NERA and ACG reports estimated that the margin earned by AAM over the period 2004-2006 ranged from 8.5-13 per cent (average 10.7 per cent) while the ESC's estimates ranged from 9.2-14.5 per cent (average 11.6 per cent).

Mr Balchin's Framework

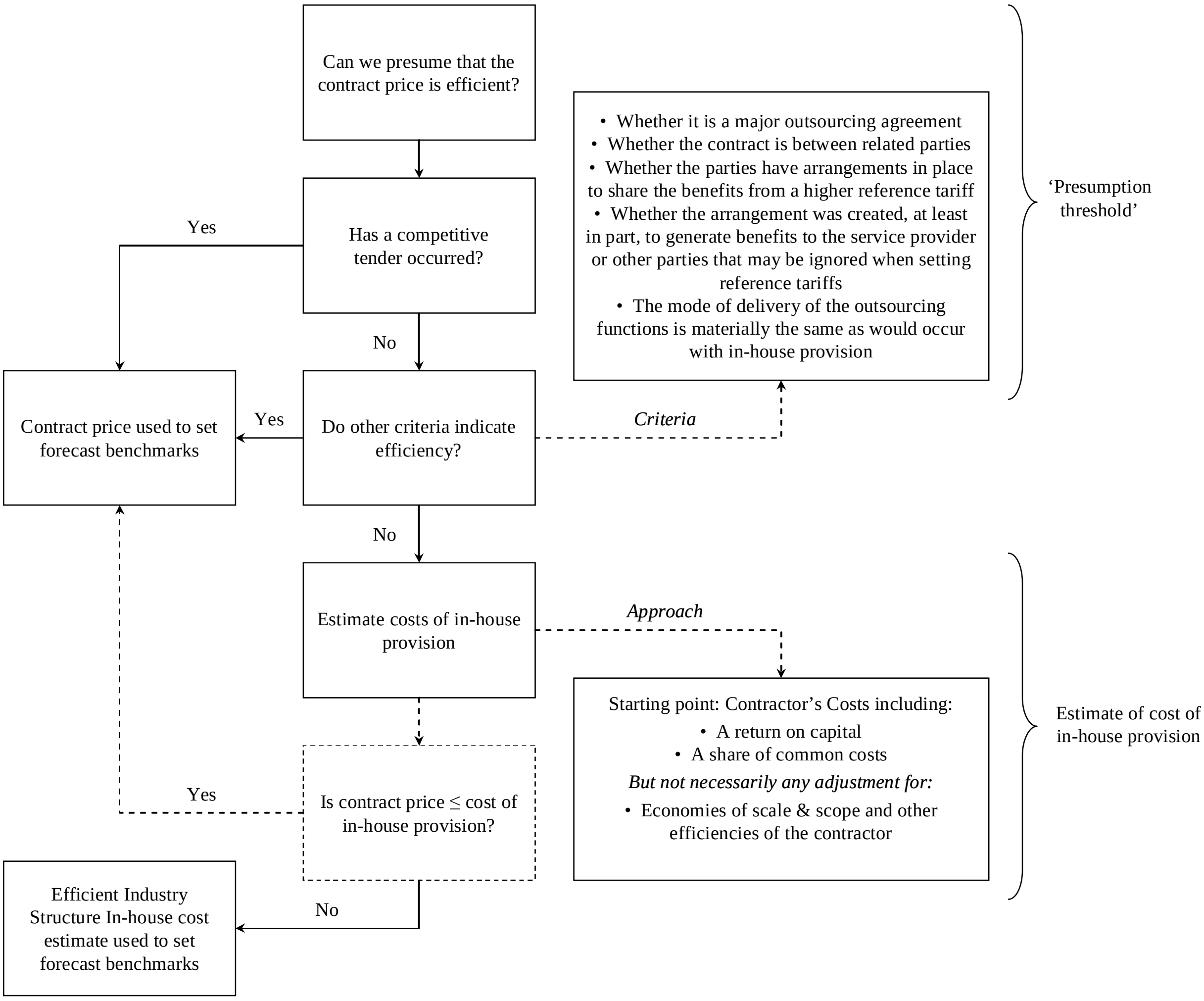
The ESC engaged Mr Jeffrey Balchin of ACG to consider the extent to which it is appropriate to place reliance on payments made under an outsourcing contract when assessing the prudent and efficient costs of undertaking an activity. In so doing, he presents his own framework for the assessment of outsourcing contracts for regulatory purposes. Broadly speaking, Mr Balchin's framework ***ostensibly*** provides for the same two stage inquiry process as the ESC's framework. However, it also has a number of important differences, eg, under his presumption threshold the only circumstances in which he would unequivocally accept a contract price as forming the efficient benchmark is where a competitive tender has occurred.

Mr Balchin's recommended approach to estimating the cost of in-house provision also differs materially to that outlined by the ESC. He uses the contractor's actual costs as the starting point and the end point for his analysis of in-house costs. Put simply, he assumes that anything that the outsourcing firm can do, the in-house provider can do equally well. He reaches this view because:

- he adopts a highly stylised counterfactual in which the in-house provider is assumed to be operating in an 'efficient industry structure', ie, the in-house provider is assumed to be able to obtain the same efficiencies as the contractor through merger activity; and
- he consequently contends that any economies of scale and/or scope obtained by a contractor in the provision of the service should be *equally attainable by the distributor* through in-house provision under his counterfactual.[12]

[12] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 149 – 150.

Figure III: Summary of Balchin Framework



As Figure III illustrates, the consequence of Mr Balchin's counterfactual ownership and operating structure is that his framework involves no scope for efficient outsourcing in those circumstances in which his presumption threshold is not met. Thus, the component of the framework that ostensibly involves a comparison of the contract price to the cost of in-house provision is effectively redundant because his assumed notional ownership/operational structure for in-house provision ensures outsourcing can *never* be the least costly option.

In my opinion, Mr Balchin's proposed framework exhibits a number of shortcomings both in principle and in practice. These shortcomings can largely be attributed to his interpretation of the Code and in particular the interaction between sections 8.1, 8.37 and 8.16(a)(i). Specifically, Mr Balchin has interpreted section 8.1 of the Code as allowing service providers only to recover *efficient* non-capital costs and capital expenditure. A consequence of this interpretation is that he has applied a far more stringent framework than would otherwise be contemplated under sections 8.37 and 8.16(a)(i) of the Code, which simply require service provider to have *acted* efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering the service. The sections do not require a service provider to necessarily attain an *efficient* level of costs.

In my opinion, Mr Balchin's interpretation of the Code incorrectly assumes that sections 8.37 and 8.16(a)(i) are unable to prevent a contract price that incorporates an element of 'double counting' and/or provides poor incentives to minimise costs from influencing the calculation of reference tariffs. It is not obvious how a contract exhibiting the characteristics referred to by Mr Balchin and thus featuring a contract price that is higher than the risk adjusted cost of in-house provision could possibly be accepted by a regulator. Specifically, it is unclear how it could be consistent with a prudent service provider acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service.

The only circumstance in which a contract price could incorporate double recovery of costs and exhibit poor incentives for cost minimisation and still comply with sections 8.37 and 8.16(a)(i) is when it nonetheless ***reduces*** costs. Specifically, it is theoretically conceivable that a contract could exhibit these features and nevertheless result in a price that is ***lower*** than the forward-looking risk adjusted cost of in-house provision. Because this results in a lower forward-looking cost benchmark it cannot be inconsistent with sections 8.37 and 8.16(a)(i) and it certainly does not require the 'solution' Mr Balchin proposes.

Mr Balchin also incorrectly interprets the objective contained in section 8.1 of the Code as constraining reference tariffs to the recovery of costs that meet the productive, allocative and dynamic efficiency standards expected in a perfectly competitive market. I indicated earlier that there is an important distinction between 'acting in a prudent and efficient manner' consistent with sections 8.16(a)(i) and 8.37 and actually achieving a level of efficiency that corresponds with a perfectly competitive market. In my view no firm can realistically be expected to achieve hypothetical 'perfect' efficiency in every facet of its operations in perpetuity. Mr Balchin's interpretation is also at odds with the findings of Parker J in *Re: Dr Ken Michael* in relation to both the level of efficiency contemplated by the Code and the extent to which section 8.1(a) constrains tariffs to the recovery of efficient costs as indicated by the following extracts from the judgment:

> '… with workable competition market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although not necessarily achieving theoretically ideal efficiency.' (emphasis added)[13]
>
> 'It is also to be noted that s8.1(a) does not provide that the service provider should recover the efficient cost of delivering the reference service; the objective is that the service provider should be provided with the "opportunity" to earn a "stream of revenue" (NOT the defined term Total Revenue as in s8.2(a) and s8.4) that recovers the efficient costs over the expected life of the assets used … in my view, it would distort the words used to engraft the sense of "no more than the efficient costs" into s8.1(a). Similarly, there would be a misconception to engraft "at least the efficient costs" into the provision. Each of these would add an emphasis not contemplated by the language of s8.1(a).'[14]

Finally, Mr Balchin appears to have elevated section 8.1 of the Code into an overarching requirement, which is contrary to the findings of both Parker J in *Re: Dr Ken Michael* and the

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13 *Re: Dr Ken Michael*, para [124] and [128].

14 Ibid at [141]-[142].

High Court in *East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission* [2007] HCA 44 (27 September 2007) (hereafter: *East Australian Pipeline*). In delivering the judgment of the Court in *Re: Dr Ken Michael*, Parker J emphasised that nothing in the Code makes section 8.1 an overarching requirement vis-à-vis other Code provisions, including, sections 8.16(a) and 8.37. In concluding that no overarching requirement existed, Parker J stated:[15]

> 'There is no provision in s8 to this effect. Section 8.1(a) comes nearest to the suggested overarching requirement. It does not provide, however, that it is to be overarching.'

Mr Balchin's interpretation of these Code provisions appears to underpin his decision to adopt a more stringent counterfactual than would necessarily flow from sections 8.37 and 8.16(a)(i) of the Code. I note above that the counterfactual adopted in Mr Balchin's framework assumes that if the service had not been outsourced it would have been provided in-house within an *efficient industry structure.* His framework effectively presupposes that a contractor could *never* be more efficient than his notional ownership and operating structure because if it were, merger activity would have occurred to capture those scale and scope economies. Accordingly, under Mr Balchin's counterfactual outsourcing can *never* be a less costly option than in-house provision.

In my opinion, Mr Balchin's counterfactual is an extreme scenario and inconsistent with accepted economic theory surrounding the specialisation benefits that can flow from outsourcing. His assumed counterfactual also appears to have no basis within the Code. This point has previously been acknowledged by Mr Balchin's firm in advice provided to the Essential Services Commission of South Australia (ESCOSA) regarding the regulatory treatment of outsourcing contracts:[16]

> '... we would question whether the Gas Code would permit the regulator to conclude that a prudent service provider should undertake structural changes (eg, a merger) in order to lower its costs (and hence to judge 'lowest sustainable cost' against this standard) …'

The likely consequence of assuming an in-house provider can always provide a service in-house as cost-effectively as a contractor would be that distributors would have a perverse incentive to *provide in-house* services that could be procured at lower cost through outsourcing. I understand that the ESC has not adopted the counterfactual proposed by Mr Balchin and based on the foregoing I would caution it against adopting such a position.

Matters for consideration

Multinet has asked for my opinion on three matters relating to:

1. the consistency of the ESC's approach for determining the benchmark allowance for the cost of services provided to Multinet with Code;

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[15] *Re: Dr Ken Michael*, para 157.

[16] ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006.

2. the manner by which Multinet should derive its forecast operating expenditure for the services provided under the OSA in order to satisfy the Code requirements; and
3. the inference drawn by the ESC from Justice Hollingworth's decision in *Alinta v Essential Services Commission* (No2)(2002) VSC 210.

Consistency of ESC's approach with the Code

On the first of these matters, I conclude that the approach adopted by the ESC in its *Draft Decision* and its findings in relation to the Multinet-AAM OSA has a number of shortcomings. These stem from the presumption threshold it has adopted, the uncertainty surrounding its specification of the counterfactual and its analysis of Multinet's hypothetical cost of in-house provision. I have also come to a contrary view to that reached by the ESC regarding the extent to which the OSA can be presumed to be consistent with the Code.

In my opinion, the threshold adopted by the ESC is of limited practical utility given that it neither provides sufficient clarity on the circumstances where a regulated service provider would have an incentive to pay an artificially inflated contract price nor recognises the dynamic nature of these incentives.

A second problem with the ESC's approach relates to the counterfactual it has adopted. In my opinion, the 'case-by-case' approach adopted when estimating the hypothetical cost of in-house provision is a source of material regulatory risk due to the level of uncertainty surrounding the counterfactual.

Finally, the ESC's analysis of Multinet's hypothetical cost of in-house provision has a number of shortcomings. First, the ESC appears to have overlooked a range of important factors regarding:

- the ability of the OSA to deliver lower costs than Multinet; and
- the view of management at the time the contract was negotiated.

Second, the ESC's use of an average accounting margin estimated across AAM's portfolio of contracts to estimate AAM's actual costs overlooks a range of costs incurred by AAM in the delivery of the services to Multinet. Further, it does not adequately reflect the efficiencies that would be available across AAM's entire portfolio relative to those attainable by Multinet under either the 'status-quo' or the 'stand-alone business' counterfactual. The margin deducted by the ESC is also higher than estimates developed by both NERA and ACG.

In my view, these shortcomings have the potential to give rise to an estimate of forecast non-capital costs for the 2008-12 period that is *less* than that which would be incurred by a prudent service provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service. Such an outcome would be contrary to section 8.37 of the Code and would not ensure that the resultant reference tariffs achieve the objectives specified in section 8.1.

In view of the shortcomings with the ESC's approach I have undertaken an examination of the OSA in accordance with the framework set out in Figure I.

On the strength of the material I have reviewed, in my opinion, there is no basis to conclude that either:

§ Multinet and Alinta (or AAM) were operating as a single economic entity when the OSA was entered or that they are currently operating as a single economic entity; or

§ the \$16 million payment made to Multinet's former shareholders represented compensation in return for the shareholders agreeing to pay an artificially inflated contract price.

I understand this latter conclusion is at odds with the view reached by the ESC. My conclusion has been informed by three affidavits prepared by Peter Scott Lowe, Ian Stewart Devenish and Robert Andrew Forsyth Dunlop all of whom were to varying extents involved in the negotiation of the OSA and the capital markets transaction. On the basis of the statements contained in these affidavits made available to me it appears that the \$16 million transaction occurred independently of the negotiation of the OSA and so the payment was not made to support the agreement to pay an artificially inflated contract price.

Accordingly, in my opinion Multinet had no incentive to agree to pay an artificially inflated contract price at the time the OSA was entered into. The corporate and commercial management structures in place within Multinet, coupled with the emergence of commercial tension between the parties, will also limit both the opportunity and incentive for Multinet to allow any transfer pricing to occur by means of the OSA at the next price review.

Having passed the first limb of my presumption threshold I have also considered whether the contract price relates wholly to the provision of the Reference Service and if the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) of the Code.

On the first of these considerations no information has been provided to me that would indicate that the opex fee payable under the OSA does not wholly relate to the provision of the Reference Service.

On the second consideration, I am aware that the ESC considers that users will attain no efficiency savings under the OSA and has cited the fixed nature of the contract price and the lack of access to AAM's actual costs as the basis for this conclusion.

I disagree with the ESC's conclusion. First, access to the actual costs of AAM, or for that matter any contractor, is not a pre-condition for efficient contracting. Second, while the contract price is largely fixed for a defined period of time, it does not follow that there is not and cannot be any sharing of efficiencies. Many commercial transactions are conducted with the price for services fixed over a specified period. Such prices inevitably reflect both the anticipated future efficiency gains when they are first set, and the realisation of efficiency gains when they are re-determined. In reality, the price struck under the OSA or any other fixed term contract will reflect a sharing of expected efficiency gains a factor which is actually explicitly reflected in the price review provisions under the OSA. This implies that forward looking efficiencies are to be incorporated into the contract price and so users will share in further expected efficiency gains.

In view of the foregoing I am satisfied that the OSA passes the presumption threshold and in my opinion the contract should be assumed to be consistent with section 8.37 of the Code.

Manner by which forecast operating expenditure under the OSA should be estimated

The second matter Multinet has asked me to consider is how it could derive its forecast of non-capital costs arising from the OSA in order to satisfy the Code. Although I have formed the view that the contract price payable for non-capital costs under the OSA should be viewed as being consistent with the Code, I have considered this matter using the criteria set out in the second inquiry phase of my proposed framework, ie, the in-house cost versus contract price inquiry phase. This inquiry phase entails estimating the in-house cost using the appropriate counterfactual and then comparing this to the contract price to ascertain whether the contract price is less than or equal to the risk-adjusted cost of in-house provision.

In light of the shortcomings in the approach employed by the ESC in its *Draft Decision*, I have developed two alternative methodologies that could be used to derive a more robust estimate of the forecast non-capital cost allowance required by Multinet over the impending access arrangement period, assuming the contract price payable under the OSA were to be set aside. These two alternatives involve:

- undertaking a 'ground-up' estimate of Multinet's costs under either a 'status-quo' or 'stand-alone business' counterfactual including direct costs, common costs and a return on and of assets that AAM currently owns that Multinet requires; and
- estimating what Multinet's in-house cost of provision would have been, as at 2006, using AAM's costs as a starting point and adjusting for scale and scope economies obtained by AAM that could not feasibly be attained by Multinet - the magnitude of the obtainable economies will be influenced by whether a 'status quo' or a 'stand-alone business' counterfactual is assumed.

In my opinion, these alternatives will yield a more robust estimate of the cost that Multinet would have incurred providing the services currently provided by AAM under the OSA that that which would be estimated using the approach employed by the ESC.[17]

Consistent with the last aspect of my assessment framework, the estimates derived from these methodologies should be compared with the contract price. If the risk adjusted cost of in-house provision derived from these methodologies is greater than the non-capital cost component of the OSA then the contract price should be accepted as the basis for setting forecast non-capital costs for the 2008-2012 access arrangement period. If the risk adjusted cost of in-house provision is less than the non-capital cost component of the OSA, then consideration should be given to whether there were intervening events that may have resulted in the expectations surrounding the risk adjusted in-house cost diverging from what they were at the time the service provider agreed to pay the contract price. If there have been no such events then the in-house cost of provision should be utilised for the purposes of establishing forecast non-capital costs for the 2008-2012 period.

[17] Another alternative would involve benchmarking the OSA contract price against other comparable contract payments. However, given the size of the contract it is unlikely that there would be other comparable contracts against which it could be benchmarked.

Inferences drawn from Justice Hollingworth's decision

In my opinion the judgment of Hollingworth J has no implications for the economic framework I have proposed in Figure I. Put simply, the judgment concerns a fundamentally different question from those concerning the determination of tariffs under the Code. In the course of her 99 page judgment, Hollingworth J devotes just a few paragraphs to the tariff setting provisions. The observations in those paragraphs could be interpreted in a number of ways, and involve an unnecessarily restrictive view of efficiency gains arising under a contract that fixes a price for a series of defined terms. Nothing in the judgment supports the ESC's interpretation of its practical implications for the tariff setting process. The judgment does not in and of itself enable the ESC to undertake the approach it proposes and, specifically, it cannot be relied upon to obviate the need to apply the systematic two-stage framework outlined above.

1. Introduction

I have been asked by Multinet Gas Distribution Partnership ('Multinet') to prepare an expert report on certain matters arising in relation to the 2008-2012 Gas Access Arrangement Review Draft Decision ('Draft Decision') of the Essential Services Commission ('ESC'). I have been assisted in the preparation of this report by Hayden Green[18] and Katherine Lowe,[19] both of whom are consultants and work with me in Sydney. Notwithstanding this assistance, the opinions in this report are my own and I take full responsibility for them. A copy of the material and information on which I have relied is set out in Appendix C and my Curriculum Vitae is attached in Appendix D. I have read the Guidelines for Expert Witnesses in Proceedings of the Federal Court of Australia and confirm that I have made all inquiries that I believe are desirable and no matters of significance which I regard as relevant have, to the best of my knowledge, been withheld.

The specific matters that Multinet have asked me to provide my opinion on are:

§ the consistency of the ESC's approach for determining the benchmark allowance for the cost of services provided to Multinet with Code;

§ the manner by which Multinet should derive its forecast operating expenditure for the services provided under the Operating Services Agreement in order to satisfy the Code requirements; and

§ the inference drawn by the ESC from Justice Hollingworth's decision in *Alinta v Essential Services Commission* (No2)(2002) VSC 210.

The Terms of Reference I have been supplied with are attached in Appendix E.

In order to address these matters this report begins by examining the regulatory considerations surrounding outsourcing contracts and the conclusions reached by both the ESC in its *Draft Decision* and Mr Jeffrey John Balchin ('Mr Balchin') in a statement he has prepared for the ESC. The remainder of this report is structured as follows:

§ Chapter 2 provides a brief overview of the economics of outsourcing arrangements, including the potential benefits and concerns surrounding such agreements within the context of the Code;

§ Chapter 3 outlines the ESC's framework for assessing outsourcing contracts, the alternative framework put forward by Mr Balchin, the key differences between those two frameworks and the manner by which the ESC applied its framework to Multinet's, Envestra's and SP AusNet's outsourcing contracts;

18 Hayden has obtained a Bachelor of Commerce (majoring in Economics) from the University of Auckland, a Bachelor of Commerce Honours (majoring in economics) -First Class Honours from the University of Auckland and a Bachelor of Law Honours from the University of Auckland.

19 Katherine has obtained a Bachelor of Business (majoring in Finance and Economics) from the University of Technology Sydney, a Master of Economics from the University of Sydney and a Master of Applied Finance from Macquarie University.

- Chapter 4 summarises the thresholds included in the ESC's and Mr Balchin's frameworks for determining whether an outsourcing contract can be presumed to be consistent with the Code, and introduces what I consider to be a more appropriate threshold;
- Chapter 5 outlines my recommended approach to estimating the cost that a provider would have incurred had it elected to provide an outsourced service in-house, including what I consider to be the appropriate counterfactual for undertaking such an assessment;
- Chapter 6 sets out my proposed framework for the assessment of outsourcing contracts, incorporating my conclusions from Chapters 4 and 5;
- Chapter 7 discusses the validity of the inferences the ESC has drawn from the Hollingworth judgment;
- Chapter 8 considers the approach adopted by the ESC in determining the benchmark allowance for the costs of services provided to Multinet by AAM and describes an alternative approach based upon my proposed assessment framework. This chapter also sets out my opinion on the first two matters Multinet has asked me to consider;
- Appendix A provides an overview of the confidential information provided to me by Multinet that I have relied upon in this report;
- Appendix B provides an overview of the confidential information provided to me by AAM that I have relied upon in this report;
- Appendix C lists the documents that I have examined but excludes the confidential information sources which I have identified separately in Appendix A and B;
- Appendix D contains a copy of my Curriculum Vitae; and
- Appendix E contains a copy of the Terms of Reference supplied to me by Multinet.

2. Outsourcing Arrangements in the Context of the Code

A firm will not always be in the best position to provide every service that it requires in-house. Firms commonly outsource myriad services to specialist providers, including law firms, advertising agencies, management consultancies and IT suppliers. In so doing, they recognise that it is likely to be cheaper and/or easier in the long-run to pay for that specialist expertise than to supply the service themselves. In other words, a firm may be able to obtain significant efficiency gains through outsourcing arrangements which relate to the provision of both capital and non-capital related services. For simplicity and unless otherwise stated I have used the term outsourcing arrangement throughout this report to describe those arrangements pertaining to both non-capital, or operating expenditure, and capital expenditure.

Outsourcing services to specialist contractors can reduce the expected cost of providing those services and, in turn, reduce the price paid by users where those cost savings are passed on. The potential cost savings can arise from economies of scale and/or scope and/or any other synergies such as specialist knowledge ('know how') and/or resources that may be available to the contractor but unattainable at a reasonable cost by the in-house provider.

Economies of scale arise when the average cost of providing a good or service falls as the amount that is provided increases. Scale economies typically arise in industries characterised by large capital costs, such that the additional cost of providing a greater quantity of output is relatively small. Economies of scope arise when there are cost savings available from producing complementary goods or services. For example, these may be associated with managing both gas and electricity distribution networks that are similarly located.

While outsourcing arrangements can deliver significant efficiency related benefits there is also the risk in a cost-of-service regulatory framework that regulated service providers may have an incentive to pay an artificially inflated contract price where:

§ the interests of the regulated service provider and the contractor are sufficiently aligned so as to create an incentive to transfer profits from the regulated service provider to the contractor; or

§ the contractor agrees to confer monetary or other benefits on the regulated service provider (the benefit may also be conferred on the regulated service provider's parent company, a subsidiary or shareholders) in return for the regulated service provider agreeing to pay an artificially inflated contract price.

In both of these cases the only pre-condition applying to the possibility of inflated prices is that the regulated service provider expects to be able to pass on the artificially inflated contract price to users. In either circumstance the efficiency of the provision of outsourced services may be *reduced*. The challenge is to distinguish between those outsourcing contracts that are likely to *enhance* efficiency and those that are likely to *harm* it.

In the remainder of this section I provide a brief overview of the economics of outsourcing arrangements, including its potential benefits as well as the regulatory concerns surrounding such agreements within the context of the Code.

2.1. The Economics of Outsourcing

The idea that members of society benefit by specialising in what they do best has a long history and is one of the most important and powerful ideas in all of economics. A number of prominent economists (including Ronald Coase[20] and Oliver Williamson[21]) have considered this issue in detail and a wide body of economic literature defines the circumstances when it will be efficient for a firm outsource as opposed to providing services in-house. The principal finding of this body of literature is that it will be economically efficient for operations to be grouped together within one firm when the costs of co-ordinating them by means of contracts exceed the benefits to the firm of acquiring them in such a market. It is important to recognise in this context that the costs of co-ordination represent the incremental cost of administering the contract since an in-house provider will also incur costs in administering its work force and managing projects.

It follows from this finding that it will be efficient to enter into an outsourcing arrangement where the expected benefits exceed the co-ordination costs. In keeping with this theory, outsourcing can be taken to be efficient if the expected costs of outsourcing (including the incremental co-ordination costs) are less than the expected cost of providing the services in-house. By extension, if an outsourcing arrangement were to result in a reduction in the risk faced by the service provider (such as would occur under a contract that involved a fixed price for specified services), then its expected costs may be taken to be lower than the risk-adjusted expected costs of providing the service in-house, even if the price payable to a contractor is equal to the expected cost of providing the services in-house.

The potential efficiency benefits to be derived from outsourcing arrangements have largely been accepted by regulators including the ESC. For instance, in the 2006 – 2010 Electricity Distribution Price Review it stated:[22]

> ‘It is not the Commission’s intention to prevent or prohibit arrangements between distributors and third parties for the supply of services but rather to ensure that they do not result in customers paying more because of them.
>
> Indeed, the Commission recognises that, in the normal course of providing distribution services, a distributor may find it beneficial to enter into arrangements with third parties for the supply of certain services. However, the Commission expects that such arrangements would only be entered into where the services could be provided more efficiently than if the distributor provided those services itself. It also expects that, in entering into any such arrangements, the distributor would seek to secure the best possible price from the market.’

In the context of the 2008-2012 Gas Access Arrangement Review the ESC has further stated:[23]

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[20] Coase, R.H., “The Nature of the Firm”, Economica, 1937, 4: pp. 386-405.

[21] Wiliamson, O.E., “Markets and Hierarchies”, Free Press 1975; “The Economic Institutions of Capitalism”, Free Press, 1985; ‘Transaction Cost Economics’, in Holstrom and Tirole, 1989, Handbook of Industrial Organization, Ch. 3. p135.

[22] Essential Services Commission, *Electricity Distribution Price Review 2006-10: Final Decision Volume 1*, October 2006, p171.

[23] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 2*, October 2006, p23.

> 'The Commission wishes to reiterate that it accepts that outsourcing is widely used by commercial businesses to reduce costs and obtain access to specialist knowledge and resources. There is therefore no reason to suggest that outsourcing is not a legitimate approach to conducting business in the natural gas industry.'

It reiterated this view in its *Draft Decision* on the 2008-2012 Gas Access Arrangement Review:[24]

> 'A prudent distributor is not necessarily likely to undertake all the activities required in order to deliver the Reference Services. It is consistent with good industry practice that various functions may be outsourced to an external provider of services that has specialist skills in undertaking particular activities. For example, a distributor may engage a specialist provider to undertake call centre activities, meter reading, gas field operations or specific capital projects. *There may be efficiencies and cost savings that are achievable by outsourcing activities to a specialist provider*.' (emphasis added)

While regulators have recognised that there is the potential for significant efficiency gains to flow from outsourcing arrangements, the increased prevalence of such arrangements has also been the source of some concern. These concerns have stemmed primarily from the recognition that in a cost-of-service regulatory framework, outsourcing arrangements may be used as a vehicle for transferring profits from a regulated service provider to a 'related party' by means of an artificially inflated contract price.

Although regulators' concerns have focused upon related party transactions, as outlined above, a regulated service provider may also have an incentive to pay an artificially inflated price for the outsourced services provided by a third party in circumstances where it is compensated for doing so.[25] I note in the introduction to this section that the only pre-condition applying to the possibility of inflated prices arising is that the regulated service provider expects to be able to pass on the artificially inflated contract price to users.

In sum, outsourcing is a widely employed means of reducing the cost incurred in delivering a service below the corresponding cost of in-house provision that can in most cases be presumed to enhance efficiency. However, in limited circumstances the motive for entering into the arrangement may be to shift profits or confer other benefits on the regulated service provider, resulting in inflated prices to consumers and reduced efficiency. In the following section I consider the potential efficiency impacts – beneficial or otherwise – of outsourcing arrangements as they relate to the determination of appropriate benchmarks for operating and capital expenditure within the context of the Code.

2.2. Code Provisions

I have been advised that the relevant provisions for the assessment of outsourcing arrangements are contained in sections 8.37, 8.16(a)(i) and 8.1 of the Gas Code. I have also been instructed that useful guidance as to the interpretation of and interaction between these Code provisions is provided by the decision of the Supreme Court of Western Australia in

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[24] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p39.

[25] This compensation may be paid to the regulated service provider or alternatively to the regulated service provider's parent company, a subsidiary or shareholders.

Re: Dr Ken Michael; ex parte EPIC Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231 (23 August 2002) (hereafter: *Re: Dr Ken Michael*) and the decision of the High Court in *East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission* [2007] HCA 44 (27 September 2007) (hereafter: *East Australian Pipeline*).

2.2.1. Sections 8.37 and 8.16(a)(i)

Section 8.37 of the Code relates to operating expenditure and states that:

> A Reference Tariff may provide for the recovery of all Non Capital Costs (or forecast Non Capital Costs, as relevant) except for any such costs that would not be incurred by a prudent Service Provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service.

Section 8.16(a)(i) of the Code applies a similar test for the assessment of capital expenditure incurred by the service provider. It allows for the capital base to be increased by the actual value of the capital expenditure incurred (or forecast to be incurred) provided:

> that amount does not exceed the amount that would be invested by a prudent Service Provider acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of providing Services;…

The criteria specified in both section 8.37 and section 8.16(a)(i) in effect require consideration to be given to whether the service provider has *acted*:

- in a prudent and efficient manner;
- in accordance with accepted and good industry practice; and
- in a manner that is consistent with achieving the lowest sustainable cost of delivering the service.

In my view, a regulated service provider should be viewed as acting in accordance with these criteria if ,at the time it negotiated the contract terms (either at the formation of the contract or at a subsequent price review), it agreed to pay a price that was less than or equal to the risk-adjusted cost of in-house provision, after taking into consideration any likely contract incremental co-ordination costs.

If it can be demonstrated that an alternative to the contract would have delivered lower costs, and this outcome should reasonably have been expected by the service provider, then some part of the contract costs may not have been 'prudently incurred'. This form of analysis would not necessarily be limited to service providers with outsourcing arrangements. Rather, the analysis could also be applied to service providers that have decided to *continue* to provide the services in-house with consideration then given to whether a service provider acted in a prudent and efficient manner when it decided to *continue* to provide the services in-house.

2.2.2. Section 8.1

Section 8.1 states that a reference tariff should be designed with a view to achieving the following objectives:

(a) "providing the Service Provider with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service;

(b) replicating the outcome of a competitive market;

(c) ensuring the safe and reliable operation of the Pipeline;

(d) not distorting investment decisions in Pipeline transportation systems or in upstream and downstream industries;

(e) efficiency in the level and structure of the Reference Tariff; and

(f) providing an incentive to the Service Provider to reduce costs and to develop the market for Reference and other Services.

To the extent that any of these objectives conflict in their application to a particular Reference Tariff determination, the Relevant Regulator may determine the manner in which they can best be reconciled or which of them should prevail.

In delivering the judgment of the Court in *Re: Dr Ken Michael*, Parker J emphasised that nothing in the Code makes section 8.1 an overarching requirement vis-à-vis other Code provisions, including, sections 8.16(a) and 8.37. In concluding that no overarching requirement existed, Parker J stated:[26]

> 'There is no provision in s8 to this effect. Section 8.1(a) comes nearest to the suggested overarching requirement. It does not provide, however, that it is to be overarching.'

This position was recently reiterated by the High Court in *East Australian Pipeline.* In this case the High Court held that:[27]

> 'There was no suggestion in this case that the Regulator's own Access Arrangement was the result of resolving a conflict of the kind referred to in s 8.1. Whilst the statement of General Principles *is not determinative*, it gives "practical content" to various terms used in the legislation, including economic terms and processes.' (emphasis added)

Parker J in *Re: Dr Ken Michael* also made it clear that section 8.1(a) does *not* require a service provider to recover either *only* efficient costs or *at least* efficient costs, but rather that the provider be provided with the *opportunity* to earn a stream of revenue that recovers the efficient costs over the expected life of the assets used:[28]

> 'It is also to be noted that s8.1(a) does not provide that the service provider should recover the efficient cost of delivering the reference service; the objective is that the service provider should be provided with the "opportunity" to earn a "stream of revenue" (NOT the defined term Total Revenue as in s8.2(a) and s8.4) that recovers the efficient costs over the expected life of the assets used … in my view, it would distort the words used to engraft the sense of "*no more* than the efficient costs" into s8.1(a). Similarly, there would be a misconception to engraft "*at least* the efficient costs" into the provision. Each of these would add an emphasis not contemplated by the language of s8.1(a).'

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26 *Re: Dr Ken Michael*, para 157.

27 *East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission* [2007] HCA 44 (27 September 2007), para 24.

28 *Re: Dr Ken Michael*, para 141-142.

I agree with Parker J's interpretation of this section of the Code. In workably competitive markets there will be periods where participants are able to recover more than their efficient cost, and periods (often following new entry) where prices are pushed down toward or even below incumbents' efficient costs. Consequently, in workably competitive markets at any *point in time* firms may be recovering more or less than their efficient costs, but *over the life of the assets* they are afforded the opportunity to earn a stream of revenue that recovers their efficient costs. Providing a firm with the opportunity to earn a stream of revenue that recovers its efficient costs over the life of the assets is therefore quite a different matter to allowing it only to recover its efficient costs. This provision of the Code explicitly recognises this possibility and, in my opinion, accords with what one would expect in a workably competitive market.

His Honour also recognised that access regulation is intended to replicate, as closely as possible, the outcome of a *workably* competitive market – not the textbook ideal of *perfect* competition. He acknowledged that whilst a workably competitive market would increase efficiency over a non-competitive market it does not necessarily fulfil the productive, allocative and dynamic efficiency standard corresponding to a hypothetical perfectly competitive market (herein referred to as 'perfect efficiency') contemplated in textbook models, which he considered to be an inappropriate benchmark:[29]

> 'I am left with the clear impression that in the field of competition policy, especially market regulation, the prevailing view and usage among economists is that a reference to a competitive market is to a workably competitive market. In the particular context of the promotion of a competitive market for natural gas it would be surprising if what was contemplated was a theoretical concept of perfect competition, as the subject matter involves very real-life commercial situations. Workable competition seems far more obviously to be what is contemplated …
>
> … with workable competition market forces will increase efficiency beyond that which could be achieved in a non-competitive market, although *not necessarily achieving theoretically ideal efficiency*.' (emphasis added)

Elaborating further upon the construct of a workably competitive market benchmark, Parker J made the following concluding remarks regarding the interaction between sections 8.1(a) and (b):[30]

> '…a competitive market in the sense of a workably competitive market appears to be viewed by the general body of economic opinion as likely, over time, to lead to economic efficiency or at least to greater economic efficiency. As the Hilmer Report puts it, the promotion of effective competition is generally consistent with maximising economic efficiency. This would suggest that, over time, the revenue earned by a service provider from a reference service, if that service was provided in a workably competitive market, would approximate the efficient costs of delivering the service.'

In my view, Parker J's findings accord with sound economic theory and are wholly consistent with my interpretation of sections 8.16(a)(i) and 8.37 outlined above. In particular, I agree that there is an important distinction between 'acting in a prudent and efficient manner'

[29] Ibid at [124] and [128].

[30] Ibid at [143].

consistent with sections 8.16(a)(i) and 8.37 and actually achieving hypothetical 'perfect' efficiency. Service providers should be required to do the former, but not necessarily to attain the latter simply because achievement of the former *does not ensure the latter.* There are a number of intuitive explanations for this, including:

- by definition 'perfect' efficiency is a moving target attainable by few - companies' abilities to transform inputs into outputs efficiently will vary over time and will be constrained by their specific operating environments;
- if every firm could attain 'perfect' efficiency on an ongoing basis then there would be no need for the incentive mechanism provisions in the Code or the efficiency carry-over mechanism (ECM), both of which have the primary purpose of incentivising improved efficiency performance; and
- if a company could perform all of its functions and attain 'perfect' efficiency it would never seek to contract with third parties to provide services in which they specialise. In reality, for the reasons outlined in section 2.1 above, externally contracting will often enable a company to secure services at reduced cost.

Put simply, no firm can realistically be expected to achieve hypothetical perfect efficiency in every facet of its operations in perpetuity. Some firms will simply be better at some things than others. It is for this reason that benchmarks for efficient costs are typically set by reference to a measure of *average cost efficiency*. As the New Zealand Ministry of Economic Development recently acknowledged, benchmarking in this fashion allows for pressure to be put on a sector to improve its average efficiency over time.[31]

As a paper prepared by my colleague Graham Shuttleworth (2005) also highlights, the risks intrinsic in regulating to perfect efficiency are exacerbated when regulators apply benchmarking to several sub-sets of total costs, such as capital and non-capital costs under the Code:[32]

> 'For each subset, companies may achieve the lowest costs only by spending money on other subsets, eg, they may lower opex by investing in new capital equipment and vice versa. The danger with such partial measures of "efficiency" is that the regulator combines the lowest (or "most efficient") costs for each subset from different companies, thereby producing an overall estimate of costs which is simply infeasible and an unreasonable basis for setting targets.'

Sections 8.46(b) and 8.46(d) would seem to reinforce the conclusion that hypothetical 'perfect' efficiency is not the relevant benchmark for the assessment of forward looking cost benchmarks. These two sections place an emphasis on providing the regulated service provider with an incentive to incur *prudent* costs and to minimise the overall costs of providing the service. However, neither section appears to contemplate the *achievement* of a productive, allocative and dynamic efficiency standard corresponding to a perfectly competitive market.

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[31] MED Discussion Document.

[32] Shuttleworth (2005), 'Benchmarking of electricity networks: Practical problems with its use for regulation, *Utilities Policy*, Vol.13, p314.

In sum, the use of the hypothetical 'perfect' efficiency construct as the benchmark for operating and capital expenditure benchmarks for setting reference tariffs would be excessive and risk the derivation of reference tariffs that were lower than the lowest sustainable cost of delivering the service for *all* firms. It would also undermine service providers' incentives for undertaking efficient investment and thus be detrimental to dynamic efficiency and long-term consumer welfare. Such an approach would also be at odds with the workably competitive market benchmark that I consider is implicit in the Code and has been confirmed by Parker J in *Re: Dr Ken Michael*, because firms in competitive markets are normally characterised by varying degrees of efficiency over time and across business segments, and earn returns accordingly.[33]

Accordingly, in my view, a company should be required to *act* prudently and efficiently in an endeavour to achieve the lowest sustainable cost of providing the service. However, consistent with the workably competitive market assumption section 8.1 should not be interpreted as requiring a company to *achieve* 'perfect' efficiency, which is a theoretical construct. Instead, as Parker J explains, section 8.1(a) contemplates reference tariffs being set so as to provide an *opportunity* to earn a stream of revenue that recovers the efficient costs over the expected life of the assets used,[34] consistent with a workably competitive market outcome. Parker J's interpretation, as I have noted previously, accords with my own view of what one would expect to occur in a workably competitive market.

2.3. Conclusion

Outsourcing is a widely employed means of reducing the cost that would otherwise be incurred in delivering a service that can in most cases be presumed to enhance efficiency. In certain limited circumstances, regulated service providers may have an incentive to agree to pay an artificially inflated contract price resulting in higher tariffs being paid by consumers and reduced efficiency.

In my view, the determination of whether a service provider has acted in a manner consistent with sections 8.16(a)(i), 8.37 and 8.1 in outsourcing a service requirement (or continuing to provide the services in-house) involves a relatively straightforward inquiry – at least in principle. Specifically, consistent with the long-standing economic literature contributed to by the likes of Williamson and Coase, operations should be provided in-house when the costs of co-ordinating them by means of contracts exceed the benefits to the firm of acquiring them in a market. Conversely, a firm should be expected to enter into an outsourcing arrangement where the expected benefits exceed the incremental co-ordination costs.

In keeping with this theory, an outsourced contract price can be taken as the appropriate cost benchmark when the expected costs (including the incremental co-ordination costs) are *less* than the expected[35] risk-adjusted[36] cost of providing the same services in-house. In other

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33 A benchmark based on 'perfect' efficiency is analogous to a *perfectly* competitive market outcome, which Parker J recognised as an inappropriate standard for the reasons outlined above.

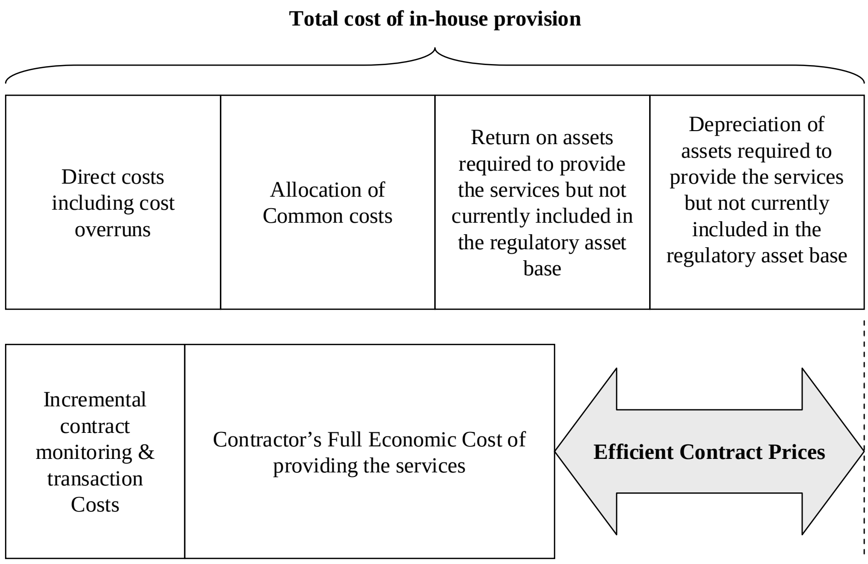
34 As outlined above, this is neither a price ceiling nor is it a price floor, ie, it does *not* require a service provider to recover *only* efficient costs or to recover *at least* efficient costs.

35 Depending upon whether such an arrangement is remunerated by means of a fixed fee or through a cost plus mechanism, any variation in the expected costs of the contractor will affect the margin earned by the contractor and/or the price paid by the regulated service provider. The good or bad fortune implied by variance between the expected and outturn cost

words, if at the time an outsourcing contract was entered into or at a subsequent price re-negotiation a regulated service provider reasonably expected to reduce its risk-adjusted expected costs, as compared with the alternative of providing the service in-house or through procurement from an alternative contractor, the contract price should form the appropriate cost benchmark.

Figure 2.1 summarises the range of potentially efficient contract prices. It illustrates that provided the contract price plus coordination costs are lower than the risk-adjusted direct and indirect costs of in-house provision, including a return on and of capital, outsourcing is an efficient alternative.

Figure 2.1: Range of Efficient Contract Prices



Of course, whilst this is straightforward at the level of principle, the comparison outlined in Figure 2.1 may be challenging to undertake in practice. Assessing the relative efficiencies of in-house provision vis-à-vis outsourcing is not always straightforward.[37] That said, it is clear that in undertaking this comparison the in-house provider should not be assumed to be able to achieve 'perfect' efficiency because to do so would be inconsistent with the workably competitive market assumption underpinning chapter 8 of the Code.

Consistent with the workably competitive market outcome articulated by Parker J, service providers should be given the opportunity to earn a stream of revenue that recovers the costs of delivering reference services over the expected life of the assets used in delivering that

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to the regulated service provider, particularly for any one year, should not be regarded as determinative in assessing the prudency of either party in entering into an agreement. The relevant focus is, as I have stated above, the expected cost at the time the arrangement was entered into.

36 If an outsourcing arrangement were to result in a reduction in the risk faced by the service provider, such as may occur under a contract that involved a fixed price for specified services, then the expected costs of the contract may be taken to be lower than the risk-adjusted expected costs of providing the service in-house, even if the price payable to a contractor is equal to the expected cost of providing the services in-house.

37 For example, relevant evidence would likely include an examination of the economies of scale, economies of scope and other efficiencies available to the contractor but not otherwise available to the service provider (or an alternative contractor).

service, and thus be provided a market-based incentive to improve efficiency. This accords with the conclusion of the High Court in *East Australian Pipeline*, wherein it stated in relation to the Code:[38]

> 'Stripped to its essentials, such a regime is at least intended to allow efficient cost recovery to a service provider and at the same time ensure pricing arrangements for the consuming public which reflect the benefits of competition, despite the provision of such services by monopolies. The balancing of those objectives properly has a natural flow-on effect for future investment in infrastructure in Australia.'

In the following section I outline the ESC's proposed framework for identifying contracts warranting further examination and the proposed substance of that examination.

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38 *East Australian Pipeline*, para 49.

3. Assessment Framework and Approach

Developing a framework for the appropriate treatment of outsourcing arrangements has been a process of continual refinement. The process has been contributed to by a large number of parties, during which time some common themes have emerged as well as some key points of difference. Unsurprisingly given the evolution in understanding of the regulatory implications of these arrangements, the ESC's proposed framework for assessing outsourcing arrangements pertaining to both non-capital costs and capital expenditure has taken on a number of forms since the release of *Consultation Paper No. 1* in May 2006.

In this section I outline the way in which the ESC framework has evolved over the last eighteen months, summarise the most recent incarnation and introduce the alternative framework put forward by Mr Balchin in his statement entitled *Outsourcing by Regulated Businesses*. I also highlight the key differences between the ESC and Mr Balchin frameworks and set out the manner in which the ESC applied its framework to Multinet's, Envestra's and SP AusNet's outsourcing contracts.

3.1. ESC Framework

The ESC set out its initial thinking on the appropriate regulatory treatment of outsourcing contracts in its *Consultation Paper 1* of May 2006 which was subsequently revised in *Consultation Paper 2* of October 2006 and most recently described in its *Draft Decision* of August 2007. During this period the ESC has been required to address a number of new and challenging issues. It is therefore unsurprising that significant shifts in the ESC's proposed approach have occurred. The following sections outline these developments.

3.1.1. Consultation Paper No. 1

In *Consultation Paper No. 1* the ESC expressed some concern about the potential for distributors to use related party outsourcing contracts to "mis-state true costs, shift profits to the related party, or transfer the benefits of cost reductions away from customers".[39] It consequently signalled its intention to undertake a detailed examination of outsourcing arrangements with particular emphasis placed on the following four factors:[40]

1. the circumstances surrounding the contract and in particular whether the provision of services were subject to full market testing through an open tender process;
2. the costs incurred under the contract relative to those incurred under similar arrangements;
3. the incentive and efficiency sharing features of the contract; and
4. the level and nature of other fees and associated payments made between the parties.

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[39] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 1*, May 2006, p20.

[40] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 1*, May 2006, p20.

3.1.2. Consultation Paper No. 2

Within *Consultation Paper No. 2* the ESC reiterated its intention to carry out a detailed examination of outsourcing arrangements on a ‘case-by-case’ basis taking into account the four factors outlined in *Consultation Paper No. 1*.[41] It also noted that distributors may wish to provide it with the following information although it gave no indication as to how it intended to utilise the information:[42]

- details of the incentive arrangements and fees payable under the contract;
- information regarding the nature of the relationship between the distributor and contractor;
- details of the tender process and any information supporting the decision to outsource the provision of services, including information demonstrating that outsourcing was a more efficient arrangement than the continued in-house provision of services;
- data demonstrating that the services provided under the contract are aligned with the services for which a distributor can seek cost recovery under the Code;
- a comparative analysis of the contract price relative to industry benchmarks or published list prices; and
- any other information that demonstrated consistency with the sections 8.37 and 8.16(a)(i).

The ESC also highlighted the potential for a detailed ‘ground-up’ cost analysis to be carried out where the distributors did not provide it with information sufficient to support a claim that the contract was consistent with the Code.[43, 44]

3.1.3. Draft Decision

The ESC’s most recent statement on the assessment framework and the criteria that it will consider when assessing outsourcing arrangements is set out in Chapter 5 of its *Draft Decision.* Consistent with its earlier positions the ESC committed to examining the outsourcing arrangements on a ‘case-by-case’ basis with a view to determining whether the following thresholds were met:[45]

- whether the reported costs represent actual costs incurred in providing the services and not costs or payments for other matters; and

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[41] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 2*, October 2006, p35.

[42] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 2*, October 2006, pp. 24-25.

[43] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Consultation Paper 2*, October 2006, p25.

[44] Reference was also made in this context to the approach adopted by the UK regulator, OFWAT, of deeming services to be provided at the contractor’s actual cost where an arrangement is entered into by related parties and the arrangement has not been subject to market testing. Notwithstanding the reference to this approach the ESC did not indicate that it would be adopting a similar position in the 2008-2012 gas access arrangement review.

[45] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p54.

- whether the distributor has acted prudently in contracting on the basis of paying for an efficient level of costs, so as to achieve the lowest sustainable cost of providing the services.

Consistent with the principles set out in section 2.4 above, the ESC agreed that where it can be satisfied that payments made under an outsourcing contract are lower than the costs that would be likely to be incurred by a distributor in undertaking those activities, then payments made under those contracts are likely to be consistent with the Code.[46]

The assessment framework developed by the ESC essentially involves a two stage inquiry process which involves:

- distinguishing between those contracts that can be presumed to be consistent with sections 8.37 and 8.16(a)(i) and those that cannot (referred to as the presumption threshold); and
- comparing an estimate of the in-house cost of provision with the price for those contracts that cannot be presumed to be consistent with section 8.37 and 8.16(a)(i).

3.1.3.1. Presumption threshold

The range of factors that the ESC cited in its *Draft Decision* as being central to the consideration of whether a contract can be ***presumed*** to be consistent with sections 8.37 and 8.16(a)(i) absent any specific examination of the likely cost of in-house provision included the following:[47]

> - ‘the parties to the contract, and whether they are associate or related parties, or independent parties;
> - the circumstances in which the contract was entered into, for example, whether the contract was entered into on a stand alone basis or whether it was entered into as part of a broader set of commercial arrangements or part of a broader transaction;
> - the scope of the services to be provided under the contract and the residual functions of the distributor, for example, does the contract involve the outsourcing of the entire operation and management of the network, leaving the distributor with little residual role to undertake, or does it entail the outsourcing of only part of the activities of the operator;
> - the structure of the contract, including whether:
>   - the contract gives an incentive for the contractor to lower costs;
>   - these cost reductions are passed on to the distributor; and
>   - the contract gives the distributor control over expenditure.
> - the nature of the payments under the contract, and whether those payments are for actual activities and costs incurred in providing Reference Services or those payments are for other matters.’

[46] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p49.

[47] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p54.

In comparing this list with those previously presented in the consultation papers it is apparent that the ESC has refined a number of the relevant factors for consideration. For example, the *Draft Decision* is more explicit regarding the relevant details surrounding the incentive arrangements and fees payable under the contract, and the nature of the relationship between the distributor and contractor. I note that the ESC has also ***removed*** one of the key factors previously cited as being of some importance. Specifically, the ESC appears no longer to consider it relevant to compare contract prices under similar arrangements, having removed the reference to comparative analysis of the contract price relative to industry benchmarks or published list prices.

Under the ESC's framework, if after considering each of the factors listed above it is satisfied that the presumption threshold has been met, the contract price will be used to establish forecast expenditure benchmarks. However, if the ESC is *not satisfied* that the presumption threshold has been met it proposes to adopt the *actual costs incurred by the contractor as the starting point* for an assessment of the cost of providing the services in-house. Interestingly, the ESC's proposed treatment of contracts that fail to meet the presumption threshold represents a significant change from its earlier consultation papers, where the ESC noted the potential for carrying out a 'ground-up' analysis, presumably using the cost of in-house provision as the reference point.

3.1.3.2. Estimating the cost of in-house provision

Using the contractor's costs as a starting point, the ESC's framework then requires consideration to be given to whether there are any reasons why a distributor could not itself undertake those activities for the same costs. In this regard the ESC noted that it would consider whether the contractor's costs incorporate a return on the assets employed by the contractor or an appropriate portion of common or overhead costs.[48] The ESC also appears to have accepted that it is relevant to consider the economies of scale, scope and other efficiencies available to the contractor but not otherwise available to the in-house service provider when establishing whether or not there are any reasons why an efficient and prudently operating distributor could not itself undertake those activities for the same costs.[49]

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[48] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p54.

[49] Support for this view can be found in footnote 30 of the ESC's Draft Decision and the following statement set out on page 52 of the Draft Decision:

> "The Commission accepts that any third party contractor will require compensation for its endeavours over and above the actual cost of undertaking the contracted activities. A third party contractor would expect to be able to recover all of the economic costs that it incurs to provide the outsourced activity and would expect to benefit from superior performance. Otherwise it would not contract to undertake those activities. Such compensation is not necessarily inconsistent with an efficient level of costs, particularly where the contractor has the ability to provide the service at a lower cost than the distributor could do so itself or obtain elsewhere. Further payments above direct costs may, as NERA suggested, also provide a return to the contractor for:
>
> – the assets employed by it in the provision of the outsourced services;
>
> – efficiencies on the part of the contractor over the life of the contract; and
>
> – the contractor's common costs.

3.1.3.3. Comparing the cost of in-house provision with the contract price

Although the ESC assumed the contractor's actual costs as a ***starting point*** it noted that in doing so it was ***not*** adopting the position that such costs formed a reasonable final benchmark of prudent and efficient costs for in-house provision. Rather, the ESC explicitly acknowledged that if an outsourcing contract is expected to reduce costs relative to the cost of in-house provision, the full contract price should represent the appropriate cost benchmark under the Code. Consistent with the principles set out in section 2.4 above, the ESC stated that:[50]

> 'In looking at the actual costs incurred by the contractor in undertaking the contracted activities, the Commission is not adopting the position that only the contractor's actual costs form a reasonable basis for the benchmark of prudent and efficient costs. The Commission accepts that, consistent with the views of both NERA and ACG, if over the relevant time horizon, the contractor incurs lower expected costs relative to providing the services in-house then this is a prudent and efficient outcome. Provided the overall contract payments do not exceed the amount that would have been incurred by the distributor undertaking the activity itself, the full contract amount would represent an efficient level of expenditure.'

In undertaking this analysis, the ESC stated that it would examine the structure of the contract and the payments under the contract as well as other specific factors, including:

- whether the contractor was able to provide the outsourced services at a lower cost than the distributor could obtain elsewhere;
- efficiencies exhibited by the contractor over the life of the contract; and
- the manner by which the contract allocates risk between the distributor and the contractor.[51]

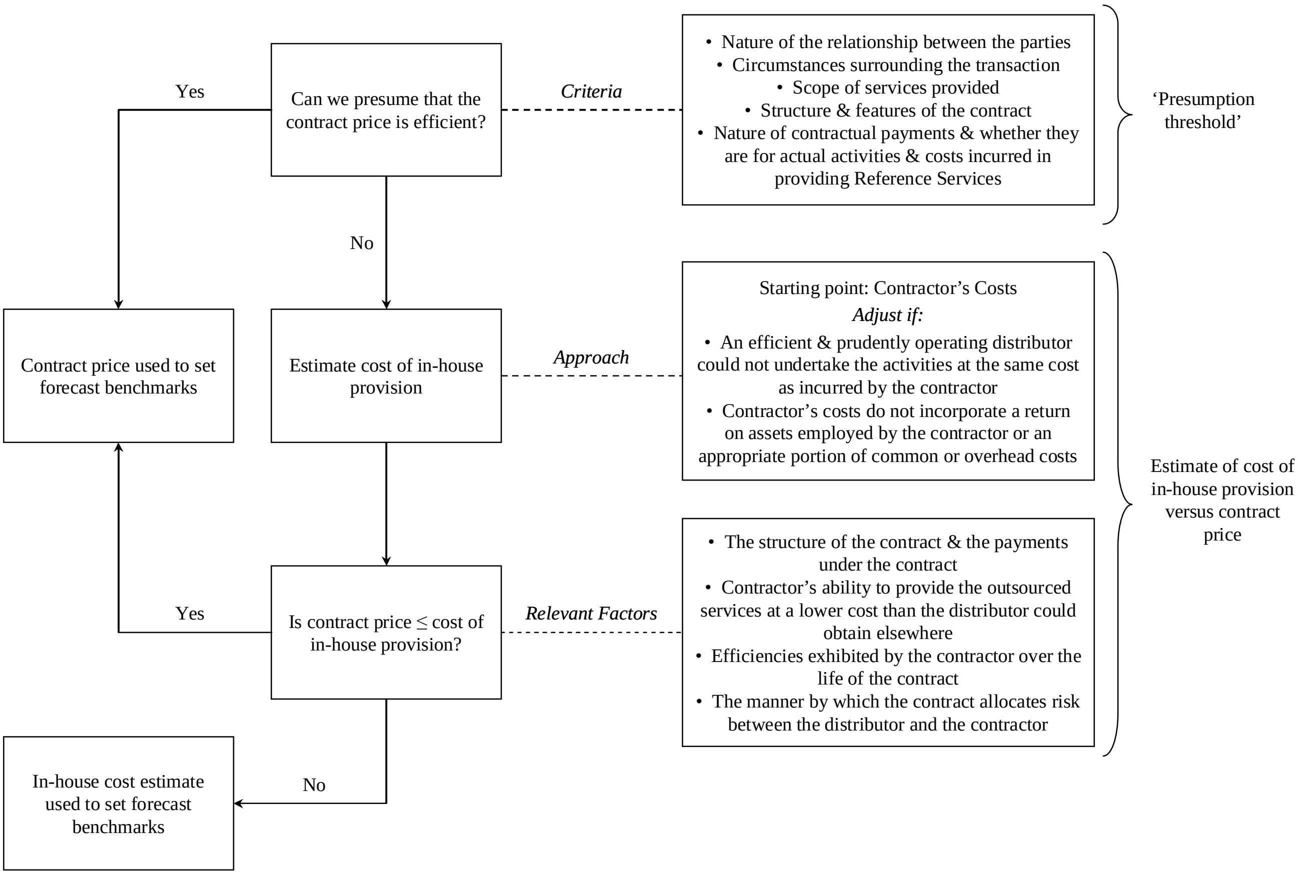
3.1.3.4. Summary

I summarise the ESC's proposed framework for the assessment of outsourcing contracts in Figure 3.1.

[50] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p55.

[51] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p55.

Figure 3.1: Summary of ESC Framework



In the following section I examine the manner in which the ESC *applied* its framework to Multinet's, Envestra's and SP AusNet's outsourcing contracts in its *Draft Decision.*

3.2. Application of the ESC Framework

The table below provides a summary of the ESC's draft assessment of Envestra's, Multinet's and SP AusNet's outsourcing arrangements.

Table 3.1: Summary of ESC's Assessment of the Presumption Threshold

<table>
<tr><th></th><th>Criteria</th><th>Multinet - Alinta Asset Management (AAM) Operating Services Agreement (OSA)</th><th>Envestra - Origin Energy Asset Management (OEAM) Operating and Management Agreement</th><th>SP AusNet-Tenix Alliance NSAA</th></tr>
<tr><td rowspan="8">Presumption threshold</td><td>Nature of relationship between the parties</td><td rowspan="2">While the ESC acknowledged that Multinet and AAM may not currently be acting as a single economic entity they stated that the OSA was not entered into on an arm's length basis but as part of a broader restructuring in which AAM's parent took a significant interest in Multinet and United Energy. It also noted the $16m payment made to the former owners of Multinet to secure the OSA, which it believed indicated the OSA was entered into as part of an 'associated transaction', involving a 'side payment' and a 'transfer of equity'.</td><td rowspan="2">The ESC noted that the OMA was entered into as part of a broader commercial relationship embodied in the Relationships Agreement. The terms of that Agreement provided for Origin to hold an equity interest in Envestra and an agreement to enter into arrangements (such as the OMA) in relation to infrastructure assets acquired by Envestra. The ESC concluded that it was not clear that, absent the Relationship Agreement, Envestra as the effective owner would not itself be able to undertake the functions of operating and managing the network.</td><td rowspan="2">The ESC noted that the arrangement between SP AusNet and Tenix Alliance was entered into as part of the ordinary commercial dealings between separate parties and not as part of a broader or wider commercial relationship.</td></tr>
<tr><td>Circumstances surrounding the arrangement</td></tr>
<tr><td>Scope of services</td><td>The ESC stated that Multinet has effectively handed over to AAM all functions relating to the operation and management of the system, leaving itself with very little residual role.</td><td>The ESC stated that outsourced services provided under the OMA are relatively broad.</td><td>The ESC stated that outsourced services include a range of operating and maintenance work, replacement capital works and support services.</td></tr>
<tr><td>Structure of the contract</td><td rowspan="4">The ESC noted that the fixed price nature of the contract coupled with the minimal transparency and the inability of Multinet to have recourse to AAM's actual costs at the time of a contract renegotiation were inconsistent with the efficiency incentive framework in place under the Code.
The ESC concluded that Multinet retains very little ability to direct the way in which contract is performed through reporting requirements. It believed that the key performance indicators (KPIs) formed a weak mechanism for monitoring and controlling AAM's activities.</td><td>The ESC agreed that features of the OMA were consistent with OEAM having incentive to incur efficient levels of costs. It also noted that the structure of contract was transparent and accorded Envestra the responsibility of reviewing and re-setting cost benchmarks having regard to the actual costs incurred over the period.</td><td>The ESC stated that the structure of the NSAA provides strong incentives to Tenix Alliance to operate efficiently and to reduce costs. The ESC further observed that the pro cess is transparent and the reduction in costs are passed back in part to SP AusNet in the relevant period. Overall the ESC concluded that the structure reflects the incentive properties promoted under the Code.</td></tr>
<tr><td rowspan="3">Nature of contractual payments</td><td>Cost pass through component – the ESC noted that the OMA appeared to include a return on and of assets employed by Origin and an allowance for overheads as well as all other direct costs.</td><td rowspan="3">The ESC concluded that the reimbursable and corporate overhead costs reflected the costs of undertaking the activities, however, the corporate charge was excluded because the ESC was not satisfied that such payments in connection with the broad corporate activities of Tenix Alliance were a relevant cost of providing the Reference Service. The ESC again noted that it would further consider the appropriateness of including incentive payments in the forward looking benchmarks.</td></tr>
<tr><td>Network management fee – the ESC concluded that this was not a prudent and efficient expense.</td></tr>
<tr><td>Incentive payments – the ESC noted its intention to further consider the appropriateness of the inclusion of incentive bonuses in forward looking benchmarks.</td></tr>
</table>

Based on its analysis of these contracts the ESC drew a distinction between the contract price payable by SP AusNet's under its NSAA and those payable by Multinet under the OSA and Envestra under the OMA. Specifically, the ESC viewed the NSAA as requiring a less thorough examination based on the arm's length nature of the relationship between the parties and the circumstances surrounding the transaction. By contrast, it concluded that the contract prices paid by Multinet and Envestra under their respective arrangements ***could not be presumed*** to be efficient. It therefore concluded that the actual costs paid by AAM and OEAM, respectively, represented the relevant starting point for estimating forward-looking cost benchmarks. Table 3.2 below provides an overview of the ESC's assessment of whether the contract price payable under Multinet's OMA and Envestra's OSA was less than or equal to the cost of in-house provision.

Table 3.2: ESC's Assessment of Contract Price versus In-House Cost

	Criteria	Multinet-AAM OSA	Envestra-OEAM OMA
Estimate cost of in-house provision	Could the distributor undertake the activities at the same cost as the contractor?	The ESC stated that there was no evidence before it to demonstrate that the OSA had delivered or was more likely to deliver lower costs than would have resulted had Multinet continued to undertake the operation and management of its network. The ESC further stated that there was no evidence that Multinet management held the view that outsourcing would reduce expected costs at the time the OSA was entered into.	The ESC stated that there was no evidence before it to demonstrate that the OEAM had delivered or was more likely to deliver lower costs than would have been the case if Envestra had itself undertaken the operation and management of the network. The ESC further stated that there was no evidence that Envestra management held the view that outsourcing would reduce expected costs at the time the OMA was entered into.
	Do contractor's costs incorporate a return on assets and common costs?	To estimate AAM's actual costs the ESC deducted the lower bound estimate of the margin earned by AAM across its entire business. In doing so, the ESC acknowledged that it may have overlooked capital costs utilised by AAM, but it noted that most of the capital assets were owned by Multinet. The ESC went on to note that the methodology should take account of AAM's common or overhead costs. However, it is not clear that this was taken into account.	The ESC noted that the OMA appeared to include a return on and of assets employed by Origin and an allowance for overheads as well as all other direct costs.
Is contract price £ in-house provision?	Structure of contract and nature of payments	Not addressed specifically in consideration of this issue.	Not addressed specifically in consideration of this issue.
	Contractor's ability to provide the outsourced services at lower cost than could be obtain elsewhere	The ESC did not specifically examine the relative efficiency of AAM versus Multinet, ie, whether AAM had the ability to provide services at a lower cost. Instead it simply concluded that there was no evidence before it to demonstrate that AAM had delivered or was more likely to deliver lower costs than would have been the case if Multinet had undertaken the operation and management of its own network.	The ESC did not specifically examine the relative efficiency of OEAM versus Envestra. It simply concluded that there was no evidence before it to demonstrate that OEAM had delivered or was more likely to deliver lower costs than would have been the case if Envestra had undertaken the operation and management of its own network. Similarly, no consideration was given to OEAM's ability to provide the outsourced services at a lower cost than Envestra could obtain elsewhere.
	Efficiencies exhibited by contractor over life of contract		
	The manner by which contract allocates risk between distributor and contractor	The ESC did not address this issue in relation to the OSA notwithstanding the fact that the contract is largely a fixed price contract which exposes AAM to the risk of cost overruns.	The ESC did not address this issue in relation to the OMA notwithstanding the fact that the cost pass through component of the contract is subject to a 'reasonably incurred' test and a 2% budget constraint which gives rise to an asymmetric risk for OEAM.

Based on its assessment of the factors set out in Table 3.2 the ESC stated in relation to the Multinet-AAM OSA that:

- it was not satisfied that the contract payment reflected 'prudent [sic] incurred efficient costs, consistent with good industry practice so as to achieve the lowest sustainable level of costs to provide the Reference Services', ie, it was not satisfied that the presumption threshold was met;[52] and
- there was no evidence before it that demonstrated the OSA has delivered, or was more likely to be able to deliver lower costs than Multinet would have incurred if the services were provided in-house and it contended there was no evidence that Multinet management held the view that the OSA would reduce expected costs when the contract was entered into, ie, it was not satisfied that the contract price was less than or equal to the expected cost of in-house provision.[53]

On the basis of these findings the ESC proposed to equate the cost of in-house provision with AAM's *actual costs*, including an allowance for common costs and the costs of assets employed by AAM not otherwise recovered in the return on capital allowance for Multinet. However, in the absence of information on AAM's actual costs, it sought to estimate those costs from publicly available information, by reference to the ***reported margins*** of the AAM business obtained from its ASIC returns for the years 2004, 2005 and 2006.[54]

Specifically, the ESC deducted an estimate of the profit before tax margin received by AAM across its portfolio of contracts which ranged from 9.2 per cent to 14.5 per cent with an average of 11.6 per cent over the indicated timeframe. In utilising this approach it conceded that there was some uncertainty associated with it and that no explicit consideration had been given to the allowance required for common costs, or a return on or of capital. In view of this uncertainty the ESC proposed reducing Multinet's reported non-capital costs in 2006 and reported capital expenditure over 2004-2006 by **9.2 per cent**, which was at the lower end of AAM's reported margin range. The reduced operating and capital expenditure benchmarks for 2006 were then used as the basis for establishing forecast operating and capital expenditure over the 2008-2012 access arrangement period, while the revised estimate of actual capital expenditure incurred over 2004-2006 was used for the purposes of establishing the value of the capital base as at 1 January 2008. The ESC also noted that if Multinet chose not to accept this decision then it would be open to it to review the actual costs incurred by AAM.[55]

In relation to the Envestra-OEAM OMA the ESC was not convinced that Envestra could not carry out the services in-house at the same costs as those passed through by OEAM under the OMA. It was not therefore satisfied that the total contract payment (including the 3% network management fee) reflected the 'prudent and efficient costs consistent with the lowest sustainable level of costs to provide the Reference Services'. Thus, it concluded that the management fee should be excluded when setting the forecast operating expenditure benchmarks. The ESC also signalled its intention to consider further the appropriateness of including the incentive bonuses payable under the OMA in forecast benchmarks ahead of its Final Decision.

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52 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p72.

53 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p76.

54 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, pp. 78-79.

55 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p80.

3.3. Mr Balchin's Framework

The ESC engaged Mr Balchin of the Allen Consulting Group (ACG) to undertake an independent review of the framework for the assessment of outsourcing contracts set out in a report prepared by NERA for Envestra entitled *'Outsourcing by regulated businesses'* report and to prepare an expert statement setting out his findings. In his statement, Mr Balchin considers the extent to which, from the perspective of a regulatory economist, it is appropriate to place reliance on payments made under an outsourcing contract when assessing the prudent and efficient costs of undertaking an activity. In so doing, he presents his own framework for the assessment of outsourcing contracts for regulatory purposes. In a similar fashion to the ESC's framework, Mr Balchin's framework *ostensibly* provides for a two stage inquiry process involving an assessment of whether:

§ a contract can be presumed to be consistent with sections 8.37 and 8.16(a)(i) of the Code (the presumption threshold); and

§ the contract price is less than the cost of in-house provision for those contracts that cannot be presumed to be consistent with section 8.37 and 8.16(a)(i) of the Code.

In the following sections I set out the key features of this framework and identify the differences between the frameworks proposed by Mr Balchin and the ESC.

3.3.1. Presumption Threshold

Mr Balchin states that where the outsourced function in question was awarded through a competitive tendering process that also determined the contract price, it is reasonable to accept that contract price as being prudent and efficient.[56] However, he accepts that a competitive tender may not always be feasible given, among other things, difficulties defining the outputs required. Hence, he proposes a number of additional criteria that he considers should be examined before an outsourcing contract can be *presumed* to be efficient, ie, without further examination of the contractor's or the in-house providers costs:[57]

> '…I would first consider whether I had sufficient confidence that the service provider had an incentive to minimise the cost of service provision to conclude presumptively that the service provider's actual expenditure was prudent and efficient and achieved the objectives for reference tariffs. I would be cautious about adopting such a presumption in circumstances where the service provider has entered into undertaken major outsourcing arrangements, particularly where:
>
> a. the contract is between related parties, and hence where there may be limited incentive for the parties to agree upon the cheapest price;
>
> b. the parties to the contract have arrangements in place to permit them to share the benefits from the regulator setting a higher reference tariff;

[56] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 43.

[57] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 157.

c. the outsourcing arrangement was created, at least in part, to generate benefits to the service provider or other parties that may be ignored when setting reference tariffs; and/or

d. the mode of delivery of the outsourced functions is materially the same as would occur with in-house provision, so that if the contract price was accepted the cost of undertaking the function, then materially different reference tariffs could result merely as a result of the choice of ownership/operating structure.'

3.3.2. Estimating the Cost of In-House Provision

In the event that Mr Balchin's 'presumption threshold' is not met he, like the ESC, proposes to compare the contract price with an estimate of the cost of in-house provision, using contractors' costs as a starting point:[58]

> 'In the absence of a presumptive conclusion that the service provider's actual expenditure is prudent and efficient and achieves the objectives for reference tariffs, I would compare the contract price with an estimate of the cost of in-house provision. I note that setting the allowance at an estimate of the cost of in-house provision would ensure that the expenditure allowance is neutral with respect to ownership structure. The circumstance when I would not consider it necessary to estimate the cost of in-house provision would be where a competitive tendering process had been undertaken to award the contract and set the price for the function.
>
> The most reliable source of evidence for the cost of in-house provision is the cost incurred by the contractor. Accordingly, information would be required from the contractor that sets out the costs that the contractor has incurred to provide those functions. These costs should be compiled in the same manner and according to the same principles that would apply to the service provider if the service provider was undertaking the same activities. An assessment would then be required about whether an adjustment to the contractor's costs when estimating the cost of in-house provision on account of efficiency gains or losses arising from outsourcing, noting the points made in paragraphs 148 to 156.'

It is worth noting in this context that the contractor's costs referred to by Mr Balchin are not limited to the *direct* costs incurred by the contractor. Rather, they are assumed to incorporate any costs that would be recognised under the Code including a return on and of assets employed by the contractor in providing the services and an allowance for common costs. However, Mr Balchin explicitly precludes a margin reflecting the contractor's relative efficiency and the asymmetric risks faced by the contractor on the basis that:

- an additional allowance for efficiency would amount to double counting given the existing incentive arrangements in place, ie, under his assumed counterfactual ownership/operating structure the in-house provider is able to obtain all of the contractor's economies of scale and scope; and
- the best estimate of the cost of in-house provision would include an estimate of all the costs incurred by the contractor irrespective of whether or not the cost could be passed

[58] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 158.

through to the distributor and thus an additional allowance for these asymmetric risks would amount to double counting.[59]

3.3.3. Comparing the Cost of In-house Provision with the Contract Price

Like the ESC's framework, Mr Balchin *ostensibly* provides a mechanism by which the contractor's costs can be adjusted to reflect different levels of relative efficiency between the contractor and the distributor. However, he contends in practice that ***no such adjustment would be warranted*** because, as outlined below in section 3.3.4.2, he assumes that any such efficiencies are ***equally available to an in-house provider*** under his assumed counterfactual ownership/operating structure:[60]

> (a) 'to determine the efficient cost of providing the relevant functions, the analysis should extend not only [sic] the efficient cost of providing the functions with the existing ownership/operating structure, but also inquire whether an alternative ownership/operating structure may permit economies of scale or scope to be realised. It is arguable that any efficiency gains available to the contractor would be achieved under this efficient operating/ownership structure; and
>
> (b) where one entity owns a regulated business together with other businesses (whether or not the latter may be regulated), the efficiency gains that may arise from operating multiple businesses would be reflected in a lower reported expenditure for the regulated business. As a result, the benefits of the efficiency gains would be passed through to customers. Accordingly, where there is a major outsourcing arrangement with a mode of delivery of the function that is substantially the same as under in-house provision, the goal describe [sic] in paragraph 42.c of providing the same allowance for expenditure irrespective of ownership/operating structure would be promoted by assuming that an in-house provider is able to achieve the efficiency gains that the contractor makes from operating multiple businesses.
>
> The two considerations set out above provide a rationale for assuming that the cost of providing the outsourced functions in-house would be approximately the same as that incurred by the contractor ...'

Mr Balchin further elaborates at paragraph 149 of his statement:[61]

> 'It is well established in the field of economics that the cost of undertaking a particular activity may diminish if the activity is undertaken by fewer, larger entities (that is, if the activity is one that is characterised by economies of scale) or is undertaken by entities that also undertake other activities (that is, if there are economies of scope across those activities).
>
> The implication of paragraph 149 is that any efficiency gains that the contractor could achieve through providing outsourced services to multiple businesses should be factored into the estimate of the efficient cost of in-house provision. This would imply simply

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59 Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 99.

60 Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 45.

61 Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 149.

> using the cost incurred by the contractor as an estimate of the cost of in-house provision and not making any adjustment on account of efficiencies that would be unavailable under the actual ownership structure.'

In other words, under Mr Balchin's framework, if the presumption threshold is not met, his assumed notional ownership structure ensures that the contract price will *never* be lower than his in-house estimate. His framework consequently assumes that there is no prospect whatsoever of an outsourcing contract being a more efficient means of delivering a service than in-house provision in these circumstances. In other words, the component of the ESC's framework that involves a comparison between the contract price and the estimated cost of in-house provision, whilst *ostensibly* present in Mr Balchin's framework, effectively ***is not*** because of the restrictive counterfactual employed.

3.3.4. Assumptions Underlying Mr Balchin's Framework

A number of assumptions and contentions underpin Mr Balchin's framework, including his interpretation of the Code, the nature of his hypothetical in-house provider and his resultant conclusions regarding the availability of economies of scale and scope under in-house provision. I outline these assumptions and contentions below.

3.3.4.1. Interpretation of sections 8.37 and 8.1 of the Code

Mr Balchin's proposed approach to assessing outsourcing arrangements assumes that *only* prudent and efficient costs form part of the forecast non-capital cost requirements under the Code. To ascertain whether costs are in fact prudent and efficient Mr Balchin proposes that two distinct inquiries be carried out:

- the first of the proposed inquiries focuses on whether the forecast non-capital costs are consistent with section 8.37; and
- the second inquiry focuses on ascertaining whether the costs actually represent efficient costs consistent with section 8.1(a) of the Code.

Mr Balchin states that the objective when ascertaining whether costs have been 'prudently and efficiently incurred' consistent with section 8.37 is to find an amount that 'reflects, to the extent practicable, the amount that an efficient firm would need to spend over the period, given best information about the likely drivers of cost over that period.'[62] However, he suggests that this analysis could also extend to an inquiry into whether the ownership structure of the business was such as to minimise cost. I note that this statement appears at odds with the position formerly adopted by ACG in its advice to ESCOSA in relation to the regulatory treatment of outsourcing contracts.[63]

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[62] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 52.

[63] ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006. '... we would question whether the Gas Code would permit the regulator to conclude that a prudent service provider should undertake structural changes (eg, a merger) in order to lower its costs (and hence to judge 'lowest sustainable cost' against this standard) …'

Under Mr Balchin's proposed two stage inquiry process, costs incurred through an outsourcing contract that are found to be consistent with section 8.37 nonetheless may be excluded from a firm's total revenue requirement if they fail to meet the criteria outlined in section 8.1(a) and/or section 8.1(f). In other words, Mr Balchin's framework contemplates scenarios in which an outsourcing arrangement may meet the requirements outlined in section 8.37, yet *not* meet the requirements set out in section 8.1 of the Code:[64]

> 'I could envisage there to be instances where including in non-capital costs an expenditure item that was judged to be prudent and efficient may nonetheless be inconsistent with these objectives, including where:
>
> a. an allowance for that expenditure item had already been made elsewhere in the calculation of the revenue requirement, and so its inclusion in non capital costs would amount to 'double counting' and breach section 8.1(a); and
>
> b. the non capital costs were derived using a method that provided the service provider with poor incentives to minimise cost (or even, worse still, provided an incentive to increase costs), which would breach section 8.1(f).'

Mr Balchin offers little explanation as to how costs that essentially involved 'double counting' could be viewed by a regulator as being consistent with section 8.37 of the Code. Similarly, no explanation is provided as to how contracts that create poor incentives for future cost minimisation could be viewed as being consistent with sections 8.37 of the Code. Indeed, it is not obvious how a contract price exhibiting such characteristics could possibly be consistent with a prudent service provider acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service. Accordingly, it is not obvious why Mr Balchin considers it necessary, in effect, to elevate section 8.1(a) into an 'overarching' requirement.[65]

3.3.4.2. Assumptions about ownership and operating structure

Mr Balchin's conclusion that outsourcing arrangements conceivably could entail 'double counted costs' and/or create poor incentives to minimise costs yet ***still*** meet the requirements in section 8.37 leads him to conclude that incentives may be created for businesses to develop inefficient ownership and operating structures. Specifically, he claims that to the extent that employing alternative ownership and operating structures potentially results in different expenditure requirements (and in turn influence the tariffs faced by users) this may create perverse investment incentives to develop alternative ownership and operating structures, contrary to section 8.1(f) of the Code:[66]

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[64] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 56.

[65] As I discuss below it is theoretically conceivable that a contract price could be less than or equal to the risk adjusted cost of in-house provision but still include a double recovery of costs and have poor incentives for cost minimisation. If the relevant benchmark is set as the contract price being less than or equal to the risk adjusted cost of in-house provision then a contract price of this form would be found to comply with sections 8.37 and 8.16(a)(i). This does not result in 'perverse incentives' to outsource since it results in a lower forward-looking cost benchmark than if the service provider had supplied the service in-house. This could not reasonably be construed as being inconsistent with sections 8.37, 8.16(a)(i) or 8.1.

[66] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses*, para 132 – 134.

> '… given the freedom that businesses have to choose whatever ownership structure and commensurate degree of outsourcing that they wish (and, as Multinet has observed, to pursue other commercial objectives), it is important that the allowance for expenditure that is factored into the calculation of regulated prices not influence decisions about ownership/operating structure or expose customers to the risk associated with poor decisions about these structures ...
>
> … if the method that was used to derive the allowance for non capital costs would result in that allowance differing merely as a result of the choice of ownership/operating structure, then the use of that method would not achieve the objective in section 8.1(f) of the Gas Code as the method could not be said to create incentives for the service provider to minimise cost.'

An implicit assumption in this claim is that the varying expenditure levels required under alternative ownership and operating structures would be consistent with section 8.37 of the Code and thus an ***additional measure*** would be required to ensure that cost variations arising from alternative structures are not included in forward looking cost benchmarks. In this regard, Mr Balchin's proposal is to adopt a notional (benchmark) ownership and operating structure that he claims will result in the allowance for expenditure being set in a manner that is neutral in terms of ownership and operating structure:[67]

> 'The simplest means of eliminating the potential for a different expenditure allowance to be provided merely as a result of a different ownership/operating structure is for the same allowance to be provided, irrespective of whether the service provider performs the functions in-house or through outsourcing arrangements. In my view, the most practicable means of achieving this end would be to set an allowance for expenditure that reflects the cost that would be incurred with in-house provision of the relevant functions.'

Under Mr Balchin's notional ownership and operating structure, the distributor is assumed to both own and operate the asset. He also assumes that:

- in accordance with ESC Guideline 17,[68] where a *distributor* owns multiple regulated and non-regulated businesses a share of any efficiency gains that arise as a result of this ownership should be attributed to the benchmark ownership and operating structure and in so doing allow the benefits to flow through to users; and
- where a *contractor* provides services to a number of regulated and non-regulated businesses a share of any efficiency gains that arise as a result of these multiple operations should *also* be attributed to the benchmark ownership and operating structure and in so doing allow the benefits to flow through to users.

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67 Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 136.

68 See: ESC (2005), *Gas Industry Guideline No.17 Regulatory Accounting Information Requirements Issue No.1,* clause 3.6.3.

In addition Mr Balchin contends that any economies of scale and/or scope obtained by a contractor in the provision of the service should be ***equally obtainable to the distributor*** through in-house provision under an alternative industry structure:[69]

> '…economic principles provide some guidance for this analysis. If the question posed is whether the expenditure allowance is consistent with the efficient cost of providing the service then this would invite an examination not only of whether cost is minimised for a particular ownership/operating structure, but also of whether cost could be reduced further under an alternative ownership/operating structure. It is well established in the field of economics that the cost of undertaking a particular activity may diminish if the activity is undertaken by fewer, larger entities (that is, if the activity is one that is characterised by economies of scale) or is undertaken by entities that also undertake other activities (that is, if there are economies of scope across those activities).
>
> The implication of paragraph 149 is that ***any efficiency gains that the contractor could achieve through providing outsourced services to multiple businesses should be factored into the estimate of the efficient cost of in-house provision***. This would imply simply using the cost incurred by the contractor as an estimate of the cost of in-house provision and not making any adjustment on account of efficiencies that would be unavailable under the actual ownership structure.'

Of course, to the extent additional efficiencies ***were*** available through hypothetical alternative industry structures, cost benchmarks for in-house providers would presumably ***also*** need to be adjusted downwards to ensure consistent treatment of outsourcing firms vis-à-vis in-house providers. However, Mr Balchin recognises that such an adjustment would be too complex to undertake:[70]

> 'Notwithstanding my view of the appropriate economic principles set out above, I would not attempt to estimate whether efficiency gains may be available from mergers between regulated businesses or other changes to ownership structure, or from regulated businesses expanding into synergistic activities, when assessing whether an expenditure proposal is prudent and efficient. This reflects my concern that the statistical techniques that may be used to estimate the gains that may be available from mergers or undertaking synergistic activities would not yield sufficiently precise estimates to defend the proposition that such benefits existed in a particular case, and of the size of such benefits.'

Nonetheless, Mr Balchin implies that his framework ***does not*** result in inconsistent treatment of outsourcing firms vis-à-vis in-house providers because the regulatory framework creates financial incentives for efficient mergers. That is, he effectively assumes that ***there will be no alternative structure that could be more efficient*** for in-house providers, otherwise such providers would have already sought to reorganise their operations to obtain those scale and scope economies:[71]

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[69] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 149 – 150.

[70] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 151.

[71] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 151.

> 'The more appropriate regulatory policy, in my view, is to provide financial incentives for mergers to occur where they would lead to cost reductions (by permitting the merged entity to retain the benefits of the merger savings for a period of time), hence encouraging efficient mergers to occur and 'observing' the merger savings that are achieved. However, in the case where the same contractor is engaged under major outsourcing arrangements to operate a number of regulated businesses, then any cost savings attainable would not need to be estimated but rather can be observed, and hence the reservations noted above would not apply.'

The financial incentives referred to by Mr Balchin in this context appear to be those ordinarily arising from price cap regulation and supplemented by the efficiency carryover mechanism adopted by the ESC which enables the service provider to capture an increased portion of the cost reductions for a given regulatory period. These incentives apply equally to service providers that elect to outsource their operations and those that continue to provide the services in-house. Given the incentives are the same across the alternative ownership and operating structures it is unclear why Mr Balchin has assumed that the in-house provider will undertake all that is necessary to achieve cost reductions but the outsourcing provider will not. In my opinion, there is no basis for drawing this artificial distinction.

In effect Mr Balchin's framework presupposes that a contractor could *never* be more efficient than his notional ownership and operating structure because if it were, merger activity would have occurred to capture those efficiencies. The ESC has succinctly characterised Mr Balchin's proposed counterfactual as being 'efficient in-house provision' where efficiency means 'in-house provision in an efficient industry structure'.[72,73]

In sum, the consequence of Mr Balchin's counterfactual ownership and operating structure is that there is no scope for efficient outsourcing under his framework in those circumstances in which his presumption threshold is not met. I discuss this further in Chapter 4 and conclude that this is likely to be a frequent occurrence given the limited circumstances in which he proposes accepting a contract price without further examination.

3.3.5. Summary

The alternative assessment framework developed by Mr Balchin for the assessment of outsourcing contracts is summarised in Figure 3.2. I note that the component of the framework that ostensibly involves a comparison of the contract price to the cost of in-house provision is effectively redundant since Mr Balchin's assumed notional ownership/operational structure for in-house provision ensures outsourcing can *never* be a less costly option.

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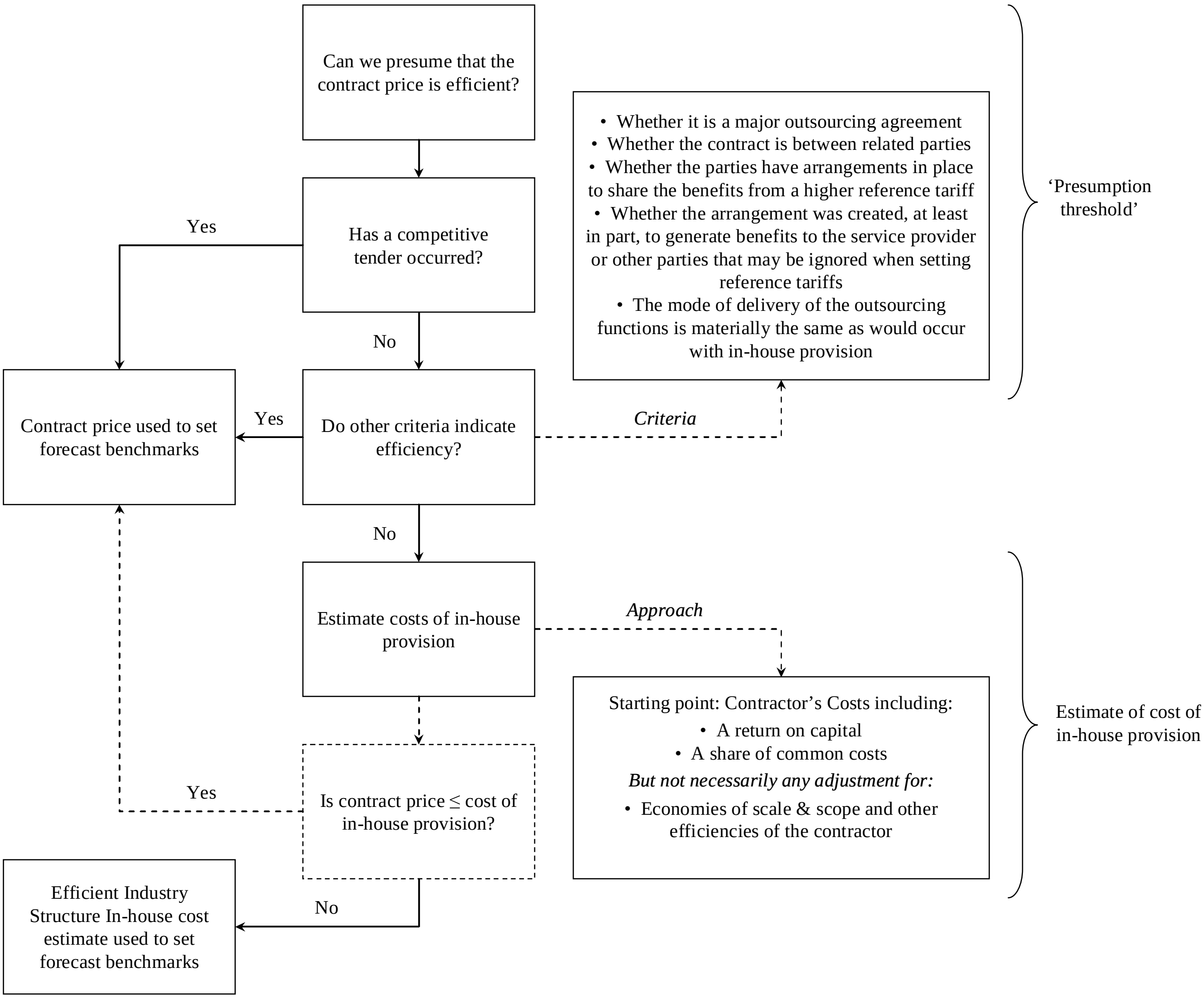
[72] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p46.

[73] I note again that this position is seemingly at odds with the position adopted by ACG in its earlier advice to ESCOSA, in which it questioned whether the Code would permit a regulator to conclude that a prudent service provider should undertake structural changes in order to lower its costs. See: ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006.

Figure 3.2: Summary of Mr Balchin's Framework



3.3.6. Differences Between the ESC and Mr Balchin's Frameworks

Mr Balchin's framework exhibits a number of important differences to the framework outlined by the ESC in its *Draft Decision*, including:

§ the extension of the scope of the consideration to non-related party contracts where there could be 'other benefits' shared between the parties;

§ the only circumstances in which Mr Balchin would unequivocally accept a contract price as forming the efficient benchmark for operating and/or capital costs is where a competitive tender has occurred; and

§ the suggestion that there may be no need to adjust for economies of scale and scope or other efficiencies specific to the contractor when examining contractor's costs since they would be equally achievable through in-house provision, albeit potentially under an alternative industry structure.[74]

I also note that the ESC's framework is relatively undeveloped with respect to several of the issues elaborated upon in Mr Balchin's framework, including its view on Mr Balchin's approach to specifying the counterfactual for estimating in-house costs.

In the following sections I highlight the key issues arising from the frameworks articulated by both the ESC in its *Draft Decision* and in the statement of Mr Balchin.

3.4. Comments on the ESC's and Mr Balchin's Frameworks

The assessment frameworks developed by both the ESC and Mr Balchin and the assumptions underlying those frameworks raise a number of matters that, in my opinion, warrant further consideration.

One of the most fundamental issues relates to the interpretation of sections 8.37 and 8.16(a)(i) of the Code and their interaction with section 8.1(a) of the Code. I noted in section 3.3.4.1 that Mr Balchin appears to have utilised section 8.1 of the Code to apply a more stringent test to forecast capital expenditure and non-capital costs than I consider is envisaged by sections 8.37 and 8.16(a)(i). Specifically, Mr Balchin's framework is predicated on the assumption that the Code allows for the recovery of only ***efficient*** capital expenditure and non-capital costs. In so doing he appears not to have recognised that sections 8.37 and 8.16(a)(i) require only that the service provider has ***acted*** efficiently, in accordance with good industry practice, to achieve the lowest sustainable cost of delivering the service.

Although the ESC has not specifically referred to the interaction between section 8.1(a) and sections 8.37 and 8.16(a)(i), a number of references in the *Draft Decision* that appear to suggest that it too has interpreted sections 8.37 and 8.16(a)(i) as allowing only 'prudent and efficient costs' to be incorporated into reference tariffs. For instance on page 2 of the *Draft Decision* the ESC states:

> '…difficulty arises where distributors seek to rely on payments made under such contracts as presumptively establishing the *prudent and efficient costs of providing services,* so as to achieve the lowest sustainable costs.' (emphasis added)

Similarly on page 7 the ESC refers to its allowance for operating expenditure as representing 'the prudent and efficient costs of operating the distributors' networks from 2008 to 2012' and on pages 171-172 it further states that it is not satisfied that the fees payable under the OSA "represent the prudent and efficient, lowest sustainable level of expenditure to provide the services".

I observed in section 2.2.2 that there is an important distinction between 'acting in a prudent and efficient manner' consistent with sections 8.16(a)(i) and 8.37 and actually attaining hypothetical 'perfect' efficiency. Indeed, there is a range of reasons why a prudent service

74 As outlined in section 3.3.1, as consequence, under Balchin's framework, if a contract is not presumed to be efficient (and his narrow criteria for unequivocal acceptance means that many not be) the contract price will *never* be less than the assumed cost of in-house provision, effectively eliminating this important aspect of the ESC's framework.

provider *acting* efficiently may not actually attain 'perfect' efficiency. In my opinion service providers should be required to *act* prudently and efficiently in an endeavour to attain the lowest sustainable cost of providing the service but should not be assumed to be capable of attaining 'perfect' efficiency. I have also noted, consistent with Parker J's finding that reference tariffs should be set so as to provide an the *opportunity* to earn a stream of revenue that recovers the efficient costs over the expected life of the assets used,[75] consistent with a workably competitive market outcome.

The term 'workably competitive market' is critical in this context because while one may expect firms in a hypothetical perfectly competitive market to achieve 'perfect' efficiency, the same cannot be said for firms operating in a workably competitive market. Rather, as Parker J noted, while workable competition may lead to efficiency that is beyond that which could be achieved in a non-competitive market it does not necessarily result in the attainment of the theoretical ideal of 'perfect' efficiency.[76] Accordingly, in my view, it is counterintuitive to infer section 8.1(a) as requiring the attainment of 'perfect' efficiency at all times over the life of an asset.

A second but less fundamental problem is that, in my opinion, both the ESC's framework and Mr Balchin's alternative framework inadequately define:

1. the 'presumption threshold'; and
2. the criteria that should be applied when comparing the contract price with the estimated cost of in-house provision.

I set out a more detailed discussion of these issues, including my proposed alternative, in Chapters 4-6.

Third, in my opinion the ESC's application of Justice Hollingworth's decision in *Alinta v Essential Services Commission (No 2)* [2007] VSC 210 in the context of establishing regulated tariffs is also somewhat questionable. I discuss this issue further in Chapter 7.

The final matter that I consider warrants further attention is the manner by which the ESC has assessed the Multinet-AAM OSA and its findings in relation to this particular contract. My consideration of this aspect is set out in Chapter 8.

75 As outlined above, this is neither a price ceiling nor is it a price floor, ie, it does *not* require a service provider to recover *only* efficient costs or to recover *at least* efficient costs.

76 *Re: Dr Ken Michael*, para 128.

4. Presumption Threshold

The outsourcing arrangement assessment frameworks developed by both the ESC and Mr Balchin contain a presumption threshold designed to distinguish between those contracts and contract payments that can be presumed to be consistent with section 8.37 and 8.16(a)(i) of the Code, and those that cannot. These thresholds have been designed to act as an initial filter in the assessment framework and in so doing enable those contracts that require further consideration to be identified.

The presumption thresholds established by both the ESC and Mr Balchin differ somewhat in their approach and focus. Within the ESC's framework the presumption threshold consists of a range of questions that seek to ascertain:

1. the nature of the relationship between the contracting parties and in particular whether the parties are associates, related or independent;
2. the circumstances surrounding the formation of the contract;
3. the scope of the services provided under the contract and the residual role left for the distributor;
4. whether the contract has incentive and efficiency sharing features and provides the distributor with any form of control over expenditure; and
5. the nature of the payments made under the contract and whether they are for actual activities and costs incurred in providing the Reference Service.

In contrast, the presumption threshold developed by Mr Balchin sets out the circumstances where he would be 'cautious' about simply presuming that the contract price is consistent with sections 8.37, 8.16(a)(i) and the broader objectives set out in section 8.1 of the Code. The specific circumstances identified by Mr Balchin include major outsourcing arrangements where a competitive tender has not been undertaken and where:

- the mode of delivery is predominantly the same as would occur if the services had been retained in-house;
- the contract is between related parties;
- the parties have other arrangements in place that permit them to share the benefits from the regulator setting a higher reference tariff; and
- the outsourcing arrangement was created to generate benefits to the regulated service provider that may be ignored when setting reference tariffs.

Comparing the factors underpinning both the ESC's and Mr Balchin's presumption threshold it is apparent that while there are broad similarities across the two there are also some key differences. For instance, the ESC's threshold focuses on 'related party' transactions while Mr Balchin's threshold encompasses any other arrangements that may distort the incentive of a regulated service provider to pay an efficient price for the services. The ESC's threshold also requires consideration to be given to the contractual features and payments while Mr Balchin's threshold does not.

Although I broadly agree with a number of the factors identified by both the ESC and Mr Balchin, in my opinion, there are two shortcomings in the overall thresholds adopted by the two.

First, in my opinion the use of the term 'related party' by both the ESC and Mr Balchin provides little insight into whether the interests of the parties would be sufficiently aligned such that they could not be expected to act independently in the decisions they make. From the perspective of an economist, when determining whether or not the capacity exists for two parties to engage in ongoing transfer pricing, I believe it is helpful to consider whether or not the parties can be considered a 'single economic entity' rather than using the term 'related party', which has been defined in a variety of ways by accountants, tax specialists and lawyers. I noted in section 3.1.3.1 that the incentive and opportunity for a service provider to engage in transfer pricing will not simply be limited to transactions between parties that are part of a single economic entity. In other words, the incentive for a regulated service provider to pay an artificially inflated contract price may also exist where compensatory payments or other benefits are conferred on the regulated service provider.[77]

Second, the thresholds adopted by both the ESC and Mr Balchin are static in nature and focus simply upon the conditions that existed at the time a transaction was entered into. While the conditions that prevailed at the formation of the contract are an important consideration, it is equally important to examine whether those conditions may have changed over time. For instance, while two parties may have been part of a single economic entity at the commencement of an outsourcing agreement, that relationship may have changed over time such that the distributor no longer has an incentive to pay an artificially inflated contract price.[78] Provided there is some form of 'circuit breaker' in the contract, such as a price review mechanism, then it is possible that a contract that was once considered to be at risk of involving transfer pricing may no longer pose such a problem.

In view of these shortcomings, I have sought to develop a presumption threshold that addresses each of these issues. In so doing, I have endeavoured to clarify the circumstances in which a service provider may have an incentive to pay an artificially inflated contract price and sought to establish a clear framework that could be applied by a regulator when considering these issues. The remainder of this section sets out my proposed presumption threshold.

4.1. Incentives to Pay an Artificially Inflated Contract Price

When determining whether or not the capacity exists for two parties to engage in ongoing transfer pricing, I believe it is insightful to consider whether or not the parties can be considered to be a 'single economic entity'.

The concept of a 'single economic entity' has been developed in the context of antitrust case law in the United States and Europe. Its purpose is to distinguish the potential for concerted

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[77] Or alternatively, to the regulated service provider's parent company, a subsidiary or its shareholders.

[78] Conversely, situations may arise where parties that were 'independent' at the time a transaction was entered into may become part of a single economic entity over time. A price review in this case may result in the regulated service provider having an incentive to pay an artificially inflated contract price notwithstanding the fact that this incentive did not exist at the time the original transaction was entered into.

action (between different parties) from unilateral conduct (by the same party), and has been applied, for example, in assessing mergers and anti-competitive agreements. It essentially questions whether two apparently different parties could be expected to act in concert with each other. In my opinion, the question of whether or not two parties are part of a single economic entity is helpful when assessing their ability to act in concert so as to enable transfer pricing to occur.

A 'single economic entity' is said to exist where the interests of the firms in question are so closely aligned that they could not be expected to act independently in the decisions they make. In such circumstances, there is little or no need to form detailed agreements between the firms to entice certain market conduct. The analysis and case law that has developed in both the United States and Europe[79] is centred on the assessment of independence, ie, whether one firm has the ability to make material decisions independently of the other(s). This informs whether, without a specific agreement, the dependent firm would ever act in a way that is contrary to the interests of the other.

If the parties to an outsourcing agreement can be regarded as a single economic entity, then the incentives and ability for them to engage in transfer pricing may be high. This is because their interests are sufficiently well aligned and the associated control or decision making mechanisms exist to ensure that transfer pricing can occur without requiring any compensating payments to sustain it. By definition, transfer pricing involves the transfer of value (or profits) between related entities. In the absence of an alignment of interests, there would be no incentive for the party shedding value to do so.

A conclusion that two entities were part of a single economic entity would not, in itself, be sufficient to conclude that transfer pricing has occurred. Rather, such a conclusion would provide *prima facie* evidence that the regulated service provider has an *incentive* to engage in transfer pricing, thereby warranting a more detailed consideration of whether or not the incentive has been acted upon and whether an artificially inflated price for services has actually been paid.

If the parties are not part of a single economic entity (notwithstanding the fact that the two parties may in a legal or accounting sense be classified as 'related'), then the incentive and ability for the regulated service provider to pay an artificially inflated contract price over an extended period of time will be limited by their independent, competing interests. That said, regulated service providers may nonetheless have an incentive to pay an artificially inflated contract price where circumstances exist that allow them to be compensated for doing so.

Such circumstances may arise where compensation paid to the regulated service provider (or alternatively, to the regulated service provider's parent company, a subsidiary or its shareholders) sustains the arrangement. Such compensation may be paid by the outsourcing party (or a subsidiary, parent company or shareholder) through a side payment or by means of another transaction which confers a benefit on the regulated service provider (the benefit may also be conferred on the regulated service provider's parent company, a subsidiary or

79 See American Tobacco Co. v United States, 328 US 781, 810 (1946), Copperweld Corp. v. Independence Tube Corp., 467 U.S. 752, 104 S.Ct. 2731, 81 L.Ed.2d 628 (1984), Beguelin Import Co v S.A.G.L. Import Export, CJ. COMM. E. 949 (1971), Imperial Chemical Industries Ltd. v Commission, Case 48/69, ECR 619 (1972) and Centrafarm BV et Adriaan de Peijper v Sterling Drug Inc, Case 15/74, ECR 1147 (1974).

shareholders). A pre-condition for this to occur (which is also a pre-condition for the single economic entity) is that the regulated service provider expects to be able to pass on the artificially inflated contract price to users through a cost-of-service regulatory framework.

In contrast to the single economic entity, this type of arrangement is not designed to transfer value (or profits) from the regulated business into the hands of a related outsourcing company. Rather it is designed to transfer value from the regulated business into the hands of the regulated service provider's shareholders, its parent company, a subsidiary or into an unregulated segment of the regulated service provider's business.

It is worth noting in this context that the incentive for a regulated service provider to agree to pay an artificially inflated contract price in either of the circumstances described above will not simply be limited to major outsourcing arrangements. Thus while the ESC's and Mr Balchin's frameworks focus on large scale arrangements I am of the opinion that any scale of arrangement that involves parties that are part of a single economic entity or involves the payment of compensation or other benefits should be closely examined.

4.2. Dynamic Nature of the Incentives for Inflated Contract Prices

Changes in the relationship between the contractor and the regulated service provider over the life of the contractual arrangement will influence the extent to which there is an ongoing incentive on the part of the regulated service provider to pay an artificially inflated price for the outsourced services. For instance, the relationship between parties that were originally part of a single economic entity may alter over time such that they can no longer be considered to be operating in concert. Conversely, two contracting parties that enter into an arrangement on an independent arm's length basis may over time become part of a single economic entity or alternatively enter into an arrangement whereby the regulated service provider is compensated for agreeing to pay an artificially inflated price.

In either circumstance the relationship between the parties will generally flow from structural changes that may eliminate or create an incentive to engage in co-ordinated conduct. From a transfer pricing perspective, such a change in the relationship will become relevant if there is a mechanism specified within the contract that enables the contract price to be reviewed.

Depending on the scope of the contract price review provisions a prior agreement to engage in transfer pricing may be terminated if the newly independent regulated service provider has an opportunity to re-negotiate a contract price that is free of any artificial inflation. Similarly, the scope of the price review provisions may enable the contracting parties to incorporate an artificially inflated component at a later date.

The scope of these price review provisions will vary across contracts. For example some contracts may allow only the previously agreed contract price to be indexed in accordance with a change in an external measure (ie, inflation) while others may allow the parties to re-negotiate the contract price without limitation.

Where the price review provisions allow only for the escalation of the previously agreed contract price there will be no opportunity for a change in the relationship between the regulated service provider and the contractor to flow through to the contract price. As a consequence, regulated service providers that had previously entered into a transfer pricing arrangement will be prevented from eliminating any distortion in the contract price that may have occurred at the commencement of the contract, consequently preserving the distortion over successive price re-determinations. These types of pricing provisions will also prevent any later arrangement to engage in transfer pricing.

In contrast, a contract that contains price review provisions allowing for the renegotiation of price will, absent any other constraints on the negotiation, allow changes in the nature of the relationship between the parties to be reflected in the contract price over time. In these circumstances regulated service providers will have an opportunity to terminate a prior transfer pricing arrangement or alternatively to agree to a new arrangement in which it agrees to pay an artificially inflated contract price. Even where there are bounds on the renegotiation, the regulated service provider may have the same opportunities available to it.

Viewed in this way it is clear that contract renegotiations or price reviews provide a mechanism by which any prior agreements to distort the contract price can be expected to be eliminated unless: [80]

§ the parties operate as a single economic entity such that the service provider is unable to exercise effective independent control over its decision making; or

§ the terms of the renegotiation ensure that the artificially inflated price is preserved over time. [81]

Where circumstances affecting the ability to engage in transfer pricing have changed, then the effect of an artificially inflated price will only need to be accounted for up to the point in time that the contract price is reviewed or reset by the parties to the extent that the artificially inflated price was actually passed on to users.[82] Henceforth it is reasonable to assume that the contract price would not have been distorted.

If the regulated service provider and the contracting party operate as a single economic entity, or if further compensatory payments are made, or alternatively if the outsourcing contract does not include price review provisions that would enable the regulated service provider to re-negotiate a contract price that is free of any artificial inflation, then the incentive and the ability to eliminate any distortion in the contract price will be limited. In such circumstances, a regulator may be justified in undertaking the adjustments to eliminate the effect of the distortion on the process of determining expenditure allowances for the purpose of setting regulated tariffs.

In my opinion, it is therefore important to examine:

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[80] If the contract provides for such a review and provided the scope of the price review allows any artificial inflation to be removed from the contract price.

[81] This could arise if, for example, the contract stated that any re-negotiated price could not fall below the previously agreed price.

[82] For example, if the contract price was set after a regulatory review (ie, in the first year of the access arrangement period) then users would simply be paying costs based on the regulatory determination and not on the basis of the contract price. In this case the contract price will only influence the carry over amount to be shared between the regulated service provider and users.

- the nature of the relationship between the parties at the time the contract is entered into to establish whether or not the parties could be viewed as a single economic entity;
- the circumstances surrounding the formation of the contract and in particular whether there were supporting compensatory payments made to sustain an artificially inflated contract price between parties that cannot otherwise be viewed as a single economic entity; and
- the nature of the relationship between the contracting parties over time, and in particular whether the contract contains price review provisions and whether the nature of the relationship between the parties has changed significantly at the time of a price review.

4.3. Proposed Presumption Threshold

Based on the foregoing I have developed criteria that could be used to distinguish between those circumstances where a regulated service provider:

- *would not* have an incentive to pay an artificially inflated contract price; and
- *may* have an incentive to pay an artificially inflated contract price.

In those circumstances where it is found that a regulated service provider would not have an incentive to pay an artificially inflated contract price then, in keeping with the ESC's approach, consideration should be given to:

- whether the contract price wholly relates to the provision of the Reference Service; and
- whether the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) in that they are consistent with a prudent Service Provider, acting efficiently, in accordance with accepted good industry practice, and to achieve the lowest sustainable cost of providing the service.

Assuming the contractual arrangements meet these criteria, the price payable under the contract should be presumed to be consistent with the Code and accepted as the basis for establishing forecast costs.

To the extent that there are concerns that a regulated service provider *may* have had an incentive to pay an artificially inflated price, then a more detailed examination of the transaction would need to be undertaken to ascertain whether an artificially inflated contract price has *actually* been agreed by the parties. Contracts of this form would therefore not meet the presumption threshold and would be subject to further scrutiny in the second inquiry phase. I present an overview of the inquiries that I consider should be undertaken in this phase in the following chapter.

The remainder of this section sets out the distinguishing criteria that I consider should be used in a presumption threshold.

4.3.1. Distinguishing Criteria

The two questions that I consider to be critical for distinguishing between those circumstances where a regulated service provider would or would not have an incentive to pay an artificially inflated contract price are:

- were the parties operating as a single economic entity at the time the contract price was negotiated or at the most recent contract price review?; and
- were there other compensatory payments made to sustain an artificially inflated contract price?

4.3.1.1. Single economic entity criteria

If the parties are found to be operating as a single economic entity at the time the contract price was negotiated, or at a subsequent contract price review, then a regulated service provider *may* have an incentive to pay an artificially inflated contract price and thus a more detailed consideration of this type of arrangement would be required.

In reaching a view on whether the parties constitute a single economic entity consideration should be given to:

- the circumstances that surrounded the contract at the time it was entered into;
- the current circumstances surrounding the contract, including whether the nature of the relationship between the parties may have changed over time such that there may no longer be any incentive for transfer pricing; and
- the nature and frequency of the provisions for review of the contract terms and in particular whether any of the price reviews have corresponded with any relevant change in the nature of the relationship between the contracting parties.

If, after considering these issues it is concluded that:

- the parties were operating as a single economic entity at the time the contract was entered into, then:
  - if that relationship has not altered over time the outsourcing arrangements should be subject to further scrutiny in the second inquiry phase;
  - if that relationship has changed but the price review mechanism would not allow changes in the nature of the relationship to be reflected in the contract price the outsourcing arrangements should be subject to further scrutiny in the second inquiry phase; and
  - if that relationship has changed and the price review mechanism allows changes in the nature of the relationship to be reflected in the contract terms, then the outsourcing arrangement should be presumed to be consistent with the Code if the contract price relates wholly to the provision of the Reference Service and the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) of the Code.
- the parties were *not* operating as a single economic entity at the time the contract was entered into but at the most recent price review the parties could be viewed as being part of a single economic entity, then:
  - if the price review mechanism of the contract would have enabled an artificially inflated contract price to have been agreed, this arrangement should be subject to further scrutiny in the second inquiry phase; and

- if the price review mechanism of the contract would not have enabled an artificially inflated contract price to have been agreed the outsourcing arrangement should be presumed to be consistent with the Code if the contract price relates wholly to the provision of the Reference Service and if the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) of the Code.

4.3.1.2. Other circumstances potentially giving rise to an inflated contract price

If it is concluded that the parties were not operating as part of a single economic entity and if there are:

- supporting compensatory payments that were paid at the commencement of the contract, or at a subsequent contract price review, then this may be ***prima facie*** evidence that the regulated service provider has agreed to pay an artificially inflated contract price. Contracts of this form should be subject to further scrutiny in the second inquiry phase; and
- no supporting compensatory payments, then a regulated service provider would have no incentive to pay an artificially inflated contract price. Contracts of this form should be presumed to be consistent with the Code if the contract price relates wholly to the provision of the Reference Service and the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) of the Code.

4.4. Summary

The outsourcing arrangement assessment frameworks developed by both the ESC and Mr Balchin contain a threshold intended to distinguish between those contracts and contract payments that can be presumed to be consistent with section 8.37 and 8.16(a)(i) and those that cannot. Whilst I agree with aspects of each threshold, in my opinion they also involve a number of shortcomings. In particular, the use of the term ‘related party’ is of limited practical utility and neither threshold gives sufficient consideration to the possibility of the nature of the relationship between the parties to develop over time.

I have therefore proposed a presumption threshold that focuses on two critical considerations:

- were the parties operating as a *single economic entity* at the time the contract price was negotiated or at the most recent contract price review?; and
- were there *other compensatory payments* made to sustain an artificially inflated contract price?

In reaching a view on these issues consideration should be given to the circumstances that surrounded the contract at the time it was entered into and to whether the incentives of the parties to engage in transfer pricing may have changed over time. The nature and frequency of any review of contract terms and conditions should form a critical element in that assessment.

The following section examines the *second* inquiry phase adopted by both the ESC and Mr Balchin for those contracts that *cannot* be presumed to be efficient.

5. Criteria for Assessing In-House Cost vs Contract Price

The second inquiry phase of the assessment frameworks developed by the ESC and Mr Balchin respectively involves assessing those contracts that cannot be presumed to be efficient in order to ascertain whether or not the contract price is less than or equal to the cost that would hypothetically be incurred if the services were provided in-house.[83] An important element of this inquiry phase is establishing the precise nature of the in-house provider. Put simply, if a service had not been outsourced, what would the equivalent in-house provider have looked like in that 'counterfactual'?

5.1. Specifying the Counterfactual

One of the challenges in comparing a contract price to the estimated cost of in-house provision is specifying the state of the world, or 'counterfactual' in which the regulated service provider is assumed to provide that service to itself. The specified counterfactual may have a considerable bearing upon the identification of those costs to be included in the estimate of in-house costs and those that are not. Critical considerations include:

- which service is the in-house provider assumed to supply, eg, does the provider only supply the reference service in question or is it assumed to supply additional, complementary services and/or does it own other regulated and/or unregulated businesses?
- how efficient is the in-house provider assumed to be at providing that service (or services), eg, what proportion of the scale and scope economies or other efficiencies obtained by the contractor are assumed to be available under hypothetical in-house provision?

It is useful to think of the potential counterfactuals as comprising a range of possibilities. At one end of the spectrum would be the scenario whereby the in-house provider supplies the service on a stand-alone basis and obtains ***none*** of the scale and scope economies or other efficiencies obtained by the contractor. At the other end of the spectrum lies Mr Balchin's counterfactual (outlined below), in which the in-house provider is assumed to be structured in such a way so as to obtain *all* of the scale and scope economies or other efficiencies obtained by the contractor.

In the following sections I outline the scenario proposed by Mr Balchin, together with its stringent assumptions, and the ESC's alternative 'case-by-case' approach. I also highlight some important shortcomings in each approach. I then propose what I consider to be a more appropriate counterfactual.

5.1.1. Mr Balchin's Counterfactual

Mr Balchin's counterfactual is straightforward. He assumes that if the service had not been outsourced, it would have been provided in-house within an *efficient industry structure*. In other words, he assumes that *all* of the efficiencies that are available to a contractor are equally available under in-house provision. As a consequence, in Mr Balchin's

[83] Although, for the reasons outlined in section 3.3.4.2 above, Balchin assumes that the contract price cannot be lower than the cost of in-house provision, rendering this aspect of his framework redundant.

counterfactual there is little, if any, scope for efficient outsourcing within the broad range of potential situations in which his presumption threshold is not met. As outlined in section 3.3, he reaches this conclusion on the basis that merger activity would be expected to occur to capture any scale and scope economies available to contractors, ie, there is no such thing as ‘contractor-specific efficiencies’.

In my opinion, the reasoning and motivation underpinning Mr Balchin’s counterfactual is unconvincing. He appears to arrive at his counterfactual by reference to his stated desire to prevent ‘perverse incentives’ to outsource services. In other words, the perceived problem Mr Balchin is seeking to address through the adoption of his highly stylised ‘notional ownership structure’ is the situation in which a firm is motivated to contract out a function that it could provide in-house for the same or lower costs, in order to inflate its expenditure allowance and hence its reference tariffs.[84]

However, I outlined in section 3.3.4.1 that this assumes that section 8.37 of the Code (and by extension, section 8.16(a)(i) as it relates to capital expenditure) does not preclude such incentives. Recall that Mr Balchin envisages instances in which an outsourcing contract might allow recovery for expenditure items ***already included*** in the revenue requirement, and provide poor incentives to minimise costs, yet still be judged to be consistent with a prudent service provider acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service.[85] However, Mr Balchin does not explain how a contract price exhibiting such characteristics could possibly be consistent with section 8.37.

Theoretically, it is conceivable that a contract price could be less than or equal to the risk adjusted cost of in-house provision but still include a ‘double recovery’ of costs and have poor incentives for cost minimisation. If the relevant benchmark is set as the contract price being less than or equal to the risk adjusted cost of in-house provision, then a contract price of this form would be found to comply with sections 8.37 and 8.16(a)(i). However, this does not result in ‘perverse incentives’ to outsource since it brings about a lower forward-looking cost benchmark than if the service provider had supplied the service in-house. I doubt such a circumstance, ie, the service provider could or should have advanced a better outsourcing arrangement, could reasonably be construed as being consistent with sections 8.37, 8.16(a)(i) or 8.1.

Whilst I agree with Mr Balchin that it would be undesirable for an outsourcing contract to deliver ‘double recovery’ of costs and/or provide poor incentives for cost minimisation, I do not foresee a material risk of such a scenario eventuating. In my view, the perceived problem Mr Balchin seeks to address in large part through the adoption of his counterfactual ownership structure is ***already dealt with*** by sections 8.37 and 8.46 (and by extension, 8.16(a)(i) for capital expenditure benchmarks). In other words, I do not consider that Mr Balchin’s highly stylised counterfactual is necessary to address the issues he perceives.

[84] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 132 – 134.

[85] Balchin, J., *Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses,* para 132 – 134.

Accordingly, it is inappropriate, in effect, to elevate section 8.1 into an 'overarching' requirement as Mr Balchin seeks to do.

Moreover, Mr Balchin's counterfactual would very likely have a number of detrimental effects. In particular, it would likely provide distributors with perverse incentives to *provide services in-house* that could otherwise be provided at lower cost through outsourcing. This arises from the assumptions implicit in that counterfactual. Most critically, Mr Balchin contends that any efficiencies obtained by a contractor in the provision of the service should be *equally obtainable to the distributor* through in-house provision under his counterfactual.

Mr Balchin justifies this position on the basis that if a firm were to provide the service in-house the regulatory framework would provide it with an incentive to merge with other entities, and in so doing it could capture all of the scale and scope economies available to contractors. In consequence, the estimated cost of in-house provision will *always* be less than the contract price where the contract price has incorporated a margin that to some extent reflects differences in relative efficiencies. In other words, under Mr Balchin's framework it is not possible for an outsourcing provider ever to provide the services at a lower cost than the in-house provider if the presumption threshold is not met.

If this counterfactual were accepted then a regulated service provider that had outsourced its operations would always receive a lower allowance for non-capital costs than implied by the contract price. Such an outcome would create a perverse incentive for the regulated service provider to bring the operations back in-house even if the contract price is less than the cost it would incur if it were to provide the services in-house. Thus while Mr Balchin's counterfactual of in-house provision is *intended* to result in a framework that is neutral in terms of ownership and operating structure, in reality it may very well have the *opposite* effect.

Implicit in Mr Balchin's counterfactual are a number of assumptions, including:

§ that a firm *currently outsourcing* that began providing the same service in-house could:
  - obtain all of the scale and scope economies available to contractors through mergers and acquisitions without incurring any transitional costs or encountering any of the competition issues that arise under section 50 the *Trade Practices Act 1974*;
  - obtain any other efficiencies that the contractor may have developed through its experience in specialising in the provision of the service;
  - undertake the necessary mergers and acquisitions without experiencing any significant alteration in its systematic risk profile (which may result in change in, say, the entity's equity beta) or incurring any transaction costs including the transitional costs associated with unwinding any duplication in overheads across businesses; and

§ all *existing* in-house providers are assumed to be structured efficiently, otherwise they would have sought already to reorganise their operations to obtain additional scale and scope economies.[86]

In my view, it is questionable whether any of these assumptions are likely to be reasonable in practice. Not only are they potentially inconsistent with accepted economic theory, but they also ignore the reality that firms outsource myriad functions to contractors to secure services at a lower cost; a proposition that myriad regulators have accepted, including the ESC. The plain fact is that it will often be cheaper to outsource a service than to provide it in-house, as the ESC recognises in its *Draft Decision*:[87]

> 'A prudent distributor is not necessarily likely to undertake all the activities required in order to deliver the Reference Services. It is consistent with good industry practice that various functions may be outsourced to an external provider of services that has specialist skills in undertaking particular activities. For example, a distributor may engage a specialist provider to undertake call centre activities, meter reading, gas field operations or specific capital projects. *There may be efficiencies and cost savings that are achievable by outsourcing activities to a specialist provider*.' (emphasis added)

It is not reasonable simply to assume that a provider could immediately acquire the synergies likely to be available to the contractor through its acquired specialist knowledge and/or resources. It is similarly unreasonable to contend that a distributor can always adopt an ownership and operating structure that delivered identical scale and scope economies, in such a way that incurred no transitional costs and encountered no competition issues under the *Trade Practices Act 1974*. To do so would be analogous to adopting a counterfactual that represented 'perfect' efficiency, by which a firm's forward-looking cost allowance is set by reference to benchmarks that are not realistically achievable.

Inferring a benchmark corresponding to 'perfect' efficiency on the strength of the function of section 8.1(a) is inconsistent with the assumption of a workably competitive market and also inconsistent with Parker J's finding that reference tariffs should be set so as to provide an the *opportunity* to earn a stream of revenue that recovers the efficient costs over the expected life of the assets used,[88] consistent with a *workably competitive market* outcome. In my opinion the workably competitive market criterion certainly does not imply 'perfect' efficiency and so in my opinion the Code does not permit the ESC to adopt Mr Balchin's suggested counterfactual. Moreover, I have noted earlier that the position formerly adopted by ACG in its advice to ESCOSA in relation to the regulatory treatment of outsourcing contracts appears consistent with my own conclusion, specifically:[89]

> '... we would question whether the Gas Code would permit the regulator to conclude that a prudent service provider should undertake structural changes (eg, a merger) in

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86 If this were *not* assumed to be the case (ie, if additional efficiencies *were* available through hypothetical alternative industry structures), cost benchmarks for existing in-house providers would presumably also need to be adjusted downwards to ensure consistent treatment under Balchin's framework of outsourcing firms vis-à-vis in-house providers.

87 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p39.

88 As outlined above, this is neither a price ceiling nor is it a price floor, ie, it does *not* require a service provider to recover *only* efficient costs or to recover *at least* efficient costs.

89 ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006.

order to lower its costs (and hence to judge 'lowest sustainable cost' against this standard) …'

In my opinion, Mr Balchin's proposed counterfactual, which assumes that if the service had not been outsourced it would have been provided in-house within an efficient industry structure, is not appropriate. His assumptions are both inconsistent with accepted economic theory and the reality that firms outsource myriad functions to contractors to secure services at a lower cost. The likely consequence of assuming an in-house provider can always provide a service in-house as cost-effectively as a contractor would be a perverse incentive for distributors to *provide services in-house* that could be provided at lower cost through outsourcing.

5.1.2. ESC Counterfactual

The ESC does not appear to have given explicit consideration in its *Draft Decision* to a counterfactual model of in-house provision, other than to recognise (and ultimately choose not to adopt) Mr Balchin's counterfactual:[90]

> 'ACG concluded that there is not necessarily a need to adjust the outsourced provider's costs for efficiencies where such efficiencies could also be obtained via efficient in-house provision. It also noted that economic principles suggest that cost of efficient in-house provision should be taken as *the cost incurred to provide the relevant functions in-house where there is an efficient industry structure.*' (emphasis added)

Rather than adopting Mr Balchin's counterfactual, the ESC has adopted a 'case-by-case' approach. It is unclear precisely what the 'case-by-case' approach entails[91] but unlike Mr Balchin, the ESC *does* explicitly acknowledge the potential for a contractor to incur lower costs relative to the cost of counterfactual in-house provision, consistent with market realities:[92]

> 'In looking at the actual costs incurred by the contractor in undertaking the contracted activities, the Commission is not adopting the position that only the contractor's actual costs form a reasonable basis for the benchmark of prudent and efficient costs. The Commission accepts that, consistent with the views of both NERA and ACG, if over the relevant time horizon, the contractor incurs lower expected costs relative to providing the services in-house then this is a prudent and efficient outcome. Provided the overall contract payments do not exceed the amount that would have been incurred by the distributor undertaking the activity itself, the full contract amount would represent an efficient level of expenditure.'

In other words, the ESC *does* recognise there may be scale and scope economies or other efficiencies available to the contractor that are unattainable under hypothetical in-house provision. However, it does *not* outline a clear counterfactual by which those contractor-specific efficiencies may be measured. If by a 'case-by-case' approach the ESC intends to adopt a 'status quo' counterfactual (discussed further in section 5.1.3 below) that reflects the

90 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p53.

91 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p53.

92 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p55.

particulars of the in-house firm, this would likely be a valid approach. Conversely, if the ESC intends such an approach to provide it with scope to adopt materially different counterfactuals for otherwise comparable providers, this would be inappropriate.

This is because the nature of the counterfactual in-house provider will likely have a significant bearing on the quantum of scale and scope economies, or other efficiencies obtained by the contractor that are assumed also to be available under hypothetical in-house provision. By way of example, a greater proportion of the contractor's scale and scope economies may be available if it is assumed that the in-house provider operates additional, complementary businesses than under the scenario in which it operates as a stand-alone provider. In my view, it should not be open for the ESC to adopt different counterfactuals when assessing otherwise comparable outsourcing contracts, eg, a 'stand-alone business' counterfactual for one and a 'status-quo' counterfactual including complementary businesses for the other.

Accordingly, whilst I agree that the ESC was right not to adopt Mr Balchin's counterfactual; it should clarify its proposed 'case-by-case' approach to specifying the relevant counterfactual so as to ensure the approach does not risk substantially different treatment of otherwise comparable outsourcing contracts based solely upon the adopted counterfactual. In my opinion, the framework should incorporate a *consistent* approach to specifying a counterfactual from *case-to-case*. I outline such an approach in section 5.1.3 below, which may prove to be consistent with what the ESC intends in its *Draft Decision* in any event.

I also disagree with the approach *actually* adopted by the ESC in its *Draft Decision*, which departs from its stated framework by overlooking the analysis required to form a view as to whether the in-house provider would be able to attain the same scale and scope economies and other efficiencies obtained by the contractor. This departure can be seen in the ESC's consideration of both the Multinet-AAM OSA and the Envestra-OEAM OMA. In both of these cases the ESC simply contends that there was no evidence before it that demonstrated that either OEAM or AAM had delivered, or were more likely to deliver, lower costs than the in-house provider. In my opinion the ESC should have undertaken a careful fact-based inquiry by reference to a consistent counterfactual before forming a view on this issue.

In view of these shortcomings I have developed a more appropriate counterfactual for the purposes of estimating the hypothetical cost of in-house provision which, in my opinion, is consistent with the Code.

5.1.3. Proposed Counterfactual

The objective in the 'second inquiry phase' is to estimate what the in-house cost of provision *would have been* had the firm not outsourced the service and to compare this with the contract price to establish whether or not the contract price was then actually artificially inflated relative to the in-house cost of provision. In my view, the estimate of the in-house cost could feasibly be examined by reference to two alternative counterfactuals. Each differs significantly from the counterfactual employed by Mr Balchin, which hypothesises an efficient industry structure. The approach of the ESC does not explicitly refer to a counterfactual. My two proposed alternatives are:

- a 'status-quo' counterfactual, ie, in estimating the costs of in-house provision a distributor's business is taken 'as is', including any related businesses, and assumes a fully in-sourced business; and
- a 'stand-alone business' counterfactual in which the distributor is not assumed to have any other operations and operates a fully in-sourced business.

The term 'status quo counterfactual' is in some sense misleading since it will often not be possible for a firm that is outsourcing a large component of its operations to provide the service in-house under its existing operational structure. Instead, it reflects the scenario in which the *starting point* for estimating in-house costs is the status quo structure, *including all related businesses*. The task is to estimate the costs, including additional labour and capital costs, that would be incurred in delivering the service in-house from this initial *reference point.*

Under the 'status quo' counterfactual, to the extent that any scale and scope economies or other efficiencies are likely to be obtained through the continued operation of other *existing* businesses, these would need to be taken into account. However, unlike Mr Balchin's counterfactual, if those related businesses *do not presently exist*, it is not assumed that the provider would seek to merge with other providers in order to obtain additional synergies. The distributor's business structure is taken 'as is', with or without related businesses.

The second counterfactual assumes that a service is provided in-house by a fully in-sourced, stand-alone service provider that owns and/or operates the single regulated pipeline. In other words, even if a provider *does* presently operate related businesses, these are ignored for the purposes of estimating the in-house cost of providing the service. In other words, any scale or scope economies or other efficiencies a provider might be expected to obtain through operating those businesses in conjunction with the pipeline are *not* factored into cost estimates. Consequently, the 'stand-alone business' counterfactual would ordinarily be expected to generate a higher estimate of in-house cost.[93]

In my opinion, the 'status quo' counterfactual is likely to be preferable because it provides the firmest reference point against which to estimate of costs. In addition, by accounting for any related businesses, the 'status quo' counterfactual would allow any scale and scope economies to be incorporated into cost estimates and thus shared between users and shareholders, consistent with ESC Guideline 17,[94] without hypothesising further structural revisions that the Code seems unlikely to permit.[95]

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93 I note that relative to Mr Balchin's counterfactual, this may be viewed as the *other* extreme scenario on the spectrum of possible counterfactuals.

94 See: ESC (2005), *Gas Industry Guideline No.17 Regulatory Accounting Information Requirements Issue No.1,* clause 3.6.3.

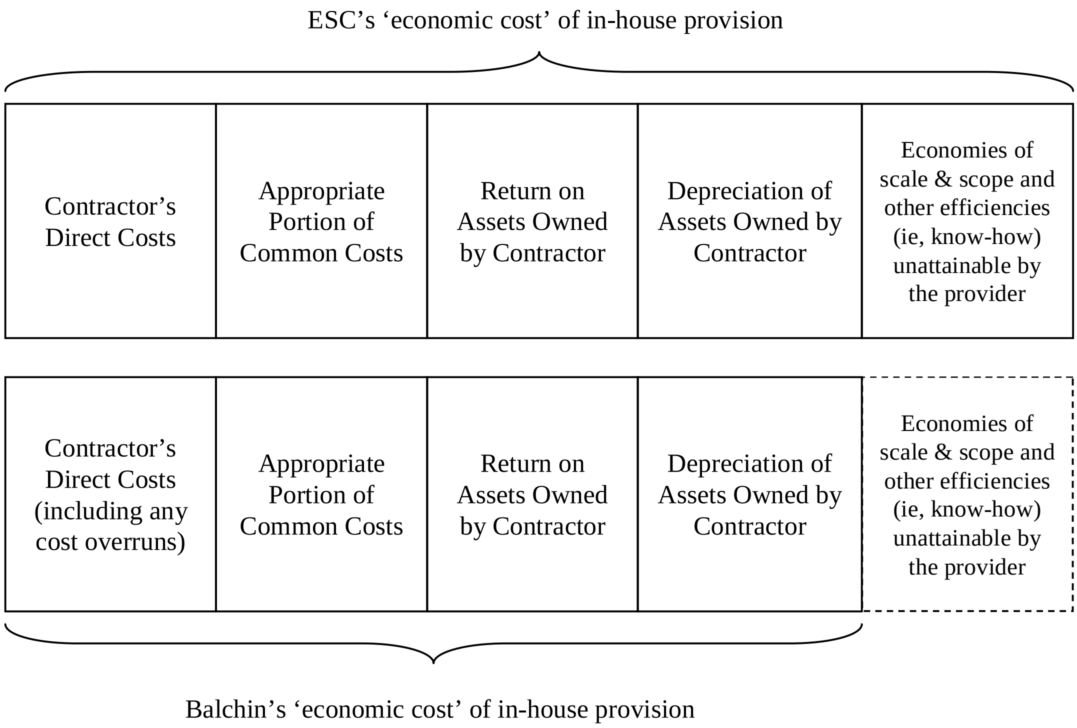
95 See: ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006.

5.2. Comparison of Cost of In-house Provision with Contract Price

5.2.1. The ESC and Mr Balchin's Frameworks

In accordance with the ESC's and Mr Balchin's framework, once a counterfactual has been decided upon, it is necessary to estimate what the in-house cost of provision *would have been* under that counterfactual. The start ***and*** end point for this analysis in Mr Balchin's framework is the contractor's actual costs including an allocation of common costs and a return on and of assets owned and employed by the contractor. Unlike Mr Balchin, the ESC's framework recognises that adjustments should also be made in those circumstances in which a service provider could not undertake the outsourced service at the same cost as the contractor. The cost categories that the ESC and Mr Balchin ostensibly include in their estimates of the in-house cost of provision are summarised in Figure 5.1.[96]

Figure 5.1: Cost Categories Included in ESC's and Mr Balchin's Definition of 'Economic Cost'



In comparing these two alternatives it is clear that the key difference between the two is the extent to which economies of scale and scope and other efficiencies such as 'know-how' are recognised. I agree with the ESC's stated framework that if one is to commence with contractor's costs then consideration should be given to the extent to which a regulated service provider could actually attain that same level of costs (given the relevant counterfactual). This requires consideration to be given to whether the contractor can access economies of scale and scope not otherwise available to the regulated service provider. In my opinion, it also requires consideration to be given to whether the contractor can access

[96] Note again that the ESC did not in actuality apply this framework, opting instead to reduce the OSA contract price by 9.2 per cent.

other synergies or efficiencies (including ‘know-how’) that a regulated service provider would not be able to access.

Figure 5.1 also highlights the uncertainty surrounding whether or not the ESC’s definition of the economic cost of in-house provision includes cost overruns incurred by the contractor, which have been included in Mr Balchin’s framework. I agree with Mr Balchin that if one is to use historic estimates of the contractor’s costs as a starting point then it is relevant to include cost overruns. If these are not taken into account it will be necessary to estimate the asymmetric risk allowance required to compensate the contractor for the risks associated with cost overruns.

Recognising these various positions, Figure 5.2 illustrates the various cost categories that in my opinion should comprise the total cost of providing the contracted services in-house if the contractor’s costs are adopted as the starting point. I note that the specified counterfactual will affect the size of the various blocks, particularly the ‘economies of scale and scope’.

Figure 5.2: Total Cost of Providing Contracted Service In-house using Contractor’s Costs

Total cost of in-house provision				
Contractor’s Direct costs (including any cost overruns)	Appropriate Portion of Contractor’s Common Costs	Return on Assets Owned by Contractor	Depreciation of Assets Owned by Contractor	Economies of scale & scope and other efficiencies (ie, know-how) unattainable by the provider

When considering whether or not the contractor is able to achieve economies of scale and scope or other efficiencies that are not otherwise available to the in-house provider, it may be relevant to consider the extent to which the risk-adjusted costs have fallen since the decision was made to outsource. This will be of particular importance where the decision to outsource was made in the not too distant past and may be taken into account by:

- comparing the contract payment with the level of pre-outsourcing costs; and
- examining the level of efficiencies attained by the contractor relative to its peers since the decision was made to outsource.

5.2.2. Other Methods to Estimate the Cost of In-house Provision

While the ESC and Mr Balchin have sought to estimate the cost of in-house provision by reference to the contractor’s costs, this is not the only method by which such costs can be estimated. There are a number of ways in which the in-house cost could be estimated, including undertaking a ‘ground-up’ estimate of the costs of in-house provision as originally proposed by the ESC in *Consultation Paper No. 2*. A ‘ground-up’ estimate would use the regulated *service provider’s own costs* as the starting point, which would reflect the obtainable scale and scope economies or other efficiencies available under the relevant counterfactual.

The cost categories that would need to be considered in this context are:

§ an estimate of the direct costs of providing the service in-house;

§ common costs; and

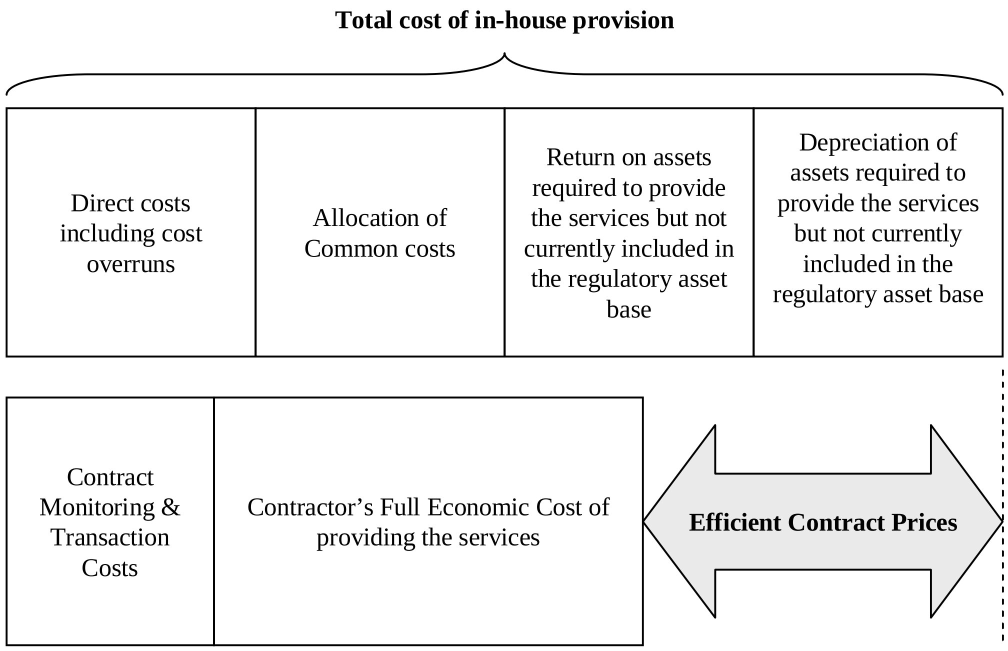
§ a return on and of assets that the contractor currently owns and that an in-house provider would require to deliver the services.

The size of these costs will differ depending on which counterfactual is assumed. For instance, the direct costs of providing the service in-house will be lower under the status-quo counterfactual if there are economies of scale and scope arising from the ownership of multiple businesses. Similarly, the common costs will be lower under the status-quo counterfactual since these costs will be shared amongst a number of businesses.

5.2.3. In-house Cost Versus Contract Price

Once the counterfactual cost of in-house provision has been estimated a comparison can be made to the contract price. I explained in section 2.3 that the outsourced contract price can be taken as the appropriate cost benchmark when the expected cost (including the incremental co-ordination costs) is *less* than the risk-adjusted expected cost of providing the same services in-house. I note that if an outsourcing arrangement were to result in a reduction in the risk faced by the service provider,[97] then it will be important to take this into account when using the contractor's costs as starting point for the estimation of the in-house cost. Figure 5.3 illustrates the range of potentially efficient contract prices.

Figure 5.3: Range of Efficient Contract Prices



[97] Such as may occur under a contract that involved a fixed price for specified services

This comparison implicitly assumes that the in-house cost is estimated at the same time that the contract price is negotiated. If this were not done then events could occur after the contract is negotiated that enable the in-house provider to incur the same, or lower, costs than reflected in the contract price.

For example, if at the time the contract was negotiated it was concluded that it would cost $120 to carry out the services in-house and the contract price was fixed at $100 for five years then this would be viewed as consistent with section 8.37 and/or 8.16(a)(i) at the time of the transaction. If within two years of the contract being negotiated a new technology was introduced that enabled the regulated service provider to provide the services in-house for $80 then, if the contract were considered at this point in time, the contract price would be viewed as being inconsistent with the Code.

Viewed in this way it is apparent that *ex post* events may result in a contract price being found to be inconsistent with the Code notwithstanding the fact that at the time the contract price was struck the service provider was acting in a prudent and efficient manner. To overcome this issue it will be important to undertake the in-house cost versus contract price analysis either:

- at the time the price was struck or renegotiated; or
- at an alternative point in time but after recognising that *ex post* events may have resulted in the contract price being higher than the expected cost of in-house provision at the time the contract price was struck. This will require consideration be given to the extent to which these events may have altered the regulated service provider's expectations. In this context it may also be relevant to consider the expectations of management at the time the contract price was originally struck or at a subsequent price negotiation.

It is worth noting in this context that prudently incurred outsourcing contracts *will* generally include an explicit or implicit margin on the contractor's directly incurred costs. The payment of such a margin is consistent with predictions of economic theory and with observed good industry practice, as noted in an earlier report prepared by NERA for Envestra entitled *Outsourcing by Regulated Businesses*. In this report it was noted that the existence of such margins will tend to reflect a range of legitimate factors including:

- the contractor's ability to provide the service at a lower cost than the purchaser could obtain elsewhere, eg, a return to the 'know how' of the contractor;
- the required return on and return of physical and intangible assets employed by the contractor in the provision of the service;
- efficiencies on the part of the contractor over the life of the contract, eg, where the contract allows some part of these to be retained by the contractor;
- the allowance required to meet the contractor's common costs; and
- the allowance required to self insure against the asymmetric risks faced by the contractor.

I agree with each of these points and am also of the opinion that margins should not be excluded on a *per se* basis. Rather, if one were concerned about the potential for the regulated service provider to pay an artificially inflated price then it should undertake all of the inquiries set out in this chapter with a view to ascertaining the extent to which the contract price was artificially inflated.

I understand from the following statement that the ESC has also accepted this proposition:[98]

> 'The Commission accepts that any third party contractor will require compensation for its endeavours over and above the actual cost of undertaking the contracted activities. A third party contractor would expect to be able to recover all of the economic costs that it incurs to provide the outsourced activity and would expect to benefit from superior performance. Otherwise it would not contract to undertake those activities. Such compensation is not necessarily inconsistent with an efficient level of costs, particularly where the contractor has the ability to provide the service at a lower cost than the distributor could do so itself or obtain elsewhere. Further payments above direct costs may, as NERA suggested, also provide a return to the contractor for:
>
> – the assets employed by it in the provision of the outsourced services
> – efficiencies on the part of the contractor over the life of the contract
> – the contractor's common costs.'

In the following section I draw together my suggested framework for the assessment of outsourcing contracts, including my suggested presumption threshold and recommended approach to estimating the cost of in-house provision.

98 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p52.

6. Appropriate Assessment Framework

Drawing together my conclusions in the preceding chapters, I have developed an assessment framework that can be applied to outsourcing arrangements involving both non-capital costs and/or capital expenditure. In developing this framework I have sought to ensure that it will achieve the specific objectives contained in sections 8.37, 8.16(a)(i) and 8.1 of the Code. The framework I have developed consists of two distinct inquiry phases (see Figure 6.1) which I have termed:

- the presumption threshold inquiry phase; and
- the in-house cost versus contract price inquiry phase.

Where the presumption threshold is met the contractual arrangement can be assumed to be consistent with a prudent service provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service. The price payable under such a contract should therefore be viewed as consistent with section 8.37 and/or section 8.16(a)(i) and form the basis for establishing forecast non-capital expenditure and/or capital expenditure.

In my opinion the reference tariffs that will flow from the adoption of this prudently and efficiently incurred contract price should be efficient in both level and structure (section 8.1(e)) and will in turn ensure that:

- the service provider is accorded an opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service (section 8.1(a));
- the outcomes of a workably competitive market are replicated (section 8.1(b)); and
- any potential distortion in investment decisions in the pipeline and in upstream and downstream industries is circumvented (section 8.1(d)).

While reference tariffs that are calculated by reference to a prudently and efficiently incurred contract price do not directly address the objectives in sections 8.1(c) and 8.1(f) the provision of such tariffs is not inconsistent with these two sections. There is therefore no conflict in the objectives specified in section 8.1.

In those circumstances where it is found that a regulated service provider may have had (or currently has) an incentive to pay an artificially inflated contract price, then consideration must be given to whether an inflated price has actually been paid. This involves estimating the hypothetical risk-adjusted cost of in-house provision and comparing it with the contract price.

Under my proposed framework the risk-adjusted cost of in-house provision is estimated by reference to the ‘status-quo’ counterfactual described in section 5.1.3. However, I note in section 5.1.3 that the ‘stand-alone business’ counterfactual may prove to be more readily able to be implemented and so both options are presented in Figure 6.1.

In Figure 6.1 two alternative methods for estimating the in-house cost of provision are described, although I note that these do not necessarily represent an exhaustive list.

The first method for estimating the risk-adjusted hypothetical cost of in-house provision set out in Figure 6.1 uses a contractor's costs as the starting point and adjusts these to reflect differences in relative efficiencies between the contractor and the regulated service provider. The term contractor's costs in this context refers to the direct costs (including overruns) incurred by the contractor, a share of the contractor's common costs and a return on and of assets owned and employed by the contractor.

The second methodology involves a 'ground-up' estimate of the cost of in-house provision. The in-house cost of provision will include direct costs, a share of the common costs incurred in-house, and a return on and of assets required for the provision of the services that are not otherwise incorporated in the revenue building blocks.

Once an estimate of the hypothetical risk-adjusted cost of in-house provision is established it can be ascertained whether the contract price is:

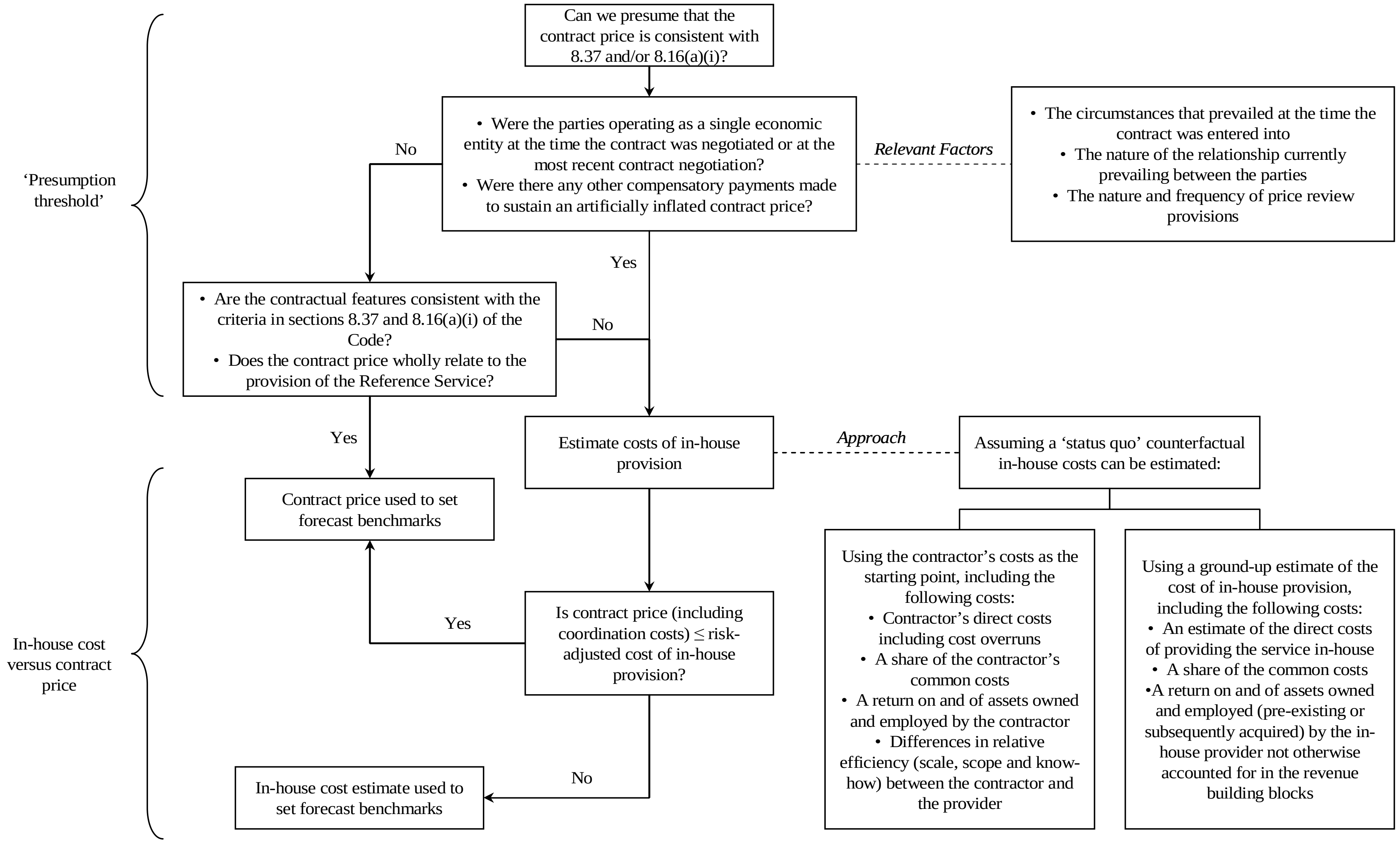
§ less than or equal to the risk adjusted cost of in-house provision and therefore *consistent* with section 8.37 and/or section 8.16(a)(i) and section 8.1. In these circumstances the *contract price* should be used to establish forecast non-capital and/or capital expenditure requirements under section 8.37 and/or 8.16(a)(i) of the Code; or

§ greater than the risk adjusted cost of in-house provision and therefore *inconsistent* with the conduct one would expect from a prudent service provider acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service. In these circumstances the *in-house cost* estimate should be used to establish forecast non-capital and/or capital expenditure requirements under section 8.37 and/or 8.16(a)(i) of the Code.

The foregoing assumes that the in-house cost estimate coincides with the time that the contract price was negotiated. If this is not the case then before reaching a firm conclusion about the nature of the contract payment, consideration should be given to whether *ex post* events may have altered the expectations surrounding the risk adjusted in-house cost from what they were at the time the service provider agreed to pay the contract price. I noted in the preceding chapter that it may also be relevant in this context to consider the expectations of management at the time the contract price was originally struck or at a subsequent price negotiation.

Overall, in my opinion the framework outlined below should ensure that the non-capital costs and/or capital expenditure benchmarks incorporated into the reference tariffs are consistent with sections 8.37, 8.16(a)(i) and 8.1 of the Code.

Figure 6.1: Proposed Assessment Framework



7. Implications of the Hollingworth Judgment

I have been asked to consider whether it was correct for the ESC to make the inference from the judgment of Justice Hollingworth in *Alinta v Essential Services Commission (No 2)* [2007] VSC 210 that it describes at page 72 of the *Draft Decision*, ie: [99]

> 'One practical implication of [the Hollingworth, AAM v ESC [2007] VSC 210] decision would appear to be that the Commission should not approve Reference Tariffs on the basis of AAM recovering more than the costs incurred in providing the services permitted under the Code (that is operating costs consistent with section 8.37 of the Code, capital costs consistent with section 8.16(a) of the Code, and a return on and of capital consistent with sections 8.30 and 8.32 of the Code). On this basis, the Commission should properly consider the actual costs of AAM in undertaking the activities under the OSA, including its actual operating costs and any relevant capital costs. In the event that Multinet does not accept the draft decision, the Commission may seek to consider AAM's actual costs in undertaking the activities under the OSA, consistent with it being a Service Provider under the Code, in its final decision.'

7.1. Hollingworth Judgment

My understanding of the context[100] for the judgment of Hollingworth J is that it concerns the question as to whether or not AAM:

- provides services by means of a distribution pipeline, within the meaning of section 22 of the Gas Industry Act 2001 (the Act) and is therefore required to hold a licence under the Act; and
- relatedly, is a "service provider" as defined in section 10.8 of the Code[101] and is therefore required to comply with the Code, including the access arrangement provisions.

My reading of the judgment is that Hollingworth J found that these questions needed to be considered by reference to:[102]

> 'A detailed examination of the relevant facts…….to determine the extent to which the operation and management of the network has in fact been handed over to another person.'

In assessing Multinet's outsourcing arrangement with AAM Hollingworth J concluded that AAM does indeed provide service by means of a distribution pipeline, and so is required to hold a licence under the Act. Hollingworth J also found that AAM is the operator of the pipeline system owned by Multinet and so falls within the definition of service provider for the purposes of the Code. AAM is therefore required to comply with the access arrangement provisions of the Code in respect of the Multinet pipeline system.

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99 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p72.

100 See for example *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p2, para 10.

101 Section 10.8 of the Code defines a service provider as the owner or operator of a pipeline or proposed pipeline covered by the Code.

102 *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p99, para 480.

In reaching this conclusion, Hollingworth J found that, by the OSA:[103]

> 'Multinet agreed to deliver up operating control of the Multinet system to or at the direction of AAM'

This finding of fact appears instrumental in Hollingworth J's conclusions that AAM was indeed an operator and so a service provider under the Code: [104]

> 'The Code clearly conceives of the possibility of there being a separate owner and operator for some or all of a covered pipeline. Where it appears that the owner has handed over the operation of some or all of the pipeline, there is a need to undertake a factual enquiry to determine who is in fact the operator of the pipeline … The extent of the contractual powers conferred on AAM under the OSA, and actually exercised by AAM, are such as to bring it within the ordinary and natural meaning of "operator" of the pipeline.'

The principal implications of this finding are that AAM is required to obtain a licence, to comply with the requirements of the Code, and to submit an access arrangement (or to submit a joint access arrangement with Multinet).

In the course of her 99 page judgment, Hollingworth J devotes just a few paragraphs to the tariff setting provisions of the Code. This discussion is developed in the context of a contention put by AAM that a dual requirement for access arrangements would increase rather than decrease the rewards delivered by the efficiency carryover, with the consequence of greater costs to the customer. Hollingworth J rejects that contention and concludes that the fact that Multinet and AAM are each service providers under the Code (as 'owner' and 'operator', respectively), does not entitle them ***both*** to receive any benefits achieved by reference to the benchmarks set by the ESC:[105]

> 'The ESC does not contend that there would be a separate access arrangement or tariff basket. There would be one tariff policy, one set of tariffs and one stream of revenue: thus, one efficiency carryover. AAM would not have its own efficiency carryover, any more than it would have its own duplicated network of pipes and other apparatus. Consideration of AAM's costs of operating the network in the course of tariff setting would result in any efficiency gains being fairly allocated rather than being, effectively, simply retained by AAM, as currently occurs.'

In other words, in the course of her judgment Hollingworth J makes no reference to the regulatory tariff setting process other than to observe that:

- although Multinet as the 'owner' and AAM as the 'operator' are separate, they should not be considered in isolation to one another in the tariff setting process; and
- 'consideration of AAM's costs of operating the network' would result in the benefit of any efficiency gains being 'fairly allocated'.

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103 *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p69, para 329.

104 *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p98, paras 473-475.

105 *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p63, para 304.

Consistent with its status as incidental to the principal subject of the judgment, this passage leaves for the reader to interpret whether or not Hollingworth J's reference to the fair allocation of efficiency gains is intended to describe those between AAM and Multinet arising in the course of the sub-contracting relationship established by the OSA, or the fair allocation of gains (by means of the efficiency carryover mechanism) arising between the two service providers and their customers. Notwithstanding this ambiguity, the ESC appears to have taken a particular and more developed interpretation of this aspect of the judgment, which I discuss further below.

Hollingworth J's final observation in this particular passage appears to be predicated on a finding that because the OSA is largely a fixed price contract, the efficiency gains achieved by AAM are not shared during the initial contractual term. In my opinion, this finding involves an unnecessarily restrictive view of efficiency gains arising under a contract that fixes a price for a series of defined periods. By definition, the concept of 'efficiency gains' implies the comparison of two potential states of the world (with one involving less efficient outcomes than the other), and any difference that arises between them. These differences can be assessed on an *ex ante* or *ex post* basis, or both.

In the context of the OSA the potential for 'efficiency gains' to materialise and to be allocated to one party or the other is likely to arise when:

§ the OSA was initially entered into, at which point (expected) efficiency gains arise for Multinet[106] through it fixing a price that may be lower and/or more certain than the expected cost of undertaking these activities itself; and/or

§ during the course of the initial fixed price term of the OSA, when (outturn) efficiency gains (or losses) may arise for AAM through it realising lower (or higher) costs than it expected at the time it agreed to the initial fixed price term; and/or

§ the setting of prices for subsequent fixed periods, which will be affected by the expected gains available to each party going forward (as compared with services not being provided by means of the OSA), as well as the extent to which (unanticipated) outturn efficiency gains from the previous period may have been greater or less than expected.

In light of these potential complexities in determining precisely what efficiency gains are being referred to and the nature of the relevant counterfactual in determining how they are allocated, the basis for Her Honour's observation that the OSA causes 'any efficiency gains' to be 'simply retained by AAM' is not clear, and arguably is not valid.

7.2. The ESC's Interpretation

Notwithstanding the uncertainties surrounding the observations of Hollingworth J, the ESC appears to have taken a rather particular and firm view on the judgment's practical implications for the tariff setting process. It cites the judgment as supporting the conclusion that it should consider the '*actual costs'* of AAM in undertaking the activities under the OSA,

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[106] Expected efficiency gains may also arise at this point for AAM, for whom the entering into the OSA may present opportunities to reduce the cost of expand the potential revenue of its other asset management activities.

and *only* its actual costs, in determining allowances for ***forward-looking*** operating and capital costs under the Code. Specifically:[107]

> 'One practical implication of that decision would appear to be that the Commission should not approve Reference Tariffs on the basis of AAM recovering more than the costs incurred in providing the services permitted under the Code (that is operating costs consistent with section 8.37 of the Code, capital costs consistent with section 8.16(a) of the Code, and a return on and of capital consistent with sections 8.30 and 8.32 of the Code). On this basis, the Commission should properly consider the actual costs of AAM in undertaking the activities under the OSA, including its actual operating costs and any relevant capital costs. In the event that Multinet does not accept the draft decision, the Commission may seek to consider AAM's actual costs in undertaking the activities under the OSA, consistent with it being a Service Provider under the Code, in its final decision.'

In my opinion, the ESC's interpretation of the judgment extends significantly beyond what can reasonably be inferred from either the words or the context of the relevant passages. Specifically:

- the ESC introduces the adjective 'actual' when referring to Hollingworth J's use of the term 'costs', which is significant for the subsequent conclusion it seeks to draw and clearly goes beyond the words used in the judgment;
- the ESC draws an apparently strong linkage between information on 'actual costs' and the provisions of the Code governing the determination of forward-looking allowances for operating and capital costs, even though the judgment provides no endorsement for such a linkage; and
- the ESC seems to draw an inference that Multinet and AAM are or should be treated as one and the same entity, even though Hollingworth J neither reaches this conclusion nor was it necessary for Her Honour to do so.

More generally, the ESC's interpretation of Hollingworth J glosses over the myriad issues that arise in dealing with the relationship between a contractor and sub-contractor in the context of tariff setting. Although the existence of a 'sub-contracting' relationship between Multinet and AAM is explicitly acknowledged in the judgment,[108] its implications are not (and need not be) discussed by Her Honour in any significant way.

Notwithstanding the absence of any practical guidance in the judgment, such issues are canvassed explicitly and extensively by Mr Balchin, and by the ESC itself elsewhere in its draft decision: [109]

> 'The Commission accepts that any third party contractor will require compensation for its endeavours over and above the actual cost of undertaking the contracted activities. A third party contractor would expect to be able to recover all of the economic costs that it incurs to provide the outsourced activity and would expect to benefit from superior

107 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p72.

108 *Alinta v Essential Services Commission (No 2)* [2007] VSC 210, p74, para 347.

109 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p52

> performance. Otherwise it would not contract to undertake those activities. Such compensation is not necessarily inconsistent with an efficient level of costs, particularly where the contractor has the ability to provide the service at a lower cost than the distributor could do so itself or obtain elsewhere'

To summarise, in my opinion there is nothing in the judgment itself that supports the ESC's contentions as regards the practical implications of Hollingworth J's findings for determining applicable tariffs for use of the Multinet pipeline system. The judgment does not in and of itself enable the ESC to undertake the approach that it proposes and, specifically, it cannot be relied upon to obviate:

- the need for the ESC to examine the characteristics of the OSA to establish whether it can be presumed reduce expected risk-adjusted costs; or
- the potential subsequent examination of the costs that Multinet *would have incurred* through in-house provision.

Whilst a consideration of AAM's costs may form an input to the estimation of in-house costs under the counterfactual, that assessment should also include a much broader consideration of costs than those identified by the ESC, not the least of which is the scale and scope economies obtainable by AAM but unavailable to Multinet.

8. Multinet – Alinta Asset Management OSA

Drawing on the material in the preceding chapters I have examined the ESC's assessment of the OSA with a view to providing my opinion on the following matters that Multinet has asked me to consider:

a. the consistency of the ESC's approach for determining the benchmark allowance for the cost of services provided to Multinet with Code; and

b. the manner by which Multinet should derive its forecast operating expenditure for the services provided under the Operating Services Agreement in order to satisfy the Code requirements.

The remainder of this chapter sets out my opinion on these matters commencing with an overview of the approach adopted by the ESC when assessing the OSA and its key findings in relation to this arrangement.

8.1. The ESC's Assessment of the Multinet-AAM OSA

The ESC's assessment of the OSA and its key findings in relation to this outsourcing arrangement are set out on pages 72 - 80 of its *Draft Decision*. For ease of reference I have sought to summarise the ESC's findings in relation to each of the aspects of its stated framework. These findings are summarised in Table 8.1.

Examining this table it is apparent that the ESC's overall conclusion that it could have little confidence that the reported contract payments paid to AAM represented 'prudent incurred efficient costs, consistent with good industry practice so as to achieve the lowest sustainable level of costs to provide the Reference Services'[110] was driven in large part by its contention that:

§ Multinet has effectively handed over all the operation and management of the pipeline to AAM; and

§ the OSA was not entered into on an arm's length basis but as part of a broader restructuring in which AAM's parent took a significant interest in Multinet and United Energy and a $16 million payment was made to the former owners of Multinet to secure the OSA.

Based on these observations the ESC moved on to the second phase of the inquiry process and sought to estimate the cost of in-house provision by reference to AAM's actual costs. Due to the lack of direct evidence on the actual costs incurred by AAM, the ESC sought to estimate those costs by deducting an estimate of the pre-tax margin generated by AAM across its portfolio of contracts from its 2004 - 2006 invoiced operating and capital expenditure.

In adopting this approach the ESC acknowledged that no explicit consideration had been given to either the common costs incurred by AAM or the return on or of assets owned by AAM. The ESC further conceded that the approach involved 'a substantial element of

[110] Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p 76.

estimation'. In view of this uncertainty the ESC proposed reducing AAM's invoiced operating and capital expenditure over the period 2004 – 2006 by **9.2 per cent**, which was at the lower end of AAM's reported margin range over the period 2004 – 2006.[111] The revised 2006 estimates for the non-capital cost and capital expenditure benchmarks (excluding the 9.2 per cent margin) then formed the basis for the ESC's non-capital cost and capital expenditure allowances for the 2008-2012 access arrangement period while the revised 2004-2006 capital expenditure estimates were used to establish the value of the regulatory asset base as at 1 January 2008.

Table 8.1: Summary of ESC's Findings in Relation to the Multinet-AAM OSA

<table>
<tr><td rowspan="5">Presumption threshold</td><td>Nature of relationship between the parties</td><td rowspan="2">While the ESC acknowledged that Multinet and AAM may not currently be acting as a single economic entity they noted that the OSA was not entered into on an arm's length basis but as part of a broader restructuring in which AAM's parent took a significant interest in Multinet and United Energy. It also noted the $16m payment made to the former owners of Multinet to secure the OSA</td></tr>
<tr><td>Circumstances surrounding the arrangement</td></tr>
<tr><td>Scope of services</td><td>The ESC stated that Multinet has effectively handed over to AAM all functions relating to the operation and management of the system, leaving itself with very little residual role.</td></tr>
<tr><td>Structure of the contract</td><td rowspan="2">The ESC noted that the fixed price nature of the contract coupled with the minimal transparency and the inability of Multinet to have recourse to AAM's actual costs at the time of a contract renegotiation were inconsistent with the efficiency incentive framework in place under the Code.
The ESC concluded that Multinet retains very little ability to direct the way in which the contract is performed through reporting requirements. It believed that the key performance indicators (KPIs) formed a weak mechanism for monitoring and controlling AAM's activities.</td></tr>
<tr><td>Nature of contractual payments</td></tr>
<tr><td rowspan="2">Estimate cost of in-house provision</td><td>Could the distributor undertake the activities at the same cost as the conractor?</td><td>The ESC concluded that there was no evidence before it to demonstrate that the OSA had delivered or was more likely to deliver lower costs than would have resulted had Multinet continued to undertake the operation and management of its network. The ESC noted that there was no evidence that Multinet management held the view that outsourcing would reduce expected costs at the time the OSA was entered into.</td></tr>
<tr><td>Do contractor's costs incorporate a return on assets and common costs?</td><td>ESC noted that this was not directly accounted for in its method.</td></tr>
<tr><td rowspan="4">Is contract price £ in-house provision?</td><td>Structure of contract and nature of payments</td><td>Not addressed specifically in consideration of this issue.</td></tr>
<tr><td>Contractor's ability to provide the outsourced services at a lower cost than distributor could obtain elsewhere</td><td rowspan="2">Not addressed.</td></tr>
<tr><td>Efficiencies exhibited by contractor over life of contract</td></tr>
<tr><td>The manner by which contract allocates risk between distributor and contractor</td><td>Not addressed.</td></tr>
</table>

During its discussion of the OSA the ESC indicated that there was no evidence before it to demonstrate that the contract had delivered or was more likely to deliver lower costs than

111 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p78.

would have resulted had Multinet continued to undertake the operation and management of its network. While no explicit statements were made by the ESC it would appear that this claim formed the basis for its decision to give no further consideration to whether Multinet could actually undertake the activities at the same cost as AAM (or any of the issues identified as being of some importance in the third inquiry phase of the ESC's stated framework) and to equate the in-house cost of provision to AAM's 'actual costs'.

Having reviewed the ESC's assessment of the Multinet-AAM OSA, I have a number of concerns with the manner by which this assessment has been undertaken. These concerns are primarily:

- the limited consideration given to the nature of the relationship between Multinet and AAM and the influence this would have on any incentive for Multinet to agree to pay an artificially inflated contract price;
- the statement made by the ESC that there was no evidence before it that:
  - demonstrated the OSA had delivered, or was more likely to be able to deliver lower costs than Multinet would have incurred if the services were provided in-house; and
  - Multinet management held the view that the OSA would reduce expected costs when the contract was entered into.
- the method employed by the ESC to estimate the cost of in-house provision, the assumptions underlying this estimate and the apparent disconnect between the assessment and the ESC's stated framework.

My specific concerns with these three aspects of the ESC's assessment are set out in the following section.

8.2. Concerns with the ESC's Assessment

8.2.1. The ESC's Assessment of the Multinet-AAM Relationship

The ESC's assessment of the Multinet-AAM relationship is set out in the following extract:[112]

> 'While today AAM and Multinet are not part of a single entity (albeit with AAM's parent company Alinta Limited owning 20.1 per cent of Multinet Group Holdings Pty Ltd which is Multinet's ultimate parent company), the circumstances in which the OSA was entered into were part of a broader restructuring arrangement in which the activities now undertaken by AAM were the responsibility of the Multinet/United Energy group of companies. The OSA was entered into as part of a broader transaction in which AAM's parent took a significant interest in Multinet, as well as other companies associated with Aquila, such as United Energy. Further, it appears that AAM or Alinta made a substantial payment in the order of $16 million to the former owners of Multinet in order to secure the OSA contract. That is, it would appear that the OSA was entered into as part of an 'associated transaction', involving a "side payment" and a "transfer of equity".'

112 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, pp72-73.

To enable me to examine the ESC's conclusion on this issue Multinet have provided me with a copy of the OSA, the MGH Shareholders Agreement, a number of affidavits, ASIC company extracts and numerous letters between itself and AAM (a full list of the documents I have reviewed is set out in Appendix C).

In examining this relationship and consistent with my stated framework in section 4.1, I have considered:

§ the circumstances that surrounded the contract at the time it was entered into;

§ the current circumstances surrounding the contract, including whether the nature of the relationship between the parties may have changed over time such that there may no longer be an ongoing incentive for transfer pricing; and

§ the nature and frequency of the price review provisions and in particular whether any of the price reviews have corresponded with a change in the nature of the relationship between the contracting parties.

My findings on these issues are set out below.

8.2.1.1. Circumstances surrounding the contract at the time it was entered into

In section 4.1 I noted that if the interests of the parties to an outsourcing arrangement were aligned sufficiently and the associated control or decision making mechanisms were in place to enable transfer pricing to occur, then the regulated service provider may have an incentive to pay an artificially inflated contract price to its single economic entity counterpart. I also observed that if the parties were found to be operating as a single economic entity then there would be no need for compensatory payments to be made to sustain the artificially inflated contract price since the alignment of interests would be sufficient to ensure that the two parties acted in concert.

In examining the circumstances surrounding the transaction I have reviewed three affidavits prepared by:

§ Peter Scott Lowe, whom I understand is currently a director of Multinet Group Holdings Pty Ltd (MGH), Multinet Gas (DB No. 1) Pty Ltd and Multinet Gas (DB No. 2) Pty Ltd and at the time the contract was formed worked for AMP Capital Investors (AMPCI). I also understand that Peter Lowe was involved in negotiating the OSA on AMPCI's behalf over the period 2002-03;

§ Ian Stewart Devenish, whom I understand was employed by Alinta at the time of the transaction and was responsible for negotiating, finalising and implementing the Shearwater transaction; and

§ Robert Andrew Forsyth Dunlop, whom I understand was a joint lead adviser to Alinta on the Shearwater transaction.

These three affidavits provide some insight into the motivations underlying the decision to enter into an outsourcing arrangement and the circumstances surrounding the formation of the outsourcing arrangement.

According to information contained within Peter Lowe's affidavit, one of the key objectives of AMPCI when it purchased the Aquila assets was to engage an operator that could take on the operating risk of the business and in so doing ameliorate the risks that the proposed investment fund, DUET, would otherwise face. Robert Dunlop's affidavit further states that as a financial investor AMPCI required an operator that was prepared to take operating risk to allow cash flow certainty.

Additional information in Peter Lowe's affidavit suggests that Aquila had achieved substantive efficiency gains and cost reductions in the period leading up to the acquisition by AMPCI. These reductions were in part attributed to Aquila's 'innovative' service models and its desire to improve the profitability of the business to maximise the potential sale price. Notwithstanding these cost reductions there was a concern that Multinet was at risk of cost increases. Setting the contract price at historic levels through a fixed price contract was therefore viewed by Peter Lowe as a 'good deal for AMPCI'. Peter Lowe's affidavit further states that AMPCI had no incentive to pay a price above the historic level and that its only incentive was to ensure that its returns were maximised because to do otherwise would simply result in a reduction in the value of the proposed investment vehicle, DUET.

Ian Devenish's affidavit indicates that Alinta's principal objective in the transaction was to expand its business model into asset management on the east coast. According to Ian Devenish's affidavit, Alinta formed the view following a period of due diligence that it could operate the assets at a lower cost than forecast through synergies and other efficiencies and in March 2003 the contract price was settled in principle.

Robert Dunlop's affidavit supports Ian Devenish's statement that Alinta viewed the transaction as involving a number of benefits including growth from a Western Australian gas distribution company to a national operator and investor in infrastructure assets through building scale and breadth. According to Robert Dunlop the long term service agreements with Multinet and United Energy were designed to underpin Alinta's national services business.

I understand from Peter Lowe's affidavit that AMPCI required the operator to take an equity interest in the assets and that this was done to ensure that the interests of the operator would accord with those of the asset owner, ie, the operator would have the incentive to seek out operating efficiencies and ensure that the value of the assets are maintained over the long term. Robert Dunlop's affidavit also refers to these incentives and notes that the banks to the consortium required the operator to hold a minimum interest of 15 per cent in the asset as a condition of their financing.

Although Alinta acquired a 20 per cent ownership interest in Multinet at the time the transaction was entered into, DUET was the only other substantial shareholder, holding the remaining 80 per cent of the shares in Multinet. While the single economic entity theory is not predicated on a particular ownership threshold, it is clear that for Multinet's interests to be sufficiently aligned with Alinta's interests alone then it would either have to be assumed that:

§ DUET operates as a 'silent partner'; or

§ DUET's interests are aligned with Alinta's such that DUET and Alinta can be taken to be operating as a single economic entity.

The material that I have reviewed indicates that neither of these conditions hold.[113] I therefore conclude that each of DUET, Alinta and Multinet operated as independent economic entities at the time the OSA was entered into. In these circumstances transfer pricing could only be sustained through the payment of some form of compensation to Multinet or DUET. This issue is examined in the following section.

8.2.1.1.1. Capital markets transaction

The OSA was entered into in conjunction with Alinta purchasing equity in Multinet and making a $16 million payment to former Multinet's shareholders.[114] I understand that AAM has explained to the ESC that the purpose of these payments was for:[115]

> '…procurement of a back-up capital expenditure bank facility for Multinet Group Holdings, capital support to AMP Capital Investors for Multinet Investors and a contribution to the underwriting costs of DUET.'

The affidavits prepared by Peter Lowe, Ian Devenish and Robert Dunlop also contain relevant information on this aspect of the Shearwater transaction. According to Peter Lowe's affidavit the fee for the OSA was settled in early 2003 and he was not aware of any proposal for Alinta to make an additional payment at the time he negotiated the contract price. Peter Lowe concluded that there was no relationship between the OSA fee and the additional payment. Ian Devenish similarly stated that during the negotiation of the OSA no reference was made to the additional payments when the contract price was negotiated.

Robert Dunlop's affidavit provides more insight into the purpose of the additional payment which he states was agreed after the contract fees were settled. According to the sequence of events surrounding the agreement to make the additional payment presented in Robert Dunlop's affidavit:

§ Aquila rejected the initial AMPCI-Alinta bid and thus additional funding was required to ensure the transaction was finalised; and

§ Alinta provided additional funding because it perceived that the benefits of expanding nationally were "worth meeting the funding deficiency to secure the deal with Aquila".

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113 I reach this conclusion for the following reasons:

§ all of the shares in DUET at the time the OSA was entered into were held by AMP Capital, Macquarie Bank, Perpetual Trustee Company and Trust Company Limited and so it could not be said that Alinta had a controlling interest in DUET which could be used to align DUET's interests with its own;

§ AMP Capital, Macquarie Bank, Perpetual Trustee Company and Trust Company were not listed in the top 20 shareholders of Alinta at the time the OSA was entered into and so these entities would have had limited or no incentive to align their interests with Alinta;

§ three out of the four directors on Multinet's Board are appointed by DUET which indicates that it takes an active role in the management of its interest in contrast to the silent partner assumption; and

§ staff of both AMP Capital and Macquarie have undertaken secondments at DUET, which also indicates that these two entities have more than a silent partner interest in DUET and Multinet.

114 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p73.

115 Letter entitled *Provision of Information and Documents*, dated 16 September 2005, p3.

According to Robert Dunlop there was no relationship between the payment made by Alinta and the fees payable under the service contracts.

On the basis of the affidavits I have been provided I conclude that the contract price was negotiated independently of the decision by Alinta to make the additional payments to the former shareholders of Multinet. Since the contract price was struck independently of the proposal to make the $16 million payment, it is difficult to see how this payment could have been used as a form of compensation in return for Multinet agreeing to pay an artificially inflated contract price. Accordingly, in my opinion the $16 million payment cannot be regarded as a compensatory payment made to sustain an artificially inflated contract price.

8.2.1.1.2. Conclusion regarding circumstances at the time of the transaction

In my opinion, at the time the OSA was entered into, Alinta and Multinet were not operating as a single economic entity nor were there compensatory payments made to sustain the payment of an artificially inflated price for services to be provided under the OSA. In these circumstances one would expect the independent and competing interests of the two parties would limit both the opportunity and incentive to agree to an artificially inflated contract price. In other words, Multinet had the same incentive as any other regulated service providers to reduce its non-capital costs and to derive a benefit from this reduction through the efficiency carryover mechanism.

Whilst I have reached this conclusion in relation to the circumstances that prevailed at the time of the transaction, it is also important to consider whether the circumstances may have changed over time.

8.2.1.2. Is there currently an incentive to pay an artificially inflated price?

I am unaware of any transactions between Multinet (or Multinet's shareholders) and AAM (or Alinta) that could be construed as conferring a benefit on Multinet (or Multinet's shareholders) in return for agreeing to an artificially inflated contract price. Accordingly, the incentive for Multinet to pay an artificially inflated contract price at the next price re-negotiation could only flow if AAM and Multinet are now acting as a single economic entity. In the following subsections I review the structural and behavioural characteristics of the relationship between Multinet and AAM in order to ascertain the extent to which the interests and incentives of these parties are likely to be independent.

8.2.1.2.1. Ownership interests

The single economic entity theory is not, as I note above, predicated on a particular ownership threshold. Nevertheless I have reviewed the most recent ASIC company extracts dated 22 October 2007 for Multinet Group Holdings (MGH) and Alinta. According to the information contained in these extracts Alinta's interest in MGH has not changed since the original transaction was entered into.

8.2.1.2.2. Corporate structures

I have reviewed the MGH Shareholders Agreement from which it appears that Alinta is granted certain privileges in relation to its representation on the board of Multinet, ie, its entitlement to appoint a director is more favourable than that accorded to other shareholders.

However, given the majority shareholding of DUET, the composition of the board of directors and the rules on voting, there is no reasonable basis on which to conclude that Alinta is in a position to impose actions on Multinet that would be detrimental to the interests of the shareholders.

8.2.1.2.3. Commercial management structures

For Multinet to be able to act in a prudent and efficient manner in its dealings with AAM, its management must be independent of AAM and have incentives that are wholly aligned with the interests of Multinet. Multinet outsources its management functions under agreements with EPG and PIES. It is therefore relevant to look at the interests and incentives of each of these parties.

EPG provide specialist management/ownership services to Multinet under a 2005 contract entitled Agreement for the Provision of Services. All of the ordinary shares in EPG are held by the MGH. This factor, coupled with the fact that all of the directors of MGH are also directors of EPG, indicates that EPG has no material independence from Multinet, ie, EPG and MGH do appear to be a single economic entity. It follows that I would expect the interests of EPG to be wholly aligned with those of Multinet. In view of this interest I see no reason to conclude that EPG would have any incentive to enter into or maintain an agreement or conduct management activities that would not be consistent with the interests of Multinet.

PIES provide Multinet with day-to-day management services under a contract entitled Multinet Management Services Agreement, dated 14 July 2003. Equity interests in PIES are held equally by MGH, UED and Alinta Networks Holdings, and of the three directors, one is on the board of MGH/UED, one is on the board of DUET and the other is on the board of Alinta. These structural attributes would appear to indicate that PIES and MGH are not a single economic entity and so it is important to undertake a further examination of the incentives PIES employees have to act on behalf of Multinet as opposed to Alinta. I have been provided with confidential information relevant to this consideration which is set out in the Confidential Appendices A and B.

Based on this information I conclude that the commercial management structure of Multinet operates only for the benefit of Multinet. No evidence that has been made available to me would support the conclusion that the management of Multinet has any incentive to enter into or maintain an agreement that is inconsistent with the interests of Multinet.

8.2.1.2.4. Operational tensions

It would be consistent with the existence of an arm's-length commercial arrangement to observe a degree of commercial tension between the parties over a period of time. Such commercial tension would not generally be a feature of an arrangement entered into with the intention of transfer pricing since, in that circumstance, one would expect the interests of the parties to be sufficiently aligned for there to be little ground for dispute.

I have received documentation from Multinet indicating that there are considerable tensions present in the commercial relationship between Multinet and AAM. These are all of a recent nature, the most significant of which has culminated in a writ being served on AAM requiring it to reveal information regarding its cost of service under the OSA.[116, 117]

Similar commercial tensions have also emerged between UED and AAM. Of particular interest is the disagreement that currently surrounds the renegotiation of the terms and conditions (including fees payable) of the OSA between UED and AAM.

Although the first fee re-determination under the Multinet OSA will not take effect until 1 July 2008 it would be reasonable to suppose that similar competing tensions will arise in this negotiation process.

8.2.1.2.5. Ongoing incentive conclusion

In my opinion, the corporate and commercial management structures in place within Multinet, coupled with the emergence of commercial tension between the parties, limit both the opportunity and incentive for Multinet to allow any transfer pricing to occur via the OSA. This conclusion is in keeping with the ESC's finding that Multinet and AAM are not currently operating as a single economic entity.

8.2.1.3. Price review provisions

In my opinion the scope of the price review provisions contained in the OSA afford Multinet and AAM the opportunity to re-negotiate the contract price in an unfettered manner for the following reasons:

- the price review provisions which Multinet and AAM are required to have regard to when re-negotiating the contract price (clauses 5.2(a)(i)-(iv)) are wide ranging and include factors that are:
  - purely historic in focus, ie, redundancy and restructuring costs incurred in the initial period (5.2(a)(iii)));
  - forward looking in nature, ie, efficiencies to be achieved over the first renewal period (5.2(a)(ii));

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116 In the case of *Multinet Gas (DB No 1) Pty Ltd & Multinet Gas (DB No 2) Pty Ltd v Alinta Asset Management Pty Ltd & Anor*, Supreme Court of Victoria Proceeding No 4712 of 2007.

117 Evidence of other tensions that has been drawn to my attention includes:

- a disagreement relating to the provision of invoices for services provided by AAM. Multinet and UED reported receiving inadequate invoice support from AAM for expenditure undertaken on its behalf. As a result Multinet has withheld payment of various invoices that were deemed unsatisfactory (see Letter entitled *Capital Expenditure – UEDH and Multinet*, dated 1 November 2006, Letter entitled *Project Records and Invoice Support*, dated 10 January 2007, Letter entitled *Invoice Approval – Capital Expenditure – December 2006 Invoices*, dated 29 January 2007 and Letter entitled *AAM Claims Under The OSA*, dated 9 February 2007);
- concerns raised by Multinet regarding the performance of AAM under the OSA. In particular Multinet was concerned that AAM was not maintaining adequate project management plans for several major capex projects. Multinet requested that it be provided with such plans to enable it to review the projects (see Letter entitled *Project Management Documentation for Key Business Projects*, dated 19 July 2006); and
- disagreements about a number of variation claims made by Alinta under the Multinet and UED OSAs with Multinet only agreeing to settle a sub-set of these variations (see Letter entitled *AAM Variation Claims Under Operating Services Agreements (OSA) With United Energy Distribution Network (UED) and Multinet Distribution Network (MGH)*, dated 30 August 2006).

  - designed to take into account changes since the contract price was originally set, ie, reasonable changes in costs (5.2(a)(ii)) and changes in the scope of services (5.2(a)(iv)); and
  - designed to take into account new external information, ie, the outcome of the 2008 to 2012 access arrangement review.
- although some of these factors are focused on the past, these historic factors inform but do not bind either Multinet or AAM to the previously agreed contract price; and
- the price review provisions that an arbiter is required to have regard to are equally wide ranging.

The scope of these price review provisions are, in my opinion, sufficiently broad to enable Multinet and AAM to re-negotiate the opex and capex fees in the 2008 negotiations in a manner that is not constrained by the previously agreed fees.

I understand that the ESC has expressed some concerns about the ability of a distributor to negotiate an efficient contract price where it is unaware of the actual costs incurred by the contractor. The assumption that the buyer must have access to the contractor's costs (*sans* margin) to enable efficient contracting, in my opinion, overlooks the reality of commercial contracting which typically involves some degree of information asymmetry between buyers and suppliers of services. This is not a unique phenomenon and there are many ways in which the information asymmetry can be ameliorated including, amongst others:

- employing an industry specialist, eg, an engineer to assist in developing an estimate of the efficient costs of service delivery;
- benchmarking the contract price against published list prices;
- obtaining quotes from other contractors; and
- being able to observe the outturn costs of other contractors in the industry.

Overall, in my opinion the concern expressed by the ESC in relation to the lack of transparency implicit in the OSA is somewhat overstated. I disagree that a pre-condition for being able to negotiate an efficient contract price is knowledge of the contractor's costs.

8.2.1.4. Conclusion

On the strength of the material I have reviewed, in my opinion, there is no basis to conclude that either:

- Multinet and Alinta (or AAM) were operating as a single economic entity when the OSA was entered or that they are currently operating as a single economic entity; or
- the $16 million payment made to Multinet's former shareholders represented compensation in return for the shareholders agreeing to pay an artificially inflated contract price.

Accordingly, in my opinion Multinet had no incentive to agree to pay an artificially inflated contract price at the time the OSA was entered into. The corporate and commercial management structures in place within Multinet, coupled with the emergence of commercial tension between the parties, will also limit both the opportunity and incentive for Multinet to allow any transfer pricing to occur by means of the OSA at the next price review.

Having passed the first limb of my presumption threshold, in my opinion the OSA should be presumed to be consistent with the Code, subject to a consideration of whether:

- the contract price relates wholly to the provision of the Reference Service; and
- the contractual features are consistent with the criteria set out in sections 8.37 and 8.16(a)(i) of the Code.

On the first of these considerations no information has been provided to me that would indicate that the opex fee payable under the OSA does not wholly relate to the provision of the Reference Service.

On the second consideration, I am aware that the ESC considers that users will attain no efficiency savings under the OSA:[118]

> 'Firstly, under the OSA Multinet has permitted AAM to retain all savings below the contracted fixed price. Furthermore, as Multinet does not have transparent access to the actual costs of AAM, it is not in a position to use the revealed costs to reset its contract price for the next period. Correspondingly, if the Commission were only to rely on the contract price, then Users would gain no benefit from any efficiency savings. It is difficult to see how the structure of the OSA could be more inconsistent with the regulatory efficiency incentive framework.'

I disagree with this conclusion. First, I noted in the preceding section that transparent access to the actual costs of AAM, or for that matter any contractor, is not a pre-condition for efficient contracting. Second, while the contract price is largely fixed for a defined period of time, it does not follow that there is not and cannot be any sharing of efficiencies. Many commercial transactions are conducted with the price for services fixed over a specified period. Such prices inevitably reflect both the anticipated future efficiency gains when they are first set, and the realisation of efficiency gains when they are re-determined. By appearing to overlook this simple property of prices set over fixed terms, the ESC's discussion of this subject takes an unnecessarily restrictive view of efficiency gain, as being only those that are in the form of differences between the contract price, as fixed for a particular period, and outturn costs. In reality, the price struck under the OSA or any other fixed term contract will reflect a sharing of expected efficiency gains.

In any case, the price review provisions under the OSA require specific consideration be given to the efficiencies to be achieved over the first renewal period (5.2(a)(ii)). This implies that forward looking efficiencies are to be incorporated into the contract price and so users will share in further expected efficiency gains.

In view of the foregoing I am satisfied that the OSA passes the presumption threshold and in my opinion the contract should be assumed to be consistent with section 8.37 of the Code.

118 Essential Services Commission, *Gas Access Arrangement Review 2008-2012: Draft Decision*, August 2007, p75.

8.2.2. Evidence that the OSA is More Likely to Deliver Lower Costs

On page 76 of its Draft Decision the ESC has claimed that there was no evidence before it that demonstrated:

- the OSA has delivered, or is more likely to be able to deliver, lower costs than would be the case had Multinet continued to undertake the operation and management of its own network; or
- that Multinet management held this view at the time that it entered into the OSA.

On the first of these issues I am aware that the ESC was provided with a report prepared by Meyrick and Associates ('the Meyrick report') commenting on the total factor productivity ('TFP') performance in the gas distribution industry.[119] I have not reviewed the analysis conducted in that report and so am not in a position to reach an independent conclusion on either its robustness or its accuracy. Assuming that the analysis in the Meyrick report is robust it indicates that the O&M partial productivity index has grown at a faster rate since the commencement of the OSA in mid 2003.[120] This implies that AAM has been able to achieve greater levels of operation and maintenance efficiency than Multinet had previously been able to attain. Thus, it could be inferred that the OSA has delivered lower costs and a greater sharing of efficiency gains than would have been the case had Multinet continued to undertake the operation and management of its own network.

On the second consideration cited by the ESC, I am aware that there is publicly available information which indicates that the fees set at the commencement of the contract were "in line with typical pre-acquisition operating expenditure levels".[121] Given the largely fixed cost nature of this contract and the transfer of expenditure related risks this statement indicates that, on a risk-adjusted basis, the contract price was at the time lower than it had been when the services were provided in-house. This would suggest that Multinet management ***did hold*** the view that the contract would result in a lower risk-adjusted cost than Multinet had been able to achieve in-house to that point.

Information contained in Peter Lowe's affidavit also indicates that AMPCI management were concerned that the business would face cost increases in the future as the business stabilised and so setting the contract price at historic levels through a fixed price contract was viewed as a 'good deal for AMPCI'.

8.2.3. Method Used to Estimate the Cost of In-House Provision

I have noted previously that the ESC sought to estimate the cost of in-house provision by deducting an estimate of the margin generated by AAM from the 2004 - 2006 (9.2 per cent) from the contract price.

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[119] Meyrick and Associates, *The Total Factor Productivity Performances of Victoria's Gas Distribution Industry*, 23 March 2007.

[120] Meyrick and Associates, *The Total Factor Productivity Performances of Victoria's Gas Distribution Industry*, 23 March 2007, p33.

[121] AMP Capital Investors and Macquarie Bank, DUET Supplementary Product Disclosure Statement for the Initial Public Offering of DUET, 28 June 2004, p94.

In my opinion, the approach adopted by the ESC has a number of shortcomings, not least of which is the deviation from the framework that it stated it would apply when examining the outsourcing arrangements. By equating the in-house cost of provision to the 'actual costs' incurred by AAM the ESC has effectively circumvented any consideration of whether AAM would *actually* be able to achieve lower expected costs than those that would be incurred in-house and in so doing has overlooked a critical element of its stated framework.

A second shortcoming is the method used by the ESC to estimate the 'actual costs' incurred by AAM. In my opinion the approach adopted by the ESC is likely to potentially result in the underestimation of the full economic costs that would be incurred by Multinet if it were to carry out the services specified in the OSA in-house.

My specific concerns in relation to these two issues are set out in the following two sections.

8.2.3.1. Would AAM be able to achieve lower expected costs than Multinet?

On page 55 of the *Draft Decision* the ESC acknowledges the importance of examining whether or not the contractor would be able to achieve lower expected costs than the distributor and states that in addition to considering the contract and the contract payments it will also consider:

- § whether AAM is able to provide the services at a lower cost than Multinet could obtain elsewhere;
- § the efficiencies derived by AAM over the life of the contract; and
- § the manner by which the OSA provides for the allocation of risk between Multinet and AAM.

Notwithstanding the acknowledged importance of these issues, the ESC has *not* considered them. Instead, it deviates from its stated framework by simply equating the cost that would be incurred by Multinet if it were to provide the services under the OSA with an estimate of the actual costs incurred by AAM. In so doing, the ESC has implicitly assumed that Multinet would have access to the same level of economies of scale and scope and 'know how', and would incur the same costs as AAM in providing the services in-house. The basis for this assumption is unclear and, given its importance, I have sought to examine the issue further.

8.2.3.1.1. Benefits to Multinet from contracting with AAM

The OSA is a largely fixed price contract and so when entering into the OSA, AAM took on the expenditure-related risks that had previously been borne by Multinet. The transfer of this risk coupled with the fact that the fees established at the commencement of the contract were broadly 'in line with typical pre-acquisition operating expenditure levels'[122] means that AAM was able to offer what Multinet considered to be a lower risk-adjusted contract price than would have been available if the services were provided in-house.

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122 AMP Capital Investors and Macquarie Bank, DUET Supplementary Product Disclosure Statement for the Initial Public Offering of DUET, 28 June 2004, p94.

This is confirmed by statements contained in Peter Lowe's affidavit. Peter Lowe has stated that at the time the contract was negotiated there was a concern that the business was at risk of facing cost increases and so the negotiation of a contract price that was largely fixed at historic expenditure levels was viewed as a 'good deal for AMPCI'.

Since entering into the OSA AAM has developed considerable expertise in providing asset management services to distribution and transmission assets of gas and electricity infrastructure providers and obtained contracts to provide operations and maintenance services to the Eastern Gas Pipeline, Tasmanian Gas Pipeline, Queensland Gas Pipeline, Dampier to Bunbury Gas Pipeline, UED and AlintaGas Networks.[123] The significant breadth of these operations means that, to the extent there are economies of scale or scope in the provision of such services or other intangible assets such as 'know-how', then AAM is likely to be able to take advantage of these.

The availability of economies of scale and scope in this area was highlighted in a recent press release issued by Alinta.[124] In commenting on the merger between itself and AGL and the integration of AAM with AGL's asset management subsidiary, Agility, Alinta stated:

> 'Alinta now expects to achieve $70 million in annual cost savings having originally forecast $55 million. The vast majority of the cost savings ($65 million) are expected to be derived from the integration of Alinta Asset Management and Agility.'

This statement indicates that the most significant source of synergies arising from the merger of Alinta and AGL have been in the area of asset management. This outcome is consistent with there being significant economies of scale and scope for AAM in this industry. It follows that AAM could be expected to be able to meet its obligations under the OSA at a materially lower cost than would be incurred by Multinet if it were to provide the same services in-house.

The fact that AAM provides services across a portfolio of contracts also means that it may be in a better position to absorb cost overruns on any of its particular outsourcing agreements and, as a consequence, may be able to provide the services for a lower fixed fee than the in-house cost of provision Multinet would otherwise have incurred.

I also understand that results presented in the Meyrick report indicate that Multinet's TFP index has exceeded the average set by the Victorian distributors over the two sample periods 1998-2006 and 2002-2006 (2.94 per cent versus 2.53 per cent for 1998-2006 and 2.91 per cent versus 2.70 per cent for 2002-2006). Although Multinet's overall TFP has slowed somewhat in the last five years, the O&M partial productivity index has grown at a faster rate since 2004.

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123 I understand that it is intended that once the sale of Alinta to Babcock & Brown and Singapore Power is completed the asset management arm of Alinta will be separated into east coast and west coast operations with Singapore Power being the ultimate holding company for the east coast asset management arm and Babcock & Brown being responsible for the west coast operations.

124 Alinta News Release dated 28 January 2007, http://www.alinta.net.au/investor/newsRoom/newsReleases/2007/070228.aspx.

The attainment of these efficiencies can be seen in the performance of Multinet relative to the benchmarks set by the ESC in the 2003-2007 Gas Access Arrangement Review. Multinet has provided me with information that indicates its actual costs were between 9 and 10 per cent lower than the benchmarks.[125] This fact was also recognised in paragraph 301 of Justice Hollingworth's recent decision:

> 'During the term of the OSA which coincides with the 2003 to 2007 regulatory period, Multinet has in fact significantly bettered the benchmarks set by the ESC in setting the relevant tariff.'

Given the largely fixed cost nature of the outsourcing arrangement with AAM, these results lead to the conclusion that either:

§ significant operating expenditure efficiencies have been gained since the formation of the OSA; and/or

§ AAM misjudged the price it would require to perform the services and so the observed 'efficiencies' actually reflect losses that AAM has incurred in providing services under the OSA, which would manifest themselves in negative margins under a fixed cost contract.

Irrespective of which of these two possibilities deserves more weight, it is apparent that significant benefits have been attained by Multinet over the period, and that these will be available to its customers under the forthcoming access arrangement period by means of the ESC's efficiency carryover mechanism.

In my opinion, the sum of the above considerations coupled with the statements contained in Peter Lowe's affidavit suggest that it is reasonable to conclude that:

§ at the time the contract was entered into the price payable under the OSA was lower on a risk-adjusted basis than the costs that Multinet would have expected to have incurred had it undertaken the services in-house; and

§ going forward one would expect this to continue given the economies of scale and scope AAM has likely been able to attain since entering into the contract.

The results of the TFP study and the comparison of Multinet's actual performance with the ESC's opex and capex benchmarks over 2003-2007 also support the conclusion that the economies of scale and scope likely to be available to AAM will enable it to meet its obligations under the OSA at a materially lower cost than would in all likelihood be incurred by Multinet if the services were to have been provided in-house.

8.2.3.2. Method used to estimate the cost of in-house provision

Notwithstanding the ESC's use of a margin at the lower end of its identified range, I do not consider that this approach is likely to provide a reasonable estimate of the likely in-house costs to Multinet of providing an equivalent service. Put simply, there is no reason in principle to believe that deducting an average accounting margin that AAM earns across its

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125 *Multinet opex (corrected).xls*, received from Multinet on 13 March 2007.

portfolio of contracts – albeit at the 'lower end' of the range – will generate a cost estimate that reflects the full economic costs likely to be incurred by Multinet if it were to carry out the services specified in the OSA. There are a number of reasons for this.

First, as the ESC itself concedes, no explicit consideration has been given to the allowance required for common costs or a return on or of assets owned by AAM and employed in the provision of the services. Selecting a 'low-end' margin estimate does not, in my opinion, adequately address this issue.

Second, the margin earned by AAM across its portfolio of contracts may arise in large part through scale and scope economies or other efficiencies (including 'know how') that Multinet could not achieve through in-house provision. A cost estimate based on the deduction of such a margin may therefore give rise to an unrealistic estimate of the cost that Multinet could feasibly achieve.

Third, the 9.2 per cent margin estimate has been calculated by reference to the margin earned across AAM's entire portfolio of contracts. I understand that AAM has a number of outsourcing contracts in place with a range of clients and that the pricing structures adopted within these contracts involve both the fixed price and cost pass through forms. This diversity of clients and contract types mean that AAM may earn superior margins on one contract while potentially also earning negative margins on another contract. Thus the overall average cannot be said to be representative of the margin earned on any one particular contract. This is of particular importance in the case of the OSA given its largely fixed cost nature, which directly exposes AAM to the risk that outturn costs will be higher than the fixed contract price and the attendant risk of earning negative margins.

It is worth noting in this context that I have not been provided with any information about the *ex post* margins that AAM has earned over the period of the OSA. However, even in the absence of this information it is quite clear that under a fixed cost contract, the margin AAM actually receives under the OSA will vary from year to year, and may even be negative in some years, eg, if outturn costs diverge significantly from the forecast costs used to derive the fixed fees. Against this backdrop it is difficult, in my opinion, to draw any inference about the likely margin earned under the OSA from the average margin earned across AAM's portfolio of contracts.

Fourth, the approach appears to overlook the allowance that AAM would require to insure itself (either through an external underwriter or through self insurance) against the risks of cost overruns. While one would not need to take this into account if it involved the estimate of the direct costs including cost overruns (ie, the approach proposed by Mr Balchin) it is a factor that must be taken into account when one seeks to estimate actual costs by simply deducting an estimated margin from the contract price. A cost estimate that does not factor such an allowance into the assessment will give rise to an unrealistic estimate of the cost that Multinet could feasibly achieve.

Finally, it would appear that the ESC's estimate of the margin earned by AAM over the period 2004-2006 is materially higher than the comparable earnings before interest and tax (EBIT) margins calculated by both NERA and the Allen Consulting Group (ACG) in their respective reports entitled "Benchmarking contractor's profit margins" and "Benchmarking of Contractors' Margins – Review of NERA and PricewaterhouseCoopers Reports". Both the NERA and ACG reports estimated that the margin earned by AAM over the period 2004 – 2006 ranged from 8.5 - 13 per cent (average 10.7 per cent) while the ESC's estimates ranged from 9.2 - 14.5 per cent (average 11.6 per cent). I have been unable to ascertain the source of this difference.[126]

8.2.4. Conclusion on the ESC's Assessment

Overall, in my opinion the approach adopted by the ESC in its *Draft Decision* and its findings in relation to the Multinet-AAM OSA have a number of shortcomings. These shortcomings potentially give rise to an estimate of forecast non-capital costs for the 2008-12 period that is *less* than that which would be incurred by a prudent service provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service. The consequence is that the reference tariffs for the 2008-2012 access arrangement period may be lower than those that would be required by a prudent service provider, acting efficiently, and so fail to ensure that:

- Multinet is provided with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service (section 8.1(a));
- the outcome of a competitive market is replicated (section 8.1(b));
- tariffs are efficient in both level and structure (section 8.1(e)); and
- Multinet's investment decisions in the distribution system and the investment decisions in upstream and downstream industries were not distorted (section 8.1(d)).

There is also a risk that providing reference tariffs that are lower than those that would be required by a prudent service provider will affect the safe and reliable operation of the distribution system contrary to section 8.1(c).

In the longer term the ESC's approach has the potential to encourage in-house provision even where the costs of in-house provision are higher than those that would be incurred if the services were outsourced. If this were to occur then any incentive the service provider had to reduce costs would be adversely affected (contrary to section 8.1(f)) and investment decisions in the pipeline would be distorted (contrary to section 8.1(d)).

In summary and in response to the first matter Multinet has asked me to consider, I do not consider the approach adopted by the ESC in determining the benchmark allowance for the costs of services provided to Multinet under the OSA is consistent with the requirements of the Code.

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[126] I have reviewed Alinta's annual reports over this period in an attempt to ascertain the source of the difference between our estimates and it would appear that the difference stems from the ESC's profit before tax estimates which ranged from $28.455 million to $54.585 million. I have been unable to verify these estimates in the annual reports and note that the EBIT estimates reported in both the NERA and ACG reports ranged from $41.495 million to $56.850 million over this period. See Allen Consulting Group, Benchmarking of Contractors' Margins – Review of NERA and PricewaterhouseCoopers Reports, July 2007, pg. 32 and NERA, Response to the Allen Consulting Group's Review of NERA's Benchmarking of Contractors' Margins Critique, October 2007, p12.

8.3. Alternative Methods for Estimating Multinet's Forecast Non-Capital Costs Arising from the OSA Over 2008-12

The second matter Multinet has asked me to consider is how it could derive its forecast of non-capital costs arising from the OSA in order to satisfy the Code. Although I have formed the view that the contract price payable for non-capital costs under the OSA should be viewed as being consistent with the Code, I have considered this matter using the criteria set out in the second inquiry phase of my proposed framework, ie, the in-house cost versus contract price inquiry phase. This inquiry phase entails estimating the in-house cost using the appropriate counterfactual and then comparing this to the contract price to ascertain whether the contract price is less than or equal to the risk-adjusted cost of in-house provision.

In light of the shortcomings in the approach employed by the ESC in its *Draft Decision* identified in the preceding section, I consider that it is useful to use the alternative methodologies that I briefly described in section 5.2.2 under both the status quo and stand-alone counterfactuals. The first alternative involves a 'ground-up' estimate of Multinet's costs, whereas the second uses the *contractor's costs* as a starting point. In keeping with the ESC's approach, each methodology uses 2006 as its reference point. In my opinion, these alternatives will yield a more robust estimate of the cost that Multinet would have incurred providing the services currently provided by AAM under the OSA.[127]

8.3.1. 'Ground-up' Estimate of Multinet's Costs

The objective of this methodology is to estimate the costs Multinet would incur if it were to undertake the services set out in the OSA as at 2006, using *its own costs* as a starting point. Figure 8.1 summarises the various cost-categories that together comprise the total 'ground-up' cost estimate of in-house provision of these services under a 'status-quo' counterfactual. The 'status-quo' in this case takes Multinet's business structure 'as is' in 2006, and so includes United Energy Distribution (UED) and assumes a fully in-sourced provision of the services provided under the OSA.

As Figure 8.1 illustrates to the extent that AAM currently owns and employs assets in performing the OSA for Multinet (eg, vehicles, computers, etc), Multinet would need to acquire additional capital to perform the services in-house and secure a return on and of those assets. Accordingly, it will likely be necessary to estimate an appropriate allowance for the return on capital and depreciation 'blocks'. The direct and common cost 'blocks' will also need to be estimated. In so doing, it will be important to be mindful of any scale and/or scope economies or other efficiencies that Multinet is likely to obtain through undertaking the same services at UED, including those that would be expected to result in lower direct costs and/or common costs, including any synergies or procurement benefits.

127 Another alternative would involve benchmarking the OSA contract price against other comparable contract payments. However, given the size of the contract it is unlikely that there would be other comparable contracts against which it could be benchmarked.

Figure 8.1: Ground-up Estimate of Cost of Providing OSA Services In-house (Status Quo Counterfactual)

Multinet cost of providing services under the OSA (status quo counterfactual)

Direct costs of providing services in-house.	**Share of Multinet's common costs**, allocated between Multinet & UED	**Return on assets** that AAM currently owns and Multinet requires	**Depreciation of assets** that AAM currently owns and Multinet requires

Figure 8.2 summarises the various cost-categories that should together comprise the total 'ground-up' cost estimate of in-house provision of services under the OSA by Multinet under a 'stand-alone business' counterfactual. In this case it is assumed that Multinet *provides only the reference service in question* and does not also operate UED. The principal difference from the status quo counterfactual is that because Multinet is assumed to operate no related businesses *all* of the common costs incurred providing the OSA services in-house are included in the estimate. Under this alternative Multinet would also be expected to obtain fewer scale economies (and likely no scope economies) than in the status quo counterfactual in which it also operates UED. In other words, the direct and common cost estimates would likely be greater. [128]

Figure 8.2: Ground-up Estimate of Cost of Providing OSA Services In-house (Stand-alone Business Counterfactual)

Multinet cost providing services under the OSA (stand-alone business counterfactual)

Direct costs of providing services in-house.	**Common costs** of providing services in-house	**Return on assets** that AAM currently owns and Multinet requires	**Depreciation of assets** that AAM currently owns and Multinet requires

8.3.2. AAM's Adjusted Costs

The objective of this methodology is to estimate what Multinet's in-house cost of providing the services under the OSA would have been, as at 2006, *using AAM's costs* as a starting

[128] To estimate the extent to which economies of scale and scope are attainable across numerous businesses (as required by the status quo counterfactual) one could undertake a ground up estimate of the stand-alone costs and then deduct an allowance for the economies of scale and scope that would otherwise be available to it from operating its additional businesses. Alternatively, the stand-alone cost of providing the service could be developed across all businesses and then an allocation made to the regulated business to estimate the status-quo cost attributable to that business. The difference between these two alternatives is that under the first economies of scale and scope are estimated explicitly while under the second approach these are estimated implicitly.

point and adjusting for scale and scope economies obtained by AAM that ***could not feasibly be attained by Multinet***. Figure 8.3 summarises the various cost-categories that should together comprise the total cost of in-house provision of OSA services for Multinet which includes:

- the direct costs of providing services to Multinet including any cost overruns (thereby accounting for any asymmetric risk encountered by AAM in undertaking the OSA);
- the share of AAM's total common costs allocated to Multinet; and
- the return on and of assets used to supply services to Multinet.

Under this alternative it will be necessary to estimate the economies of scale and scope that AAM obtains through its operations and to examine whether they are feasibly obtainable by Multinet through in-house provision. The magnitude of the obtainable economies will likely be influenced by whether a 'status quo' or a 'stand-alone business' counterfactual is assumed, since some of the benefits obtained though AAM's portfolio of contracts may be more readily available to Multinet by virtue of it also operating UED.

Figure 8.3: In-house Cost of Providing OSA Services using AAM's Costs

In-house cost of providing OSA services

Direct costs of providing services to Multinet, including any cost overruns)	**Share of AAM's total common costs**, allocated on some basis to Multinet	**Return on assets** used to supply services to Multinet (assuming not covered elsewhere)	**Depreciation of assets** used to supply services to Multinet (assuming not covered elsewhere)	**Economies of scale & scope** unattainable by Multinet	**Other margin**, eg, return to 'know-how'

Regardless of the assumed counterfactual, quantifying scale and scope economies is likely to be challenging. Examples of potential evidence that might be considered in this regard include:

- ASX announcements made by Alinta on the synergy benefits achieved through any of its acquisitions;
- detailed case-studies of particular transactions (eg, the Agility acquisition) that provide specific examples of synergy benefits actually obtained through particular acquisitions, including for example:
  - any labour force consolidations;
  - savings through real-estate co-location;
  - synergies through sharing back-office systems; and
  - procurement benefits

  These benefits would then need to be netted off against any one-off amortised transitional costs associated with achieving the economies cited above; and

- differences between the partial factor productivity attained by Multinet in the period leading up to the OSA and those achieved by AAM following the commencement of the contract.

8.3.3. Conclusion on Alternative Methodologies

In my opinion, the methodologies I have put forward in this section will result in estimates of non-capital costs associated with the OSA that are consistent with a prudent service provider, acting efficiently, in accordance with accepted and good industry practice, and to achieve the lowest sustainable cost of delivering the Reference Service (consistent with sections 8.37 and 8.16(a)(i)).

Consistent with the last aspect of my assessment framework, the estimates derived from these methodologies should be compared with the contract price. Where the risk adjusted cost of in-house provision derived from these methodologies is greater than the non-capital cost component of the OSA then the contract price should be accepted as the basis for setting forecast non-capital costs for the 2008-2012 access arrangement period. Where the risk adjusted cost of in-house provision is less than the non-capital cost component of the OSA, then consideration should be given to whether there were intervening events that may have resulted in the expectations surrounding the risk adjusted in-house cost diverging from what they were at the time the service provider agreed to pay the contract price. If there have been no such events then the in-house cost of provision should be utilised for the purposes of establishing forecast non-capital costs for the 2008-2012 period.

The application of the risk adjusted in-house cost versus contract price test will in my opinion ensure that the reference tariffs over the 2008-2012 period are efficient in both level and structure (section 8.1(e)) and will in turn ensure that:

- Multinet is provided with the opportunity to earn a stream of revenue that recovers the efficient costs of delivering the Reference Service over the expected life of the assets used in delivering that Service (section 8.1(a));
- the outcome of a competitive market is replicated (section 8.1(b)); and
- Multinet's investment decisions in the distribution system will not be distorted and that investments in upstream and downstream industries will similarly not be distorted (section 8.1(d)).

Moreover, the provision of reference tariffs that are calculated by reference to prudently and efficiently incurred non-capital costs is not inconsistent with:

- ensuring the safe and reliable operation of the pipeline (section 8.1(c)); or
- providing Multinet with an incentive to reduce costs and develop the market for Reference Services (section 8.1(f)).

9. Declaration

I have read the Guidelines for Expert Witnesses in Proceedings of the Federal Court of Australia and confirm that I have made all inquiries that I believe are desirable and no matters of significance which I regard as relevant have, to the best of my knowledge, been withheld.

Appendix A. Information Confidential to Multinet

[This section has been left intentionally blank]

Appendix B. Information Confidential to AAM

[This section has been left intentionally blank]

Appendix C. Documents Examined

The following list sets out the documents that I have had regard to in the preparation of this report:

ACG, Memorandum: Management fee in the Envestra-OEAM Operating Agreement, 18 June 2006.

Affidavit of Peter Scott Lowe, In the Matter of a Response to a Draft Decision by the Essential Services Commission

Affidavit of Ian Stewart Devenish, In the Matter of a Response to a Draft Decision by the Essential Services Commission

Affidavit of Robert Andrew Forsyth Dunlop, In the Matter of a Response to a Draft Decision by the Essential Services Commission

Agreement for the Provision of Services (EPG), 22 April 2005

Alinta Annual Reports, 2004-2006

Alinta Gas Media Release entitled Aquila Asset Transaction, 23 April 2003

Alinta Gas Media Release entitled Aquila Opportunity, 23 April 2003

Alinta v Essential Services Commission (No 2) [2007] VSC 210.

AMP Capital Investors and Macquarie Bank, DUET Supplementary Product Disclosure Statement for the Initial Public Offering of DUET, 28 June 2004.

ASIC Company Extract for Alinta Limited, 22 October 2007

ASIC Company Extract for Alinta Asset Management Pty Ltd, 22 October 2007

ASIC Company Extract for DUET Investment Holdings Limited, 22 October 2007

ASIC Company Extract for Energy Partnership (Gas) Pty Limited, 22 October 2007

ASIC Company Extract for Multinet Gas (DB No 1) Pty Ltd, 22 October 2007

ASIC Company Extract for Multinet Group Holdings Pty Limited, 22 October 2007

ASIC Company Extract for Pacific Indian Energy Services Pty Ltd, 22 October 2007

ASIC Company Extract for United Energy Distribution Holdings Pty Limited, 22 October 2007

Balchin, J., Statement of Jeffrey John Balchin, Gas Access Arrangement Review Outsourcing by Regulated Businesses

East Australian Pipeline Pty Limited v Australian Competition and Consumer Commission [2007] HCA 44 (27 September 2007).

ESC, Gas Access Arrangement Review 2008-12 Consultation Paper No. 1, May 2006

ESC, Gas Access Arrangement Review 2008-12 Consultation Paper No. 2, October 2006

ESC, Gas Access Arrangement Review 2008-12 Draft Decision, 28 August 2007

ESC, Electricity Distribution Price Review 2006-10: Final Decision Volume 1, October 2006

ESC (2005), Gas Industry Guideline No.17 Regulatory Accounting Information Requirements Issue No.1

Letter entitled AAM Claims Under the OSA, 9 February 2007

Letter entitled AAM Variation Claims Under Operating Services Agreements (OSA) With; United Energy Distribution Network (UED) and Multinet Distribution Network (MGH), 30 August 2006

Letter entitled Capital Expenditure – UEDH and Multinet, 1 November 2006

Letter entitled Invoice Approval – Capital Expenditure – December 2006 Invoices, 29 January 2007

Letter entitled Project Management Documentation for Key Business Projects, 19 July 2006

Letter entitled Project Records and Invoice Support, 10 January 2007

Letter to ESC, 19 April 2006

Meyrick and Associates, The Total Factor Productivity Performance of Victoria's Gas Distribution Industry, 23 March 2007

Multinet Group Holdings Constitution, 27 March 2006

Multinet Group Holdings Shareholders Agreement, 14 July 2003

Multinet Management Services Agreement (PIES), 14 July 2003

Provision of Information and Documentation, 16 September 2005

Re: Dr Ken Michael; ex parte EPIC Energy (WA) Nominees Pty Ltd & Anor [2002] WASCA 231 (23 August 2002)

Services Agreement – Multinet Distribution Network (OSA), July 2003

Shuttleworth (2005), ‘Benchmarking of electricity networks: Practical problems with its use for regulation, *Utilities Policy,* Vol.13

Spreadsheet entitled Multinet Opex (Corrected).xls

Summary of Multinet’s Actual Operating Expenditure (Opex) for the Current Regulatory Period, 23 February 2007

Writ in the matter of Multinet Gas (DB No 1) Pty Ltd & Multinet Gas (DB No 2) Pty Ltd v. Alinta Asset Management Pty Ltd & Anor, Supreme Court of Victoria Proceeding No 4712 of 2007, dated 20 February 2007

Appendix D. Curriculum Vitae

Gregory Houston

Director

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Overview

Gregory Houston has twenty years experience in the economic analysis of markets and the provision of expert advice in litigation, business strategy, and policy contexts. His career as a consulting economist was preceded by periods working in a financial institution and for government.

Greg Houston has directed a wide range of competition, regulatory economics and valuation-related assignments since joining NERA in 1989. His work in the Asia Pacific region principally revolves around the activities of the Australian Competition and Consumer Commission, the New Zealand Commerce Commission and other competition and regulatory agencies, many of whom also number amongst his clients. Greg has advised clients on merger clearance processes, on access to bottleneck facilities, and enforcement proceedings involving allegations of predatory pricing, anti-competitive bundling and price fixing. His industry experience spans the aviation, building products, electricity and gas, grains, payments networks, petroleum, ports, rail transport, retailing, scrap metal and telecommunications sectors. Greg Houston has acted as expert witness in antitrust, regulatory and valuation-related proceedings before the courts, in various arbitration and mediation processes, and before regulatory and judicial bodies in Australia, Fiji, New Zealand, the Philippines, Singapore and the United Kingdom.

In December 2005, Greg was appointed by the Hon Ian Macfarlane, Minister for Industry, Tourism and Resources, to an Expert Panel to advise the Ministerial Council on Energy on achieving harmonisation of the approach to regulation of electricity and gas transmission and distribution infrastructure in Australia.

Greg is member of the United States board of directors of National Economic Research Associates Inc. and head of NERA's Australian operations, which he founded after transferring from London in 1998.

Qualifications

1982 **UNIVERSITY OF CANTERBURY, NEW ZEALAND**
B.Sc.(First Class Honours) in Economics

Prizes and Scholarships

1980 University Junior Scholarship, New Zealand

Career Details

1987-89 **HAMBROS BANK, TREASURY AND CAPITAL MARKETS**
Financial Economist, London

1983-86 **THE TREASURY, FINANCE SECTOR POLICY**
Investigating Officer, Wellington

Project Experience

Competition Policy and Mergers

2007 **Meerkin & Apel/SteriCorp**
Damages assessment
Expert report in the context of an international arbitration on commercial damages arising through alleged non-performance of medical waste processing plant.

2007 **Australian Energy Market Commission, Australia**
Review of the Wholesale Gas and Electricity Markets and Implications for Retail Competition
Retained to provide an overview of the operation and structure of the wholesale gas and electricity markets within the National Electricity Market (NEM) jurisdictions and to identify the issues that the AEMC should consider when assessing the influence of the wholesale markets on competition within the retail gas market in each jurisdiction

2006-07 **Middletons/Confidential Client**
Damages assessment
Retained to provide an expert report on forecast demand and supply conditions and prices for gas, LPG, ethane and crude oil prices and over a ten year period.

2006-07	**Essential Services Commission of South Australia** **Competition assessment** Analysis of the effectiveness of competition in electricity and gas retail markets in South Australia.
2006-07	**Allens Arthur Robinson/Confidential Client** **Merger clearance** Retained to advise in relation to a proposed merger in the board packaging industry.
2006-07	**Johnson Winter & Slattery/Confidential Client** **Damages assessment** Assistance in the assessment of damages arising from alleged cartel conduct.
2006	**Minter Ellison/Confidential Client** **Misuse of market power** Expert economic advice in relation to an alleged breach of section 46 in the telecommunications industry.
2006	**DLA Phillips Fox/Donhad** **Merger clearance** Retained for advice on competition effects of proposed Smorgon/One Steel merger.
2006	**Johnson Winter & Slattery/Qantas Airways** **Competition effects of price fixing agreement** Assessed the competition effects of proposed trans-Tasman networks agreement between Air New Zealand and Qantas Airways.
2006	**Phillips Fox/ACCC** **Vertical foreclosure** Retained by the ACCC as economic expert in the context of proceedings before the Federal Court concerning the acquisition of Patrick Corporation by Toll Holdings. The proceedings were subsequently withdrawn following a S87B undertaking made by Toll.
2006	**Gilbert + Tobin/AWB** **Access to bottleneck facilities** Expert report and testimony in a private arbitration concerning the imposition of throughput fees for grain received at port in South Australia.

2006	**Qantas Airways, Australia/Singapore** **Assessment of Single Economic Entity** Advice to Qantas in relation to its Application for Decision to the Competition Commission of Singapore that the agreement between Qantas and Orangestar does not fall within the ambit of the price-fixing and market sharing provisions of the Singapore Competition Act.
2005-06	**Qantas Airways, Australia/Singapore** **Competition effects of price fixing agreement** Expert report submitted to the Competition Commission of Singapore evaluating the net economic benefits of a price fixing/market sharing agreement, in relation to an application for exemption from the section 34 prohibition in the Competition Act of Singapore.
2005-06	**Phillips Fox/Fortescue Metals Group, Western Australia** **Access to bottleneck facilities** Expert report and testimony in the Federal Court proceedings concerning access to the Mt Newman and Goldsworthy rail lines, serving iron ore export markets in the Pilbara.
2005-06	**Australian Competition Consumer Commission** **Electricity generation market competition** Advice on the competition effects under S50 of the Trade Practices Act of three separate proposed transactions involving the merger of generation plant operating in the national electricity market.
2005	**Gilbert + Tobin/Hong Kong Government, Hong Kong** **Petrol market competition** Director of a NERA team working with Gilbert + Tobin that investigated the extent of competition in the auto-fuel retailing market in Hong Kong.
2005	**Phillips Fox/National Competition Council, Western Australia** **Access and competition in gas production and retail markets** Retained as expert witness in the appeal before the WA Gas Review Board of the decision to revoke coverage under the gas code of the Goldfields pipeline. Proceedings brought by the pipeline operator were subsequently withdrawn.
2004-05	**Gilbert + Tobin/APCA, Australia** **Competition and access to Eftpos system** Retained as economic advisor to the Australian Payments Clearing Association in connection with the development of an access regime for the debit card/Eftpos system, so as to address a range of competition concerns expressed by the Reserve Bank of Australia and

the ACCC. This involved the provision of an expert report examining barriers to entry to Eftpos and the extent to which these can be overcome by an access regime.

2003-05 **Phillips Fox/Confidential Client, New South Wales**

Misuse of market power

Retained to assist with all economic aspects of a potential Federal Court action under S46 of the Trade Practices Act alleging misuse of market power in the rail freight market.

2004 **Clayton Utz/Sydney Water Corporation, New South Wales**

Competition in sewage treatment

Retained to assist with Sydney Water's response to the application to have Sydney's waste water reticulation network declared under Part IIIa of the Trade Practices Act, on the basis this will promote competition in the retail market for sewage collection services.

2004 **Blake Dawson Waldron/Boral, Australia**

Competition analysis of cement market

Directed a NERA team advising on Boral's proposed acquisition of Adelaide Brighton Ltd, a cement industry merger opposed in Federal Court proceedings by the ACCC. Boral subsequently decided not to proceed with the transaction.

2004 **MinterEllison/Singapore Power, Victoria**

Merger clearance

Advice on competition issues arising from the proposed acquisition of TXU's Australian energy sector assets by Singapore Power. This included the submission of an expert report to the ACCC.

2004 **Mallesons Stephen Jaques/Orica, New South Wales**

Competition in gas production and retail markets

Retained as expert witness in the appeal by Orica against the Minister's decision to revoke coverage under the gas code of the substantial part of the Moomba to Sydney gas pipeline. The case was subsequently settled.

2004 **Courts, Fiji**

Merger clearance, abuse of market power

Prepared a report for submission to the Fijian Commerce Commission on the competition implications of the Courts' acquisition of the former Burns Philip retailing business, and related allegations of abuse of market power. The Commission subsequently cleared Courts of all competition concerns.

2003-04	**Mallesons Stephen Jaques/Sydney Airport Corporation, NSW** **Competition in air travel market** Retained as principal expert witness in connection with proceedings before the Australian Competition Tribunal on economic aspects of the application by Virgin Blue for declaration of airside facilities at Sydney Airport under Part IIIa of the Trade Practices Act.
2003-04	**Bartier Perry/ DM Faulkner, New South Wales** **Alleged collusive conduct** Submitted an expert report to the Federal Court in connection with allegations under s45 of the Trade Practices Act of collusive conduct leading to the substantial lessening of competition in the market for scrap metal. The 'substantial lessening of competition' element of this case was subsequently withdrawn.
2002-04	**Essential Services Commission, Victoria** **Effectiveness of competition** Advisor on six separate reviews of the effectiveness of competition and the impact of existing or proposed measures designed to enhance competition in the markets for wholesale gas supply, port channel access services, liquid petroleum gas, retail electricity and gas supplies, and port services.
2003	**Gilbert + Tobin/AGL, Victoria** **Vertical integration in electricity markets** Prepared a report on the international experience of vertical integration of electricity generation and retailing markets, in connection with proceedings brought by AGL against the ACCC. This report examined the principles applied by competition authorities in assessing such developments, and evidence of the subsequent impact on competition.
2002-03	**National Competition Council, Australia** **Gas market competition** Expert report in connection with the application by East Australian Pipeline Limited for revocation of coverage under the Gas Code of the Moomba to Sydney Pipeline System. The report addressed both the design of a test for whether market power was being exercised through pipeline transportation prices substantially in excess of long-run economic cost, and the assessment of existing prices by reference to this principle.
2001-03	**Blake Dawson Waldron/Qantas Airways, Australia** **Alleged predatory conduct** Directed a substantial NERA team advising on all economic aspects of an alleged misuse of market power (section 46 of the Trade Practices Act) in Federal Court proceedings brought against Qantas by the

ACCC. The proceedings were withdrawn soon after responding expert statements were filed.

2002 **Phillips Fox/AWB Limited**

Access and competition in bulk freight transportation

Retained to provide an expert report and testimony on the pricing arrangements for third party access to the rail network and their impact on competition in the related bulk freight transportation services market, preparation for the appeal before the Australian Competition Tribunal of the Minister's decision not to declare the Victorian intra-state rail network, pursuant to Part IIIA of the Trade Practices Act. The case settled prior to the Tribunal hearings.

2002 **Australian Competition and Consumer Commission, Australia**

Anti-competitive bundling or tying strategies

Provided two (published) reports setting out an economic framework for evaluating whether the sale of bundled or tied products may be anti-competitive. These reports define the pre-conditions for such strategies to be anti-competitive, and discuss the potential role and pitfalls of imputation tests for anti-competitive product bundling.

2002 **Minter Ellison/SPI PowerNet, Victoria**

Merger clearance

Advice in connection with a bid for energy sector assets in Victoria on merger clearance under section 50 of the Trade Practices Act.

2001 **Gilbert + Tobin/AGL, New South Wales**

Gas market competition

Advised counsel for AGL in connection with the application by Duke Energy to the Australian Competition Tribunal for review of the decision by the National Competition Council to recommend that the eastern gas pipeline should be subject to price regulation under the national gas code.

2000 **One.Tel, Australia**

Competitive aspects of Mobile Number Portability

Advised on the competitive aspects of proposed procedures for Mobile Number Portability and whether these arrangements breached the Trade Practices Act in relation to substantial lessening of competition.

2000 **Baker & McKenzie/Scottish Power, Victoria**

Impact of consolidation on competition

Expert report submitted to the ACCC on the extent to which the acquisition of the Victorian electricity distribution and retail business, Powercor by an entity with interests in the national electricity market may lead to a 'substantial lessening of competition' in a relevant market.

Regulatory and Financial Analysis

2007	**Ministerial Council on Energy, Australia** **Review of Chapter 5 of the National Electricity Rules** Retained to provide advice on the development of a national framework for connection applications and capital contributions in the context of the National Electricity Rules.
2007	**Powercor/CitiPower, South Australia** **Advice on Related Party Outsourcing Arrangements** Retained to provide advice on the manner by which regulatory concerns surrounding related party outsourcing arrangements may be ameliorated.
2007	**Multinet, Victoria** **Review of Outsourcing Infrastructure Asset Management Contracts** Retained to provide advice on the prudency of outsourcing contracts in the context of the National Gas Code and to benchmark operating margins levied by asset management service providers.
2006-07	**Ministerial Council on Energy, Australia** **Demand Side Response and Distributed Generation Incentives** Conducted a review of the MCE’s proposed initial national electricity distribution network revenue and pricing rules to identify the implications for the efficient use of demand side response and distributed generation by electricity network owners and customers.
2006	**Ministerial Council on Energy, Australia** **Electricity Network Pricing Rules** Advice on the framework for the development of the initial national electricity distribution network pricing rules, in the context of the transition to a single, national economic regulator.
2005-06	**Australian Energy Markets Commission, Australia** **Transmission pricing regime** Advisor to the AEMC’s review of the transmission revenue and pricing rules as required by the new National Electricity Law.

2002-07 **Orion New Zealand Ltd, New Zealand**

Electricity lines regulation

Advisor on all regulatory and economic aspects of the implementation by the Commerce Commission of threshold and control regime for the regulation of New Zealand electricity lines businesses. This role has included assistance with the drafting submissions, the provision of expert reports, and the giving of expert evidence before the Commerce Commission.

2001-07 **Auckland International Airport Limited, New Zealand**

Aeronautical price regulation

Provided various expert reports and advice in relation to the review by the Commerce Commission of the case for introducing price control at Auckland airport and, subsequently, a fundamental review of airport charges due for implementation in 2007.

1998-2006 **Essential Services Commission, Victoria**

Price cap reviews

Wide ranging advice to the Essential Services Commission (formerly the Office of the Regulator-General), on regulatory, financial and strategic issues arising in the context of five separate reviews of price controls applying in the electricity, gas distribution and water sectors in Victoria. This work has encompassed advice on the development of the Commission's work program and public consultation strategy for each review, direct assistance with the drafting of papers for public consultation, the provision of internal papers and analysis on specific aspects of the review, drafting of decision documents, and acting as expert witness in hearings before the Appeal Panel and Victorian Supreme Court.

2004-05 **Ministerial Council of Energy, Australia**

Reform of the national electricity law

Retained for two separate advisory roles in relation to the reform of the institutions and legal framework underpinning the national energy markets. These roles include the appropriate specification of the objectives and rule making test for the national electricity market, and the development of a harmonised framework for distribution and retail regulation.

2004-05 **Johnson Winter Slattery, ETSA Utilities, South Australia**

Price determination

Advice on a wide range of economic and financial issues in the context of ETSA Utilities' application for review of ESCOSA's determination of a five year electricity distribution price cap.

2000-07	**TransGrid, New South Wales** **National electricity market and revenue cap reset** Regulatory advisor to TransGrid on a range of issues arising in the context of the national electricity market (NEM), including: the economics of transmission pricing and investment and its integration with the wholesale energy market, regulatory asset valuation, the cost of capital and TransGrid's 2004 revenue cap reset by the ACCC.
2004	**Deacons/ACCC, Australia** **Implementation of DORC valuation** Prepared a report on the implementation of a cost-based DORC valuation, for submission to the Australian Competition Tribunal in connection with proceedings on the appropriate gas transportation tariffs for the Moomba to Sydney gas pipeline.
2003-04	**Natural Gas Corporation, New Zealand** **Gas pipeline regulation** Advisor in relation to the inquiry by the Commerce Commission into the case for formal economic regulation of gas pipelines. This role includes assistance with the drafting of submissions, the provision of expert reports, and the giving of evidence before the Commerce Commission.
2001-03	**Rail Infrastructure Corporation, New South Wales** **Preparation of access undertaking** Advised on all economic aspects arising in the preparation of an access undertaking for the New South Wales rail network. Issues arising include: pricing principles under a `negotiate and arbitrate' framework, asset valuation, efficient costs, capacity allocation and trading, and cost of capital.
2002	**Clayton Utz/TransGrid, New South Wales** **National Electricity Tribunal hearing** Retained as the principal expert witness in the appeal brought by Murraylink Transmission Company of NEMMCO's decision that TransGrid's proposed South Australia to New South Wales Electricity Interconnector was justified under the national electricity code's 'regulatory test'.
2001-02	**SPI PowerNet, Victoria** **Revenue cap reset** Advisor on all regulatory and economic aspects of SPI PowerNet's application to the ACCC for review of its revenue cap applying from January 2003. This included assistance on regulatory strategy, asset valuation in the context of the transitional provisions of the national

electricity code, drafting and editorial support for the application document, and the conduct of a `devil's advocate' review.

1999-2002 **Sydney Airports Corporation, New South Wales**

Aeronautical pricing notification

Directed all aspects of NERA's advice to Sydney Airports Corporation in relation to its notification to the ACCC of proposed aeronautical charges at Sydney Airport. This work involved the analysis and presentation of pricing and revenue determination principles and their detailed application, through to participation in discussion of such matters at SACL's board, with the ACCC, and in a public consultation forum.

2002 **Corrs Chambers Westgarth/Ofgar, Western Australia**

Economic interpretation of the gas code

Provision of expert report and sworn testimony in the matter of Epic Energy vs Office of the Independent Gas Access Regulator, before the Supreme Court of Western Australia, on the economic interpretation of certain phrases in the natural gas pipelines access code.

2001 **ACCC, Australia**

Determination of local call resale prices

Advised the ACCC regarding the determination of local call resale prices from Telstra's fixed line network. This included providing advice on how the cost of community service obligations should be allocated to competitors with wholesale access to local calls.

1999-2001 **ACCC, Australia**

Cost of capital

Undertook various assignments in relation to the cost of capital for regulated businesses. These included: an analysis of the approach taken by regulators overseas in relation to the treatment of taxation in estimating the WACC, and the use of pre-tax versus post-tax WACC formulations in regulation; and, a survey of regulatory decisions in relation to the cost of capital across a range of international jurisdictions. Two reports have been published by the ACCC.

2000 **Gilbert + Tobin/AGL, South Australia**

Vesting contract terms

Advised AGL SA in connection with its application to the ACCC for revocation and substitution of both vesting contract terms and network pricing provisions for the retail supply of electricity in South Australia.

2000	**Commonwealth Bank of Australia, Australia** **Access arrangements** Advised on the legislative framework for access to essential facilities in Australia in comparison to the frameworks used in the United States, United Kingdom and European Union. This included an assessment of the pricing policies regulators use when setting access tariffs, and relevant case studies from the electricity, telecommunications and transportation industries.
1998, 2000	**Rail Access Corporation, New South Wales** **Regulatory and pricing strategy** Advisor on regulatory and financial issues arising in the context of the 1998/99 IPART review of the NSW rail access regime. Subsequently, prepared two board papers on, first, the principles for commercially sustainable pricing in the context of the NSW access regime and, second, on issues and options for addressing the growing imbalance between costs and revenues, including the probable need to finance a significant increase in capital expenditure.
1998-9	**MWSS Regulatory Office, Philippines** **Regulation by concession** Advised the MWSS Regulatory Office on its response to applications for “extraordinary price adjustments” under the terms of the two, twenty five-year, water and wastewater concession agreements. This involved an assessment of the grounds for the applications, the associated financial impact, and the appropriate rate of return to be applied in determining the consequent price adjustment. Subsequently, provided expert testimony in the arbitration of one applicant’s appeal of the Regulatory Office’s decision.

Valuation and Cost Analysis

2006	**Confidential Client/Australia** **Valuation of digital copyright** Provided oral advice in relation to a negotiation for a licence for digital copyright. The advice included a theoretical discussion of the issues that should be considered in determining fees for a digital copyright licence, including the extent to which digital material should be valued differently to print material and whether the charging mechanism for print is appropriate for digital copyright.
2006	**Minter Ellison/Australian Hotels Association** **Valuation of copyright material** Expert report in the context of proceedings before the Copyright Tribunal concerning the appropriate valuation of the rights to play recorded music in nightclubs and other late night venues.

2005-06	**Minter Ellison and Freehills/Santos** **Gas supply agreement arbitrations** Principal economic expert in two separate arbitrations of the price to apply following review of a major gas supply agreement between the South West Queensland gas producers and, respectively, a large industrial customer and major gas retailer.
2002-03	**ActewAGL, ACT** **Consumer willingness to pay** Directed a one year study of consumers' willingness to pay for a range of attributes for electricity, gas and water services in the ACT. This study involved the use of focus groups, the development of a pilot survey and then the implementation of a stated preference choice modelling survey of household and commercial customer segments for each utility service.
2002-03	**National Electricity Market Management Co, Australia** **Participant Fee Determination** Advice to NEMMCO in the context of its 2003 Determination of the structure of Participant Fees, for the recovery of NEMMCO and NECA's costs from participants in the national electricity market.
2002	**Screenrights, Australia** **Non-market valuation methods** Advice on the range and suitability of revealed preference and stated preference survey methodologies for valuing the retransmission of free to air television broadcasts for the purposes of determining the 'equitable remuneration' to be paid for retransmission of copyright material contained in free-to-air television broadcasts.
2001-03	**Minter Ellison/Optus Networks, New South Wales** **Arbitration of market lease fee** Retained as expert witness in the mediation and then arbitration between Optus Networks and United Energy on the appropriate annual market fee for leasing electricity pole space for the attachment of HFC coaxial cable.
2001	**Gilbert & Tobin/One.Tel, Australia** **Arbitration on the local loop service** Advice on the pricing of Telstra's unconditioned local loop service (ULLS) for use in arbitration.
2001	**Department of Natural Resources and Environment, Victoria** **Efficient pricing of water services** Prepared a report setting out the principles for efficient pricing of urban water services, an evaluation of the structure of existing

wholesale and retail water tariffs in metropolitan Melbourne, and recommended reforms.

1998-2000 **TransGrid and EnergyAustralia, NSW**
Cost effectiveness study of transmission capacity augmentation
Directed a NERA team that conducted a cost effectiveness analysis of alternative options for augmenting transmission capacity to the Sydney CBD area. This included identification and evaluation of alternative transmission, generation and demand side management options, and application of the `regulatory test', as defined in the national electricity code.

Institutional and Regulatory Reform

2006 **Bulk Entitlement Management Committee, Melbourne**
Development of urban water market
Prepared a report for the four Melbourne water businesses on options for the devolution of the management of water entitlements from collective to individual responsibility.

2003-05 **Goldman Sachs/Airport Authority, Hong Kong**
Framework for economic regulation
Lead a team advising on the options and detailed design of the economic regulatory arrangements needed to support the forthcoming privatisation of Hong Kong Airport.

2003-04 **Ministry of Finance, Thailand**
Framework for economic regulation
Lead a team advising on the detailed design and implementation of a framework for the economic regulation of the Thai water sector in order to support the proposed corporatisation and then privatisation of the Metropolitan Water Authority of Bangkok.

2003 **Metrowater and Auckland City, New Zealand**
Water industry reform options
Provided a report on alternative business models for the Auckland City water services supplier, Metrowater, in the context of proposals for structural reform elsewhere in the industry. This report examined the long term drivers of water industry efficiency and the costs and benefits of alternative structural reform options.

2001 **Independent Pricing and Regulatory Tribunal (IPART), NSW**
Review of energy licensing regime
Directed a program of work for in the context of IPART's year-long review of the energy licensing regime in NSW. This review included

the identification - by reference to experience in other state and international jurisdictions - of the most effective regulatory model for the licensing of both network and retail functions in the electricity and gas sector, the development of a compliance monitoring and reporting framework, and an assessment of the need for and nature of minimum service standards.

1999 **Department of Treasury and Finance, Victoria**

Urban water market

Developed a comprehensive proposal for the introduction of tradeable rights for bulk water used to supply metropolitan Melbourne. This involved detailed design of the form and allocation of rights, the role of a weekly spot market to determine storage draw down decisions, the specification of a 'market model' and the institutional arrangements for rights registration, trading, and the operation of an open access transfer system.

1994 **Office of Water Reform, Victoria**

Water markets

Developed a conceptual framework and the detailed requirements for its application to create markets for the trading of water rights across the state of Victoria. The recommendations of this report have underpinned subsequent reforms undertaken by the Victorian government as recently as 2006.

Sworn Testimony, Transcribed Evidence

2006 **Expert report submitted to arbitration proceedings before Sir Daryl Dawson and David Jackson, QC, between Santos and others, and AGL**

Expert report, sworn evidence, November 2006

Expert Evidence before the Federal Court on behalf of Fortescue Metals Group in the matter of BHP Billiton vs National Competition Council and Others

Expert report, sworn evidence, November 2006

Expert report submitted to arbitration proceedings before Sir Daryl Dawson and David Jackson, QC, between Santos and Others, and Xstrata Queensland

Expert report, sworn evidence, September 2006

	Expert evidence before the Copyright Tribunal on behalf of the Australian Hotels Association and others in the matter of PPCA vs AHA and Others Expert report, sworn evidence, May 2006
	Statement submitted to arbitration proceedings before Hon Michael McHugh, AC QC, on the matter of AWB Limited vs ABB GrainLimited Expert report, sworn evidence, 24 May 2006
	Statements submitted to the Appeal Panel, in the matter of the appeal by United Energy Distribution of the Electricity Price Determination of the Essential Services Commission Expert report, sworn evidence, 10 February 2006
2005	**Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on its Notice of Intention to Declare Control of Unison Networks** Transcribed evidence, public hearings, Wellington, 17 November 2005
	Expert evidence on behalf of Orion NZ, at the Commerce Commission's Conference on Asset Valuation choice and the electricity industry disclosure regime Transcribed evidence, public hearings, Wellington, 11 April 2005
2004	**Statements submitted to the Australian Competition Tribunal, in the matter of Virgin Blue Airlines vs Sydney Airport Corporation** Expert reports, sworn evidence, 19-20 October 2004
	Expert evidence on behalf of Orion NZ, at a Commerce Commission's Conference on the ODV Handbook for electricity lines businesses Transcribed evidence, public hearings, Wellington, 26 April 2004
2003	**Expert evidence on behalf of Orion NZ, in response to the Commerce Commission's draft decision on re-setting the price path threshold for electricity lines businesses** Transcribed evidence, public hearings, Wellington, 5 November 2003
	Expert evidence on behalf of NGC Holdings, in response to the Commerce Commission's draft framework paper for the gas control inquiry. Transcribed evidence, public hearings, 3 September 2003

	Affidavit submitted to the Federal Court, in the matter of ACCC vs DM Faulkner and Others Expert report, Federal Court of Australia, May 2003
	Expert evidence on behalf of Orion NZ, in response to the Commerce Commission's draft decision on a targeted control regime for electricity lines businesses Transcribed evidence, public hearings, Wellington, 25 March 2003
2002	**Expert evidence on behalf of Orion NZ, in the Commerce Commission's review of asset valuation methodologies for electricity lines businesses** Transcribed evidence, public hearings, Wellington, 25 November 2002
	Expert evidence on behalf of Optus Networks and Optus Vision Ltd, in the matter of an arbitration with United Energy Ltd Expert report, prior to settlement, 18 October 2002
	Expert statement submitted to the National Electricity Tribunal, in the matter of Murraylink Transmission Company vs NEMMCO, TransGrid, and others Sworn Testimony, National Electricity Tribunal, Melbourne, 26 August 2002
	Expert evidence on behalf of Orion NZ, in the Commerce Commission's review of control regimes for electricity lines businesses Transcribed evidence, public hearings, Wellington, 21 August 2002
	Affidavit submitted to Supreme Court of Western Australia, in the matter of Epic Energy vs Dr Ken Michael – Independent Gas Access Regulator Sworn testimony, Supreme Court of Western Australia, November 2002
2001	**Expert evidence on behalf of Auckland International Airport, in the Commerce Commission's review of airfield price control** Transcribed evidence, public hearings, Wellington, 4-5 September 2001
	Expert evidence on behalf of Optus Networks, in the matter of Optus Networks vs United Energy Mediation before Trevor Morling QC, Sydney, August and September 2001

	Expert evidence on behalf of Sydney Airports Corporation in the Productivity Commission's review of airport regulation Transcribed evidence, public hearings, Melbourne, 3 April 2001
	Affidavit submitted to Supreme Court of Victoria, in the matter of TXU vs Office of the Regulator-General Sworn testimony, Supreme Court of Victoria, 23-26 March 2001
2000	**Evidence on behalf of Sydney Airports Corporation in the aeronautical pricing determination by the ACCC** Transcribed evidence, public forum, Melbourne, 13 December 2000
	Expert Statement on Rural Risk and the Weighted Average Cost of Capital, in the matter of an appeal by Powercor Australia Ltd of the Office of the Regulator-General's Electricity Price Determination 2001-05 Sworn testimony before the Appeal Panel, Melbourne, 13 October 2000
1999	**Affidavit submitted in arbitration proceedings between the MWSS Regulatory Office and Manila Water Company on the cost of capital for the Manila water concession agreements** Sworn testimony, Manila, 20 August 1999
1998	**Expert evidence on behalf of Great Southern Networks in the gas access determination by IPART** Transcribed evidence, Sydney, 12 November 1998
1996	**Expert evidence before the Monopolies and Mergers Commission inquiry into the proposed merger of Wessex Water plc and South West Water plc** Transcribed evidence, London, August 1996
1995	**Expert evidence before the Monopolies and Mergers Commission inquiry into the proposed acquisition of Northumbrian Water plc by Lyonnaise des Faux** Transcribed evidence, London, March 1995

Speeches and Publications

2007	**Assessing the Merits of Early Termination Fees, *Economics of Antitrust: Complex Issues in a Dynamic Economy,* Wu, Lawrence (Ed)** NERA Economic Consulting 2007
	Trade Practices Workshop **Access to Monopoly Infrastructure Under the Trade Practices Act: Current Issues with Part IIIa and Section 46** Conference Paper Co-Author, Canberra, 22 July 2006
2005	**Federal Court Judges' Conference** **Use of Quantitative Methods in Competition Analysis** Paper and speech, Sydney, 20 March 2005
2004	**ACCC Regulation Conference** **Market Power in Utility Industries** Speech, Gold Coast, 29 July 2004
	Australian Water Summit **Integrating Regional and Urban Water Management Strategies** Speech, Melbourne, 25 February 2004
2003	**Assessing the Competitive Effects of Bundling: the Australian Experience, *Economics of Antitrust, New Issues, Questions and Insights*, Wu, Lawrence (Ed)** NERA Economic Consulting, 2004
	Water Infrastructure Conference **Pricing to promote reuse and recycling – Why Pay More for Less?** Speech, Melbourne, 28 July 2003
	ACCC Incentive Regulation and Implementation Seminar **To Index or Not to Index – Is that the Right Question?** Speech, Melbourne, 8 May 2003
	Australian Water Summit **Establishing Water Markets Why? How? What Next?** Speech, Sydney, 27 February 2003
2002 `	**Australian Energy Users Association Conference** **Emerging Themes in Energy Sector Reform – Global and Local** Speech, Melbourne, 15 October 2002

	Australian Conference of Economists **Efficient Transmission: Where to from here?** Conference Paper, Adelaide, 3 October 2002
	ACCC Conference **Foundation Contracts and Greenfields Pipeline Development – an Economic Perspective** Speech, Melbourne 26 July 2002
2001	**IPART Conference, Incentive Regulation at the Crossroads** **Incentive Regulation: at the Cross Roads or Back to the Future?** Speech, Sydney, 5 July 2001
	World Bank Conference on Private Participation in Infrastructure **A Regulatory Perspective** Speech, Beijing, 15 November 2001
	Airports Council International (ACI) World Conference **Role of prices in managing airport congestion** Presentation of paper, Montreal, 11 September 2001
	NSW Power Conference **Electricity transmission pricing and investment** Presentation of paper, Sydney, 30 August 2001
	ACCC Regulation and Investment Conference **International Comparison of Regulated Rates of Return** Speech and presentation of paper, Sydney 26 March 2001

Publicly Available Reports

2007	**Review of the Effectiveness of Energy Retail Market Competition in South Australia** A report for the Essential Services Commission of South Australia, June 2007

2006	**Consistency of the Transmission Rules with the Competition Principles Agreement** A report for the Australian Energy Market Commission, December 2006
	Study of the Hong Kong Auto-fuel Retail Market A report for the Economic Development and Labour Bureau, Hong Kong, April 2006
	Expert Panel on Energy Access Pricing A report to the Ministerial Council on Energy, April 2006
2005	**Intention to Declare Control** A report for Orion, October 2005
	Efficient Investment in Transmission and its Alternatives A report for Mighty River Power, July 2005
	Wealth Transfers in Cost Benefit Analysis A report for Auckland International Airport, January 2005
2003	**Asset Valuation for the Gas Control Inquiry** A report for NGC Holdings, August 2003
	Estimating the Rate of Economic Profit for Electricity Lines Businesses A report for Orion, November 2003
	Inclusion of Competition Benefits in the Regulatory Test A report for TransGrid, April 2003
	Imputation Tests for Bundled Services A Report for the ACCC, January 2003
	Anticompetitive Bundling Strategies A Report for the ACCC, January 2003
2002	**The Hypothetical New Entrant Test in the Context of Assessing the Moomba to Sydney Pipeline Prices** A Report for the ACCC, September 2002
	A Comment on the Commerce Commission's Report: Regulation of Electricity Lines Businesses A Report for Orion, May 2002

Review of Energy Licensing Regimes in NSW: Compliance Monitoring and Reporting Framework
A Report for IPART, March 2002

Review of Energy Licensing Regimes in NSW: Minimum Service Standards
A Report for IPART, January 2002

2001

Review of Energy Licensing Regimes in NSW: Most Effective Regulatory Model
A Report for IPART, November 2001

A Review of Melbourne's Water Tariffs
Report for the Department of Natural Resources and Environment

A Critique of Price Control Study of Airfield Activities
A Report for Auckland International Airport Limited, August 2001

International Comparison of Utilities' Regulated Post Tax Rates of Return in North America, the United Kingdom and Australia
A Report for the Australian Competition and Consumer Commission (ACCC), March 2001

A Critique of Crew and Kleindorfer's Paper Comparing Single and Multi-till Pricing Methodologies
A Report for Sydney Airports Corporation, February 2001

Appendix E. Terms of Reference

Multinet GAS

321 Ferntree Gully Road
Mount Waverley Vic 3149
Australia

29 October 2007

By Email: greg.houston@nera.com

Mr Greg Houston
Director
National Economic Research Associates
GPO Box 5378
Sydney NSW 2001

Dear Mr Houston

Terms of Reference

Multinet Gas (Multinet) as required, submitted a revised Access Arrangement on 30 March 2007. Multinet requests that you prepare an expert report on certain matters arising in relation to the 2008-2012 Gas Access Arrangement Review Draft Decision ('Draft Decision') of the Essential Services Commission ('ESC'). We have previously sent you a draft Terms of Reference on 4 October 2007 in order for you to begin forming your expert opinion. Your report should address the following questions:

1. Please provide your opinion in the three issues listed below:
    a. the consistency of the ESC's approach for determining the benchmark allowance for the cost of services provided to Multinet with the Code;
    b. the manner by which Multinet should derive its forecast operating expenditure for the services provided under the Operating Services Agreement in order to satisfy the Code requirements; and
    c. the inference drawn by the ESC from Justice Hollingworth's decision in Alinta v Essential Services Commission (No2)(2007) VSC 210.

In setting out your opinion, please explain clearly how your approach differs from the approach adopted by the ESC in its Draft Decision and why your approach satisfies the Code requirements. In addressing this question, you should have regard to:

a. Multinet's access arrangement information as submitted to the ESC;
b. the respective abilities of AAM and Multinet to achieve economies of scope and scale in undertaking the activities;
c. the information presently available to Multinet regarding the cost to AAM of providing the OSA services; and
d. any other matters you consider relevant.

As a result of comments made by the ESC in Consultation Paper No 1, it is important for your report to comply with the Federal Court Guidelines for Expert Witnesses (attached). Please read the attached Guidelines and ensure your report complies with the Code.

1. Summarise your experience and qualifications and attach your curriculum vitae.

2. Summarise your instructions and attach this letter of retainer.

3. In the introduction to the report, list the facts, matters and assumptions on which your opinion is based and the source of those facts, matter and assumptions.

4. Acknowledge that you have read the Guidelines.

5. List all reference material and information on which you have relied.

6. Identify any person and their qualifications, who assists you in preparing the report or in carrying out any research or test for the purposes of the report.

7. Include detailed reasons for your opinion.

8. Provide a summary of your opinions.

9. List any limitations, incomplete matters or qualifications to your opinion.

10. At the end of your report, you should include a declaration that you have read the attached Guidelines and that you "*have made all inquiries I believe are desirable and appropriate and that no matters of significance which I regard as relevant have, to the best of my knowledge, been withheld.*"

We look forward to hearing from you.

Yours faithfully

Andrew Schille
Price & Access Arrangements Manager