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FOXTEL's Special Access Undertaking in relation to the Digital Set Top Unit Service

A report prepared for Freehills on behalf of
Seven Network Limited

NERA

Economic Consulting



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Executive Summary

This report examines the special access undertaking ('SAU') lodged by FOXTEL with the Australian Competition and Consumer Commission ('ACCC') in relation to its digital subscription television service. FOXTEL's SAU sets out the proposed terms and conditions under which third party providers of subscription television programs may access its digital set top unit ('STU') service. FOXTEL submits that in providing access to digital subscription television services, it is reasonable for it to limit the supply of conditional access and service information ('CA/SI') services to those retail customers to whom it currently supplies, and continues to supply, a retail subscription television service.

FOXTEL's SAU is accompanied by a range of supporting material, including reports by two economic experts, Mr Henry Ergas of CRA International and Dr Philip Williams of Frontier Economics. I have been asked by Freehills to prepare a report on the following:

1. Are the various propositions and conclusions that Ergas and Williams make in their reports justified? If not, please explain why.
2. Is the Undertaking likely, inter alia to:
 - (a) promote competition in markets for listed services;
 - (b) encourage the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.

Statutory Test for Reasonableness

Part XIC of the Trade Practices Act (1974) ('the Act') stipulates that the ACCC must not accept the SAU unless it is satisfied that the terms and conditions are 'reasonable'.¹ In examining the reasonableness of the SAU, I focus on two related issues:

- whether the terms and conditions of the SAU promote the 'long term interests of end-users' of carriage services or of services supplied by means of carriage services and, specifically:
 - whether the SAU achieves the objective of promoting competition in markets for listed services, ie, whether it creates the conditions or environment for improving competition in markets for listed services as compared with those that would otherwise be the case; and
 - whether the SAU achieves the objective of encouraging the economically efficient use of and investment in the facilities used to supply the service, ie, the likely productive, allocative and dynamic efficiency consequences of the SAU, as compared with those that would otherwise be the case.
- the costs of providing access.

¹ Part XIC, Section 152CBD(2)(b). The test for reasonableness is outlined in Part XIC, Section 152AH of the Act.

Factual and Counterfactual

In order to assess the reasonableness of the SAU it is necessary to compare two hypothetical future situations, one with the SAU (the ‘factual’) and one without (the ‘counterfactual’). The counterfactual forms the benchmark against which any changes arising from the SAU are to be measured. In this report, I have confined my analysis to the factual and counterfactual hypothetical future situations identified in the reports of Mr Ergas and Dr Williams.

In the factual case, specified by Mr Ergas, the SAU provides access to FOXTEL’s deployed network of STUs, including the modem in the STU, together with CA/SI and electronic programming guide (‘EPG’) listings. The consequence of these arrangements is that the scope of the SAU is limited to households that take at least FOXTEL’s basic package, and continue to do so. I have focused in my report on the reasonableness of this factual as compared with a counterfactual of CA/SI unbundling, as described by Mr Ergas. In this counterfactual, FOXTEL submits the same SAU, but unbundles the provision of CA/SI services from the rest of its service and sub-licenses its STU specifications and ‘security keys’ to access seekers.

Under CA/SI unbundling, access seekers wishing to offer a subscription television service to non-FOXTEL retail customers would be able to install their own STUs at the customer’s premises. These would be compatible with FOXTEL’s CA/SI and so capable of receiving FOXTEL programming. Under CA/SI unbundling, a customer could buy or rent an STU from a pay-TV service provider and use that STU to access programming packages offered by any provider using FOXTEL CA/SI. Importantly, a customer would not have to buy FOXTEL’s basic service in order to gain access to a FOXTEL-compatible STU.

Summary of Economic Rationale for FOXTEL’s SAU

Mr Ergas concludes that it is reasonable for FOXTEL’s SAU to limit the supply of CA/SI services to retail customers to whom it supplies, and continues to supply, a retail service, rather than providing unbundled access to CA/SI. In drawing these conclusions, Mr Ergas is asked to assume that:

- FOXTEL can only provide CA/SI services to access seekers using an STU that is identically-specified to that which FOXTEL uses; and
- it is important for FOXTEL’s business that it continues to be able to supply subscribers with STUs as part of its subscription television service, since:
 - it wants to be able to ‘subsidise’ the cost of the STU to encourage take-up of its subscription television service; and
 - control of STU technology gives FOXTEL the ability to continue to improve its subscription television service.

Mr Ergas also makes a number of his own assumptions regarding the current and future states of competition in the market for subscription television services. He explicitly assumes that:

- customers would be prepared to ‘stack’ multiple STUs; and

- customers find it easy to switch between different forms of equipment.

In addition, Mr Ergas' analysis appears to proceed under the assumption that a 'retail model' in which customers purchase or pay an explicit rental for an STU is unlikely to coexist with options in which the cost of the STU is 'subsidised' to encourage take-up, as is the case under FOXTEL's existing 'ownership' model.

Mr Ergas' analysis, in combination with these assumptions, leads him to conclude that unbundling the provision of CA/SI:

- would not promote competition as compared with the SAU, since:
 - entry barriers would not be significantly reduced, if at all; and
 - infrastructure competition may be reduced; and
- would not encourage efficient use of, and investment in, infrastructure, since:
 - significant costs would be incurred, with no assurance of recovery;
 - there would be no clear efficiency gains;
 - FOXTEL's ability to recover and gain a return on its investment would be compromised; and
 - in the case of CA/SI unbundling, competition may be reduced or distorted, and innovation and service upgrading would be made substantially more difficult.

Dr Williams concludes that the SAU will promote competition since it will facilitate entry by 'niche' subscription broadcasters, relative to the counterfactual in which the existing 87B undertaking continues. In reaching this conclusion, Dr Williams, like Mr Ergas, assumes that:

- FOXTEL can only provide CA/SI services to access seekers using an STU that is identically-specified to that which FOXTEL uses; and
- it is important for FOXTEL's business that it continues to be able to supply subscribers with STUs as part of its subscription television service.

Dr Williams also assumes that:

- the relevant counterfactual is one in which the existing s87B undertaking continues;
- the most significant barriers to entry are:
 - government licensing; and
 - a combination of scale and scope economies – particularly the sunk costs associated with long-term contractual commitments to secure premium content.

Dr Williams' analysis, in combination with these assumptions, leads him to conclude that:

- FOXTEL does not have market power and faces extensive competition, particularly from free-to-air ('FTA') television networks;
- the SAU will not reduce what he considers to be the most significant barriers to entry, relative to the counterfactual in which the existing 87B undertaking continues; and

- new entry by a ‘full-scale’ competitor remains highly unlikely under the SAU as compared with the status quo.

On the strength of the analysis contained in the reports by Mr Ergas and Dr Williams, FOXTEL submits that compelling it to unbundle CA/SI services would be unreasonable.

Do FOXTEL’s Submissions Establish Reasonableness?

In my opinion, the Commission cannot be satisfied that the SAU would improve the opportunities and environment for competition as compared with a counterfactual in which FOXTEL’s CA/SI services are unbundled. In other words, the Commission cannot be satisfied that the SAU promotes competition within the meaning of s152AB(2)(c) of the Act. My opinion is based on the following principal findings:

- FOXTEL currently possesses market power in the supply of digital subscription television services since there is sufficient reason to believe that, if entry were to occur as a result of CA/SI unbundling, FOXTEL would reduce its prices and may be forced to alter its fundamental programming subscription choices;
- Mr Ergas and Dr Williams do not take sufficient account of the barrier to entry posed by incompatibility between competing STUs and FOXTEL’s established systems. Customers subscribing to an alternative subscription television service will most likely want the option of also receiving FOXTEL programming at some point in the future,² and potentially programming from other providers as well;
- CA/SI unbundling would go some way to reducing FOXTEL’s market power by reducing the barrier to entry posed by incompatibility;
- Mr Ergas and Dr Williams understate the prospect of new entry. Reducing the barrier to entry posed by incompatibility will provide greater opportunities for new entry by all forms of access seekers, irrespective of the number of channels they wish to offer;
- Mr Ergas over-emphasises the potential detriment to competition from standardisation of CA/SI/STU technologies and understates the potential benefits that creating an industry standard may have for competition on the price, content and quality of subscription television; and
- FOXTEL has the ability and incentive to alter the composition of its basic package so as to disadvantage competitors in circumstances where access is tied to the basic package. This would be difficult to detect and address under Parts IV and XIB of the Act.

In my opinion, the Commission cannot be satisfied that the SAU would encourage the economically efficient use of and investment in infrastructure within the meaning of s152AB(2)(e) of the Act, relative to CA/SI unbundling. In my view, the efficiency gains obtainable from unbundling are likely to outweigh the efficiency losses. I reach this conclusion on the basis that:

² This may particularly likely if FOXTEL were to change the composition of its packages to provide greater choice to customers, eg, by unbundling its basic package and offering more segmented packages of channels.

- unbundling CA/SI would provide for significant allocative efficiency improvements by reducing the barrier to entry posed by a lack of compatibility relative to the SAU;
- Mr Ergas overstates the efficiency losses entailed in unbundling CA/SI relative to the SAU, since he:
 - does not provide a compelling case as to why the vertical efficiencies implicit in FOXTEL's current business arrangements would be unavailable to it in either counterfactual; and
 - does not explain why FOXTEL's dynamic incentives would differ significantly as between the factual and the respective counterfactuals.

Conclusion

In my opinion, the reports of Mr Ergas and Dr Williams:

- do not establish that the SAU promotes competition by creating the conditions and environment for improving competition relative to the scenario in which CA/SI is unbundled; and
- do not establish that the SAU encourages the efficient use of, and investment in, infrastructure, as compared to CA/SI unbundling.

Accordingly, the Commission cannot be satisfied that it is reasonable for FOXTEL to limit the supply of its CA/SI services to those retail customers to whom it currently supplies, and continues to supply, a retail service.

1. Introduction

I, Gregory John Houston, economist, of 201 Sussex Street, Sydney in the state of New South Wales, say as follows:

1. I am a director of the United States-based firm of consulting economists, National Economic Research Associates Inc ('NERA'), and head of its Australian operations, based in Sydney.
2. I have been asked by Freehills, on behalf of Seven Network Limited ('Seven'), to prepare a report for submission to the Australian Competition and Consumer Commission ('ACCC') commenting on a range of matters arising in relation to FOXTEL's lodgement with the ACCC of a special access undertaking ('SAU') in relation to its digital subscription television service. FOXTEL's SAU sets out the proposed terms and conditions under which third party providers of subscription television programs may access its digital set top unit ('STU') service.
3. FOXTEL submits that in providing access to digital subscription television services, it is reasonable for it to limit the supply of conditional access and service information ('CA/SI') services to those retail customers to whom it currently supplies, and continues to supply, a retail subscription television service. FOXTEL's SAU is accompanied by a range of supporting material, including reports by two economic experts, Mr Henry Ergas of CRA International³ and Dr Philip Williams of Frontier Economics⁴.
4. Specifically, I have been asked by Freehills to prepare a report on the following:
 1. Are the various propositions and conclusions that Ergas and Williams make in their reports justified? If not, please explain why.
 2. Is the Undertaking likely, inter alia to:
 - (a) promote competition in markets for listed services;
 - (b) encourage the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.
5. In preparing this report, I have been provided with a copy of the Federal Court's "Guidelines for Expert Witnesses in Proceedings in the Federal Court of Australia" ('the Guidelines'). In accordance with the Guidelines, I confirm that I have made all inquiries that I believe are desirable and appropriate, and that no matters of significance that I regard as relevant have, to my knowledge, been withheld in preparing my opinions contained herein. I have not previously worked for Seven or its affiliates.
6. I have been assisted in the preparation of this report by three NERA colleagues: Hayden Green and Daniel Young, whom both work with me in Sydney; and a London-based colleague, David Matthew. Notwithstanding this assistance, the opinions in this report are my own.

³ CRA International, *Reasonableness of limiting the supply of FOXTEL's conditional access service*, October 2005 (hereafter 'the Ergas report').

⁴ Frontier Economics, *Foxtel's Special Access Undertaking*, 5 October 2005 (hereafter 'the Williams report').

7. The remainder of this report is structured as follows:
- section two outlines the statutory test for ‘reasonableness’;
 - section three provides a brief introduction to the Australian pay-TV industry;
 - section four introduces the appropriate ‘factual’ and ‘counterfactual’;
 - section five summarises the economic rationale for FOXTEL’s SAU;
 - section six considers whether FOXTEL’s submission establishes that restricting the provision of CA/SI services is reasonable; and
 - section seven provides concluding remarks.

2. Statutory Test for Reasonableness

8. I set out below my understanding of the statutory test under which a special access undertaking must be assessed. A special access undertaking may be lodged by a person who is, or expects to be, a carrier or service provider supplying:⁵
- a ‘listed carriage service’; or
 - a service that facilitates the supply of a listed carriage service.
9. A listed carriage service is one defined at section 16 of the Telecommunications Act 1997, and includes those services by which digital subscription television services are carried by hybrid fibre coaxial (‘HFC’) cable or by satellite to subscriber locations. If accepted, a special access undertaking specifies the terms and conditions upon which third parties may gain access to the relevant service. Declaration provides third parties the right to negotiate the terms on which access to the relevant service is provided and, in the absence of agreement, to have those terms decided under arbitration arrangements before the ACCC. If the SAU is accepted, although the services to which it relates can still be declared, the terms and conditions of the SAU will prevail over any terms and conditions determined by the ACCC in arbitration.
10. Part XIC of the Trade Practices Act (1974) (‘the Act’) stipulates that the ACCC must not accept a special access undertaking unless it is satisfied that the terms and conditions of the undertaking are ‘reasonable’.⁶ The test for reasonableness is outlined in Part XIC, Section 152AH of the Act, which states:
- (1) *For the purposes of this Part, in determining whether particular terms and conditions are reasonable, regard must be had to the following matters:*
- (a) *whether the terms and conditions promote the long term interests of end-users of carriage services or of services supplied by means of carriage services;*
 - (b) *the legitimate business interests of the carrier or carriage service provider concerned, and the carrier’s or provider’s investment in facilities used to supply the declared service concerned;*
 - (c) *the interests of persons who have rights to use the declared service concerned;*
 - (d) *the direct costs of providing access to the declared service concerned;*

⁵ Part XIC, Section 152CBA(1)(a) and (b).

⁶ Part XIC, Section 152CBD(2)(b)

- (e) *the operational and technical requirements necessary for the safe and reliable operation of a carriage service, a telecommunications network or a facility;*
- (f) *the economically efficient operation of a carriage service, a telecommunications network or a facility.*

(2) *Subsection (1) does not, by implication, limit the matters to which regard may be had.*

11. Sections 152AB(2) and (3) also state that in determining whether the ‘long-term interests of end-users’ are promoted, regard should be had, and limited to, the following objectives:⁷

- (c) *the objective of promoting competition in markets for listed services;*
- (d) *the objective of achieving any-to-any connectivity in relation to carriage services that involve communication between end-users; and*
- (e) *the objective of encouraging the economically efficient use of, and the economically efficient investment in, the infrastructure by which listed services are supplied.*

2.1. Criterion (a): the long-term interest of end-users

12. Mr Ergas’ assessment of FOXTEL’s SAU considers only the extent to which criterion (1)(a) - the promotion of the long term interests of end-users - is likely to result in:⁸

- the objective of promoting competition in the market for the provision of subscription television services; and
- the objective of encouraging the economically efficient use of and investment in the facilities used to supply the service.

13. Mr Ergas does not assess the extent to which the SAU is likely to result in the second objective identified at s152AB(2), ie, achieving any-to-any connectivity. I have been instructed that for present purposes Seven does not challenge this approach. Accordingly, I adopt it also.

2.1.1. Promotion of competition

14. I have been instructed that in considering whether the SAU will ‘promote competition’ in the market for the provision of subscription television services I should adopt the interpretation of the Australian Competition Tribunal (‘the Tribunal’) in *Sydney International Airport* (2000). In that decision, the Tribunal stated that the ‘promotion of competition’ does *not* require:⁹

⁷ Part XIC, Section 152AB(2) and (3).

⁸ Ergas report, p16.

⁹ *Sydney International Airport* (2000) ATPR 41-754 [106].

“...an advance in competition in the sense that competition would be increased. Rather, the Tribunal considers the notion of ‘promoting’ competition in s44H(4)(a) involves the idea of creating the conditions or environment for improving competition from what it would be otherwise. That is to say, the opportunities and environment for competition given declaration, will be better than they would be without declaration.”

15. In *Seven Network Limited* (No 4) [2004] the Tribunal accepted that this definition of ‘promotion of competition’ also applied to the phrase in Part XIC:¹⁰

“In our view, this description is apt for the criterion established under s152ATA(6) and s152AB(2)(c). In addition, we consider that this description is equally applicable to assessing whether the ‘particular thing’ encourages economic efficient use of, and investment in, infrastructure pursuant to s152AB(2)(e).”

16. The Act specifies that it is competition for *listed services* that is to be considered when assessing the promotion of competition:¹¹

“In determining the extent to which a particular thing is likely to result in the achievement of the objective referred to in paragraph 2 (c), regard must be had to the extent to which the thing will remove obstacles to end-users of listed services gaining access to listed services.”

17. In the analysis that follows, I proceed on the interpretation that the SAU would promote competition if it created the conditions or environment for improving competition for listed services as compared with what would otherwise be the case.

2.1.1.1. FOXTEL interpretation

18. I note that the reports of both Dr Williams and Mr Ergas proceed on the basis of an interpretation of the phrase ‘promotion of competition’ that is different from that articulated by the Tribunal in *Sydney International Airport* (2000). Dr Williams states that:¹²

*“In order to assess whether the SAU might promote competition in the television broadcasting market, one must compare **the likely extent of competition** in the future with the SAU with the likely extent of competition in the market without the SAU.”* (emphasis added)

19. In *Sydney International Airport* (2000) the Tribunal expressly states that the promotion of competition does *not* require ‘an advance in competition in the sense that competition would be increased’, but rather that the opportunities and environment for competition be improved.¹³ By assessing the ‘likely extent of competition’ with and without the SAU, Dr

¹⁰ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [123].

¹¹ s152AB(4)(2).

¹² Williams report, p41.

¹³ *Sydney International Airport* (2000) ATPR 41-754 [106].

Williams has therefore set a more stringent test. In my opinion, this reduces the validity of the conclusions drawn by Dr Williams' report, as I elaborate below.

20. By contrast, Mr Ergas' report notes that if access seekers were to use an STU with identical specifications to FOXTEL's, this may reduce competition *for STUs*:

"In addition to reducing the incentive to compete, CA/SI unbundling can also potentially blunt or distort competition in customer equipment."

21. I understand that the relevant listed services are:

- in the case of carriage services, those by which digital subscription television services are carried by hybrid fibre coaxial ('HFC') cable or by satellite to subscriber locations; and
- in the case of services supplied by means of carriage services, digital subscription television services.

22. An STU is *not* a 'listed service' since it does not carry communications from one point to another point in Australia. FOXTEL itself acknowledges this point:¹⁴

"STUs are not 'carriage services' nor 'services that facilitate the supply of carriage service' under s152AL(2)."

23. It follows that Mr Ergas also adopts a stricter test than that outlined by the Tribunal. Whether or not competition *for STUs* is promoted is only relevant to the extent that it then promotes competition in markets for *listed services*. I set out in section 6.2.3 below the reasons for my opinion that *standardising* the provision of STUs is more likely to promote competition in markets for listed services than are arrangements that allow competition for STUs themselves.

2.1.2. Efficient use of and investment in infrastructure

24. The second mandatory consideration in determining whether an SAU promotes the long term interests of end-users is the economically efficient use of and investment in the infrastructure by which listed services are supplied.

25. The Act sets out a number of factors that must be considered in determining whether or not the efficient use of and investment in infrastructure is likely to be achieved:¹⁵

"In determining the extent to which a particular thing is likely to result in the achievement of the objective referred to in paragraph (2)(e), regard must be had to the following matters:

- (a) *whether it is technically feasible for the services to be supplied and charged for, having regard to:*

¹⁴ FOXTEL, *Submission to Australian Competition and Consumer Commission, FOXTEL Special Access Undertaking*, p41. (hereafter 'the FOXTEL Submission')

¹⁵ s152AB(6).

- (i) *the technology that is in use or available; and*
 - (ii) *whether the costs that would be involved in supplying, and charging for, the services are reasonable; and*
 - (iii) *the effects, or likely effects, that supplying, and charging for, the services would have on the operation or performance of telecommunications networks;*
- (b) *the legitimate commercial interests of the supplier or suppliers of the services, including the ability of the supplier or suppliers to exploit economies of scale and scope;*
 - (c) *the incentives for investment in the infrastructure by which the services are supplied.”*

26. In considering whether the SAU would encourage the efficient use of, and investment in, infrastructure I have distinguished the likely productive, allocative and dynamic efficiency consequences of the SAU, as compared with those that would otherwise be the case. In this respect I employ a broadly similar approach to that adopted by Mr Ergas.

27. Mr Ergas also notes that the ACCC, with respect to criterion (b) above, considers that:¹⁶

“regard to the legitimate business interests of access providers requires an access price that at least provides a normal commercial return on prudent investment.”

28. I agree that access prices should at least provide a normal commercial return on prudent investment. However, I do not consider that the legitimate business interests of the carrier extend so far as to warrant insulation from competition in downstream markets.

2.2. Summary of criteria to consider in this report

29. I concur with the interpretations of Mr Ergas as regards criteria (c) – (f). However, this does not necessarily extend to the conclusions that he draws.

30. My report therefore focuses on two related issues:

- whether the terms and conditions of the SAU promote the long term interests of end-users of carriage services or of services supplied by means of carriage services and, specifically:
 - whether the SAU achieves the objective of promoting competition in markets for listed services; and
 - whether the SAU achieves the objective of encouraging the economically efficient use of and investment in the facilities used to supply the service; and
- the costs of providing access.

¹⁶ ACCC (1999), *Access Pricing Principles – Telecommunications*, p9.

31. Before addressing these questions in substance, in the following section I provide some relevant background on the subscription television industry in Australia.

3. The Australian Subscription Television Industry

32. Subscription television was introduced to Australia in the mid-1990s by its two largest telecommunications companies, Telstra and Optus, who launched FOXTEL and Optus TV, respectively. In November 2002, the ACCC gave in principle approval to ‘channel sharing’ arrangements between these two companies, allowing subscribers to each service to receive channels previously shown only on the other. This arrangement means that FOXTEL now controls virtually all content shown in the Australian subscription television industry. Consistent with this, Optus has moved from being a provider of subscription television services to being predominantly a reseller of FOXTEL’s services.
33. The central feature of the content sharing agreement is that three platforms – FOXTEL, Optus and regional and rural operator Austar – are able to offer customers largely similar programming packages. Optus did, however, undertake to provide at least seven channels on its subscription television service that FOXTEL did not offer.¹⁷ The agreement was also designed to allow service providers like Neighbourhood Cable in regional Victoria and TransACT in Canberra to have access to FOXTEL’s programming at wholesale rates.
34. I set out below a summary of the current state of the subscription television industry in Australia.

3.1. Major service providers

35. There are currently five principal pay-TV operators in Australia: FOXTEL; Austar; Optus; TransACT; and Neighbourhood Cable.

3.1.1. FOXTEL

36. FOXTEL is jointly owned by Telstra (50%), News Limited (25%), and Publishing and Broadcasting Limited (25%), and is the largest pay-TV service provider in Australia. It controls the bulk of programming through ownership and distribution agreements with other service providers, who generally operate in geographic distinct markets.¹⁸ FOXTEL has the largest number of subscribers - in excess of one million since June 2005 – and the most extensive reach on its combined cable and satellite networks.¹⁹ FOXTEL is available via Telstra cable in Sydney, Melbourne, Brisbane, Adelaide, Perth, Canberra, Newcastle, Central Coast (NSW), Geelong, Gold Coast (Qld) and by satellite in regional WA.
37. In June 2005, FOXTEL had around a 60% share of pay-TV subscriber numbers, but its packages served approximately 70% when resales through Optus were included.²⁰

¹⁷ *Undertaking to the Australian Competition and Consumer Commission Pursuant to Section 87B of the Trade Practices Act 1974 by Optus Vision Pty Limited and Optus Vision Media Pty Limited*, Schedule 4.1.

¹⁸ TransACT – in Canberra; Optus where it has its HFC cable; and Austar in its satellite footprint, ie, mainly regional and rural Australia.

¹⁹ Australian Film Commission, *Get the picture: What Australians are watching; Pay TV*, 14 December 2005, p7.

²⁰ Australian Film Commission, *Get the picture: What Australians are watching; Pay TV*, 14 December 2005, p7.

FOXTEL's digital service was launched in March 2004 and is thought to have significantly contributed to it recently exceeding its profit forecasts:²¹

"It is understood FOXTEL posted an operating profit after interest and tax for the first time in the first week of January and has been in the black since, which is well ahead of the company's internal forecasts."

38. FOXTEL's digital subscription television service currently involves two related features:
- First, FOXTEL ties the provision of a digital STU to the purchase of its basic package of channels, as detailed in Appendix A. Customers may also choose to add various packages of 'premium content' on to this platform, and these are also detailed in Appendix A.
 - Second, FOXTEL uses proprietary CA/SI technology, and this currently prevents competitors from providing programming to customers through FOXTEL's installed digital STUs.
39. FOXTEL supplies its STUs only to households that subscribe to its retail service. Ownership of the STU is retained by FOXTEL, and the STUs of subscribers who 'churn' away from the network are repossessed. By tying the provision of STUs to its basic package, FOXTEL has built up an installed base of digital STUs that are owned and controlled by it rather than by its customers.

3.1.2. Optus

40. Optus is wholly owned by Singapore Telecommunications, and sells pay-TV packages to customers on its high-speed cable network in Sydney, Melbourne and Brisbane, along with local and long-distance calls and internet services. In June 2005 Optus had 157,000 subscribers, or approximately 9% of total pay-TV subscribers. On 20 June 2005, Optus wrote to the ACCC seeking release from its undertaking to supply at least seven channels on its subscription service not provided by FOXTEL. I have been instructed to assume that such a variation has been made, which results in Optus reselling a virtually identical package of programmes to FOXTEL.²² Optus utilises its own CA/SI technology and supplies its own STUs.

3.1.3. Austar

41. Austar is available by satellite in regional and rural Australia, Hobart, and by cable in Darwin. In 2005 it provided services to around half a million subscribers, or approximately 30% of total subscribers.²³ Austar is jointly owned by UnitedGlobalCom and Castle Harlan Australian Mezzanine Partners, which own 83%, while the remaining 17% is owned by public shareholders. Austar's digital service was launched in March 2004. Austar utilises its own CA/SI technology and supplies its own STUs.

²¹ Kitney D, "Digital signals profit at FOXTEL", *Australian Financial Review*, 30 January 2006, p13.

²² See Appendix A.

²³ Ibid.

3.2. Other service providers

3.2.1. TransACT

42. TransACT is available via cable in Canberra and Queanbeyan. From February 2004 ActewAGL has managed the daily operations of TransACT. Ownership of ActewAGL is shared equally between AGL and ACTEW Corporation, a government owned enterprise. TransACT has a very small share of total subscribers compared to the largest three companies. TransACT provides its own STUs and CA/SI technology. Since 1 March 2004 TransACT has ceased reselling FOXTEL programming. In the Senate Environment, Communications, Information Technology and the Arts References Committee, Ms Dianne O'Hara, the General Manager of TransACT, stated that this was a result of:²⁴

“Foxtel are making changes based on encryption for their digital service, it is becoming increasingly difficult for TransACT to offer that service.”

43. Ms O'Hara also stated that TransACT did not receive FOXTEL's premium sports content as it was unable to negotiate what it considered to be reasonable terms for that programming.²⁵ Appendix A outlines the channel options currently available on TransACT.

3.2.2. Neighbourhood Cable

44. Neighbourhood Cable is available to consumers in Geelong, Mildura and Ballarat. Neighbourhood Cable is a public company listed on the Australian Stock Exchange. Like TransACT, Neighbourhood Cable serves a very small proportion of subscribers compared to the three largest providers. Neighbourhood Cable provides its own STUs and CA/SI technology. As Appendix A illustrates, Neighbourhood offers very little in the way of FOXTEL programming.

3.3. Programming and contractual conditions

45. The three largest pay-TV providers, FOXTEL, Austar and Optus, have virtually identical 'basic package' offerings and very similar 'premium' content. This is primarily a consequence of the content sharing agreement that I note above. By contrast, TransACT's basic package differs substantially and includes far fewer channels. Neighbourhood Cable does not have a basic package, and instead offers several permutations of channel selections, all of which feature many channels bundled together with a limited amount of premium sport and movie content.²⁶
46. The contractual conditions offered to subscribers are all broadly comparable²⁷, ie:

²⁴ See: <http://www.aph.gov.au/hansard/senate/commttee/S8465.pdf>

²⁵ Ibid.

²⁶ Table 1 in Appendix A provides a snapshot of the programming currently available on digital pay-TV from suppliers in Australia.

²⁷ Appendix B provides further details of the contractual terms and conditions currently offered by Australian pay-TV operators.

- each provider requires a minimum contract period, generally of 12-months (6- months for new FOXTEL customers);
- there are switching costs associated with changing service provider - cancelling a subscription within this minimum contract period incurs a cancellation fee; and
- each service provider imposes minimum package costs, although Neighbourhood Cable minimum package cost is significantly lower (\$14.95).

47. By imposing minimum package costs, minimum contract periods and cancellation fees each service provider appears to be attempting to recover the costs of churning – including the cost of STU installation – through its ongoing subscription charges.

4. Factual and Counterfactuals

48. In order to assess the reasonableness of the SAU it is necessary to compare two hypothetical future situations, one with the SAU (the ‘factual’) and one without (the ‘counterfactual’). The counterfactual forms the benchmark against which any changes arising from the SAU are to be measured. In this report, I have confined my analysis to the factual and counterfactual hypothetical future situations identified in the reports of Mr Ergas and Dr Williams.
49. In this section of my report, I discuss:
- the factual specified by Mr Ergas;
 - the potential counterfactuals specified by Mr Ergas;
 - a number of economic issues arising out of Mr Ergas’ specification of the factual and counterfactual; and
 - the counterfactual specified by Dr Williams.

4.1. The factual

50. In the factual case specified by Mr Ergas, the SAU provides access to its deployed network of STUs, including the modem in the STU, together with CA/SI and electronic programming guide (‘EPG’) listings. The consequence of these arrangements is that FOXTEL would provide access to its ‘deployed’ network of STUs, thereby limiting the scope of the SAU to households that take at least FOXTEL’s basic package, and continue to do so.
51. In the factual case, an access seeker intending to provide a pay-TV service to non-FOXTEL retail customers must either:²⁸
- use the SAU to distribute its content to FOXTEL retail customers, and provide its own CA/SI technology and STUs for distribution to non-FOXTEL retail customers; or
 - set aside its right to seek access under the SAU and instead to provide its own CA/SI technology and STUs for FOXTEL *and* non-FOXTEL retail customers.

4.2. Potential counterfactuals

52. Mr Ergas assesses the reasonableness of FOXTEL limiting the supply of CA/SI to retail customers to whom it supplies (and continues to supply) a retail service against two counterfactuals. These are:
- where CA/SI is unbundled and provided separately (‘CA/SI unbundling’); and
 - where CA/SI and the STU are provided separately from FOXTEL’s content (‘full-service model’).

²⁸ Ergas report, p13.

4.2.1. CA/SI unbundling

53. The first counterfactual considered by Mr Ergas is that FOXTEL submits the same SAU, but unbundles the provision of CA/SI services from the rest of its service and sub-licenses its STU specifications and ‘security keys’ to access seekers.
54. Under this scenario, access seekers wishing to offer a subscription television service to non-FOXTEL retail customers would be able to install their own STUs at the customer’s premises. These would be compatible with FOXTEL’s CA/SI and so capable of receiving FOXTEL programming. Competitors seeking to provide a service to non-FOXTEL retail customers would, therefore, be responsible for the cost of expanding the FOXTEL-compatible STU network.
55. Under CA/SI unbundling, a customer could buy or rent an STU from a pay-TV service provider and use that STU to access any programming packages offered by any provider using FOXTEL CA/SI. Importantly, a customer would not have to buy FOXTEL’s basic service in order to gain access to a FOXTEL-compatible STU.
56. I note, as does Mr Ergas²⁹, that if unbundled CA/SI were available from FOXTEL by means of satellite, it would be possible for an access seeker to provide a competing service in areas not directly served by FOXTEL at present – such as Austar’s satellite ‘footprint’ - without having to invest in CA/SI infrastructure of its own.

4.2.2. Full-service model

57. The second counterfactual is referred to by Mr Ergas as the ‘full-service model’. It involves separating the provision of the technical platform for subscription television (ie, the CA/SI system, STU network and EPG services) from the supply of FOXTEL’s programming content.
58. In this model, access seekers looking to distribute their content to non-FOXTEL retail customers would contract with a separate FOXTEL wholesale business, which would make the necessary changes to its network to accommodate their requirements. In other words, under a full-service model not only would unbundled CA/SI be available to non-FOXTEL retail customers, FOXTEL itself would be responsible for installing and maintaining STUs.

4.3. Economic issues identified by the Tribunal

59. In this section I draw attention to a number of the economic issues arising from Mr Ergas’ specification of the factual and counterfactuals that were identified by the Tribunal when it considered a broadly similar access undertaking in 2004. The Tribunal also recognised that the SAU provides for an unusual form of access in that an access seeker is effectively limited to offering a service that is *complementary* to that provided by FOXTEL.³⁰

²⁹ Ergas report, p40.

³⁰ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [294].

“The structure of the FOXTEL digital access agreement means that an access seeker’s channel(s) can only serve as a complement to the Basic Package, and never as a substitute for it. Potential access seekers will be competing only for that subset of subscribers who choose to purchase premium tiers in addition to FOXTEL’s Basic Package. It also means that FOXTEL’s Basic Package would not be threatened by the prospective entry of an access seeker.”

60. The effect of the terms and conditions proposed by FOXTEL’s SAU is that access is limited to enhancing the attractiveness of FOXTEL’s programming packages by increasing the choice and variety of premium tiers available through its network infrastructure. I note that in its assessment of essentially the same issue the Tribunal questioned the seriousness with which FOXTEL proposed its factual case:³¹

“...we consider that FOXTEL’s submission that an access seeker could provide subscription television services using Telstra’s carriage service but the access seeker’s own digital STUs and ancillary services undermine the access undertaking that it provided in the first place. To suggest that an access seeker may be better off under an alternative of not seeking access to FOXTEL’s service calls into question the seriousness with which access was offered.”

61. The Tribunal considered that the tying of access to FOXTEL’s basic package was a significant deterrent to entry.³²

“...we consider that the tie of the Basic Package to access to FOXTEL’s services as contained in the digital access agreement is a significant deterrent to entry. This is exacerbated by what we regard as an unnecessary prevention of an access seeker using FOXTEL’s infrastructure and services, other than its STUs, to deliver subscription television services. In our view, potential access seekers are likely to be deterred from commencing supplying subscription television services in competition with FOXTEL for so long as access is tied in this manner.”

62. For the reasons I describe in section 6.2 below, I have reached the same conclusion.
63. The Tribunal also considered the possibility of FOXTEL providing unbundled access to its CA/SI – the same counterfactual specified by Mr Ergas in the case of this SAU – thereby untying access to STUs from FOXTEL’s basic package.³³

“...the ability of an access seeker to provide subscription television services using its own STUs but without having completely to duplicate FOXTEL’s delivery infrastructure would appear to be a potentially attractive and valuable option. Accordingly, we do not wish to foreclose any scope which

³¹ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [302].

³² *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [301].

³³ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [298].

may exist for Conditional Access ('CA') and Service Information ('SI') services to be supplied separately from STUs. On such a view, the tying of the Basic Package does not appear necessary or appropriate."

64. However, the Tribunal was reluctant to support the introduction of a 'full-service' model, stating:³⁴

"...we are uncomfortable with the proposition that FOXTEL should be required to provide equipment at the behest of an access seeker, whilst receiving no immediate benefit itself (other than access fees), even if, as submitted by Seven Network, it was possible to ensure there was appropriate compensation. This notion also appears to depart from standard situations in which access is required."

65. Taking into account these earlier views of the Tribunal, I have focused in the remainder of my report on the reasonableness of the SAU as compared with a counterfactual of CA/SI unbundling, as described by Mr Ergas - an alternative the Tribunal considered had merit.

4.3.1. The counterfactual assumed by Dr Williams

66. I note that in reaching the conclusion that the SAU may promote competition by facilitating entry by niche broadcasters Dr Williams assumes a counterfactual that differs markedly from those scenarios considered by Mr Ergas. Specifically, Dr Williams assumes that the relevant counterfactual is one in which the existing s87B undertaking continues.³⁵
67. In my opinion, this counterfactual does not follow from a reasonable assessment of what is likely to occur if the SAU is not accepted by the ACCC. I conclude above that a more appropriate comparison is whether the SAU would promote competition relative to the scenario in which CA/SI is unbundled. Because Dr Williams takes the status quo as his counterfactual, the relevance of his analysis is limited by the validity of that assumption. In the following sections, I discuss the reasons for my opinion that this assumption is inappropriate, but by way of broad summary:
- it results in Dr Williams understating the relevant barriers to entry since he does not identify that which has been cited in similar circumstances as a critical entry barrier, ie, the reluctance of consumers to purchase an incompatible technology;
 - Dr Williams' analysis does not therefore reflect the fact that CA/SI unbundling may significantly reduce this barrier, allowing economies of scale and scope to be more easily obtained;

³⁴ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [295].

³⁵ Williams report, p53.

- Dr Williams characterises ‘niche’ broadcasters as entrants selling their channels on a tier to FOXTEL’s basic package, when CA/SI would allow those entrants to sell those channels on a stand-alone basis; and
- Dr Williams’ analysis therefore fails to account for the fact that CA/SI unbundling would lead to significantly different entry conditions between the SAU and the appropriately specified counterfactual.

5. Summary of Economic Rationale for FOXTEL's SAU

68. In this section I summarise the analysis contained in the reports of Mr Ergas and Dr Williams, that is cited by FOXTEL in support of its contention that it is reasonable to limit the supply of CA/SI services in its SAU to retail customers that receive, and continue to receive, a FOXTEL service. I also identify the assumptions that explicitly and implicitly underpin that analysis.

5.1. Ergas report

69. Mr Ergas concludes that it is reasonable for FOXTEL's SAU to limit the supply of CA/SI services to retail customers to whom it supplies, and continues to supply a retail service, rather than providing unbundled access to CA/SI. In drawing these conclusions, Mr Ergas is asked to assume that:³⁶

- FOXTEL can only provide access seekers with CA/SI services if the access seeker's subscription television service is supplied using an STU that is identically-specified to that which FOXTEL uses;
- it is important for FOXTEL's business that it continues to be able to supply subscribers with STUs as part of its subscription television service, for reasons including that:
 - it wants to be able to 'subsidise' the cost of the STU to encourage take-up of its subscription television service; and
 - control of STU technology gives FOXTEL the ability to continue to improve its subscription television service.

70. Mr Ergas also makes a number of his own assumptions regarding the current and future states of competition in the market for subscription television services. He explicitly assumes that:

- customers would be prepared to 'stack' multiple STUs;³⁷ and
- customers find it easy to switch between different forms of equipment.³⁸

71. I note that, in addition, Mr Ergas' analysis appears to proceed under the assumption that a 'retail model' in which customers purchase or pay an explicit rental for an STU is unlikely to coexist with options in which the cost of the STU is 'subsidised' to encourage take-up, as is the case under FOXTEL's existing 'ownership' model.³⁹

72. In the following section I summarise the analysis that, in combination with these assumptions, underpins Mr Ergas' conclusion that the SAU is reasonable as compared with a scenario in which CA/SI is unbundled.

³⁶ Ergas report, p15.

³⁷ Ergas report, p28.

³⁸ Ibid.

³⁹ Ergas report, p56.

5.1.1. CA/SI unbundling will not promote competition

73. Mr Ergas concludes that CA/SI unbundling would not promote competition to any greater extent than the SAU.

5.1.1.1. Entry barriers unaffected

74. Mr Ergas contends that entry barriers will not be reduced by CA/SI unbundling, relative to the arrangements under the SAU. By way of support for that contention, he states that alternative CA/SI systems are readily available at a cost that is moderate in the context of the many other costs involved in entering the pay-TV market.⁴⁰ In any event, Mr Ergas claims that the payments to FOXTEL for use of its CA/SI would largely eliminate any entry cost savings.⁴¹ The combination of these facts causes Mr Ergas effectively to conclude that CA/SI unbundling would not bring about a reduction in barriers to entry on the 'supply-side'.

75. Second, Mr Ergas concludes that CA/SI unbundling will not reduce 'demand-side' barriers to entry, since:⁴²

- he assumes that customers do not mind 'stacking' multiple technological formats and so would be prepared to stack multiple STUs - the rapid uptake of DVD players while most consumers retained VHS recorders is cited as providing support for this assumption;
- he assumes that customers find it easy to switch between different forms of equipment;
- the cost of the STU is not a barrier to entry since some type of STU will be required and FOXTEL's tends to be relatively expensive; and
- customers will not be dissuaded from switching any more than they would under CA/SI unbundling since an STU of some kind is required.

5.1.1.2. Infrastructure competition reduced

76. Mr Ergas states that competition in the development of CA/SI technology and STUs⁴³ would be reduced since competitors would have fewer incentives to develop their own systems to compete with FOXTEL. In turn FOXTEL may have fewer incentives to upgrade its own systems, since this may benefit its rivals.⁴⁴ In a similar vein, Mr Ergas argues that making FOXTEL's CA/SI a technological 'standard' may:

- reduce FOXTEL's incentives to improve that standard;

⁴⁰ Ergas report, p27.

⁴¹ Ibid.

⁴² Ergas report, p28.

⁴³ As I explained in section 2.1.1.1, whether or not competition *for STUs* is promoted is, in isolation, irrelevant for the purposes of assessing reasonableness. It is only relevant to the extent that it then promotes competition for *listed services*.

⁴⁴ Ergas report, p37.

- reduce choices for consumers; and
- raise costs for access seekers, who might otherwise use alternative, more appropriate technologies.

5.1.2. CA/SI unbundling would not encourage economic efficiency

77. Mr Ergas contends that the unbundling of FOXTEL's CA/SI would entail few, if any, efficiency gains and would likely involve significant efficiency losses, although those losses are not quantified. Mr Ergas also contends there would be few efficiency gains obtainable from unbundling CA/SI since, as summarised in section 5.1.1 above, he also concludes that unbundling CA/SI would not lead to greater competition or cost savings. However, Mr Ergas identifies a number of factors that he claims would lead to a reduction in efficiencies, including:

- the inability of FOXTEL to pursue its STU ownership model would force FOXTEL to assume an inefficient structure, with greater costs and fewer incentives for innovation;
- technical difficulties associated with ensuring compatibility and security;
- future regulatory gaming over the terms of provision of CA/SI; and
- reduced dynamic incentives on FOXTEL to improve its system.

78. Mr Ergas also concludes that under CA/SI unbundling there is a significant risk that:

- FOXTEL will not recover its costs;⁴⁵
- it would need to make substantial additions to its core business; and
- by sub-licensing its security keys, FOXTEL would open itself to increased risk of a security breach and incompatibility issues.

79. To the extent that this compromises FOXTEL's ability to recover its past and future investments, this is claimed to have a negative impact on efficiency in that FOXTEL's incentives to improve its service would be dampened. Mr Ergas maintains that there would be informational and pricing complexities in setting access charges that were sufficient to compensate FOXTEL for these additional costs of unbundling CA/SI. In particular, he suggests that some users may not pay, or may not pay enough to compensate FOXTEL for its additional costs.

5.1.3. Conclusion

80. Mr Ergas concludes that unbundling the provision of CA/SI:

- would not promote competition as compared with the SAU, since:
 - entry barriers would not be significantly reduced, if at all; and
 - infrastructure competition may be reduced; and

⁴⁵ Ergas report, p33.

- would not encourage efficient use of, and investment in, infrastructure, since:
 - significant costs would be incurred, with no assurance of recovery;
 - there would be no clear efficiency gains;
 - FOXTEL's ability to recover and gain a return on its investment would be compromised; and
 - in the case of CA/SI unbundling, competition may be reduced or distorted, and innovation and service upgrading would be made substantially more difficult.

81. Accordingly, Mr Ergas concludes that:⁴⁶

“...it unlikely that either of the two counterfactual scenarios would be more reasonable than the factual case, based on the economic tests that underlie the meaning of reasonableness under relevant legislation.”

82. In section 6 below, I examine the robustness of the assumptions made by Mr Ergas, the analysis derived on the strength of those assumptions, and the conclusions subsequently drawn.

5.2. Williams report

83. Dr Williams asserts that the relevant market within which the promotion of competition brought about by the SAU should be assessed is the Australian television broadcasting market. This market includes free-to-air ('FTA') broadcasters and embraces the activities of producing, marketing and distributing television broadcasting services.⁴⁷ He concludes that the SAU may promote competition in this market by facilitating entry by niche broadcasters, but that this effect will not be very great.⁴⁸ In arriving at this conclusion, Dr Williams, like Mr Ergas, assumes that:

- FOXTEL can only provide access seekers with CA/SI services if the access seeker's subscription television service is supplied using an identically-specified STU to the STU that FOXTEL uses; and
- it is important for FOXTEL's business that it continues to be able to supply subscribers with STUs as part of its subscription television service, for reasons including that:
 - it wants to be able to 'subsidise' the cost of the STU to encourage take-up of its subscription television service; and
 - control of STU technology gives FOXTEL the ability to continue to improve its subscription television service.

84. Dr Williams also assumes that:

⁴⁶ Ergas report, p1.

⁴⁷ Williams report, p37.

⁴⁸ Williams report, p53.

- the relevant counterfactual is one in which the existing 87B undertaking continues;
- the most significant barriers to entry are:
 - government licensing; and
 - a combination of scale and scope economies – particularly the sunk costs associated with long-term contractual commitments to secure premium content.

5.2.1. SAU will promote competition

85. Dr Williams draws the following conclusions in his report:

- FOXTEL does not have market power and faces extensive competition, particularly from free-to-air ('FTA') television networks, as evidenced by its 'disastrous profit record';⁴⁹
- the SAU will not reduce what he considers to be the most significant barriers to entry, relative to the counterfactual in which the existing 87B undertaking continues, namely:⁵⁰
 - government licensing; and
 - scale and scope economies.
- new entry by a 'full-scale' competitor remains highly unlikely under the SAU *vis-à-vis* the status quo.⁵¹

86. Nonetheless, Dr Williams concludes that the SAU will promote competition since it will facilitate entry by 'niche' subscription broadcasters, relative to the counterfactual in which the existing s87B undertaking continues.

5.3. FOXTEL's submission

87. On the strength of the analysis contained in the reports by Mr Ergas and Dr Williams, FOXTEL submits that compelling it to unbundle CA/SI services would be unreasonable, since it is likely that:

- entry barriers would not be reduced or reduced only slightly and there are unlikely to be any 'full-service' access seekers;
- significant costs would be incurred by FOXTEL with no assurance they will be recovered;
- unbundling CA/SI may reduce and distort competition;
- there would be no clear efficiency gains and, in particular, innovation and service upgrading would become substantially more difficult; and

⁴⁹ Williams report, p41.

⁵⁰ Williams report, p51.

⁵¹ Williams report, p50.

- FOXTEL's ability to recover and gain a return on its investments would be compromised.

88. In the following section I examine the robustness of the assumptions and analysis of Mr Ergas and Dr Williams that underpin FOXTEL's submission that the SAU is reasonable as compared with the counterfactual scenario in which CA/SI is unbundled.

6. Do FOXTEL's Submissions Establish Reasonableness?

89. In this section I examine the robustness of the assumptions and analysis of Mr Ergas and Dr Williams that underpin FOXTEL's submission that it is reasonable for it to limit the supply of CA/SI services to retail customers to whom it supplies, and continues to supply a retail service, rather than providing unbundled access to CA/SI services.
90. I begin by examining whether the reports of Mr Ergas and Dr Williams provide a sound basis from which to conclude that the SAU will provide for significantly greater opportunities and environment for competition than if FOXTEL's CA/SI technology were unbundled. I then examine whether the reports of Mr Ergas and Dr Williams have established that the SAU will encourage the economically efficient use of and investment in infrastructure relative to CA/SI unbundling.

6.1. Critical assumptions or conclusions

91. In examining whether the SAU would promote competition relative to CA/SI unbundling, I have undertaken an analysis of a number of critical assumptions made or conclusions drawn by Mr Ergas and/or Dr Williams. On each of these critical elements of the logic underpinning their ultimate conclusion, I set out in the remainder of this section the reasons for my opinion that a different conclusion is appropriate. My conclusions on each of these issues is:
- that FOXTEL does have market power (see section 6.2.1);
 - that customers would be averse to 'stacking' multiple STUs (see section 6.2.2.1);
 - that customers would be reluctant to acquire an STU that is incompatible with FOXTEL's CA/SI systems (see section 6.2.2);
 - that new entry is feasible, at least in the long-term, and would not necessarily be limited to 'niche' suppliers (see section 6.2.4); and
 - that FOXTEL has the ability and incentive to alter the composition of its basic package (see section 6.2.2.3.2).
92. In assessing whether the SAU will encourage the economically efficient use of and investment in infrastructure relative to CA/SI unbundling, I also assume:
- that CA/SI unbundling is technically feasible, albeit potentially at a cost to FOXTEL, consistent with the assumption of Mr Ergas;
 - that reciprocal access is feasible, albeit contingent upon overcoming a number of hurdles, consistent with the assumption of Mr Ergas;⁵² and

⁵² Mr Ergas states in a number of places in his report that there is no *certainty* that reciprocal access would be available to FOXTEL. However, he does not contend that reciprocal access is infeasible, provided the identified hurdles are overcome.

- that that CA/SI unbundling does not preclude FOXTEL from pursuing a broadly similar business model to that which it currently employs with respect to ‘subsidising’ the cost of its STUs to encourage uptake (see section 6.3.2).

93. I discuss below the reasons for my different conclusion on each of these issues from those adopted by Mr Ergas and Dr Williams in their reports.

6.2. Would the SAU promote competition?

94. In this section I examine whether it has been established that the SAU will promote competition within the meaning of s152AB(2)(c) of the Act by providing for significantly greater opportunities and environment for competition than if FOXTEL’s CA/SI technology were unbundled.

95. The Tribunal has pointed out⁵³ that, in order to assess whether a “particular thing” – in this case the SAU – promotes competition, it is necessary to have formed at least a general view as to the market in question. I note that the report of Mr Ergas does not explicitly define a relevant market or markets for the purposes of his assessment of the reasonableness of the SAU. However, Mr Ergas does refer explicitly to a market for ‘the delivery of subscription television services’,⁵⁴ and this appears to be the reference point for the analysis in his report. In contrast, Dr Williams explicitly defines an ‘Australian television broadcasting market’, as I note in section 5.2 above.

96. For the purposes of my analysis of whether the SAU would promote competition in markets for listed services, I have adopted as a reference point the same market as that adopted by Mr Ergas, ie, the market for subscription television services. To the extent that Dr Williams’ preferred market definition is appropriate – an opinion that, for the reasons I discuss below, I do not share - my analysis would only be affected if it could be shown that the SAU would no longer promote competition in that wider market.

6.2.1. FOXTEL’s market power

97. FOXTEL submits that there is “clear and overwhelming evidence that it does not possess market power in the supply of digital subscription television services.”⁵⁵ In so doing, it relies upon the submission of Dr Williams, who cites the following factors as evidence that FOXTEL does not possess market power:

- FOXTEL competes against other subscription television broadcasters, suppliers of DVDs and videos, and particularly FTA broadcasters;
- rivalry from these said competitors acts as an effective constraint on FOXTEL, as evidenced by it attracting less than 14 per cent of viewers when FTA broadcasts are included; and

⁵³ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [126].

⁵⁴ Ergas report, p25.

⁵⁵ FOXTEL Submission, p42.

- FOXTEL's poor financial performance suggests that that it has not been earning monopoly profits.
98. In my opinion these factors provide an insufficient basis from which to infer that FOXTEL does not have market power. Neither an analysis of FOXTEL's audience share, nor an analysis of its historic accounting profits, are immediately relevant for determining whether it possesses market power.
99. First, FOXTEL's audience share provides a poor indication of market power since the existence of market power is not contingent upon commanding a substantial share of all television viewers. Many FOXTEL customers may be prepared to pay for the service even though they expect to watch FOXTEL programming relatively infrequently. For example, many customers may subscribe to FOXTEL in the expectation of watching only a small number of live sporting events at the weekend and an occasional 'first run' movie. This may represent only a small percentage of their total weekly television viewing, yet they are nonetheless prepared to pay a monthly subscription to receive that content. In other words a relatively low audience share does not necessarily imply an absence of market power.
100. Second, analysing historic and expected future cash flows provides a relatively poor indication of the existence of market power. Dr Williams is essentially analysing whether, based on its historic and expected cash flows, FOXTEL would elect again to make the same investments. Dr Williams' analysis does not address even this issue in full, since he limits his consideration of FOXTEL's future cash flows to 2012. In my opinion, this is an inadequate time-horizon from which to infer whether FOXTEL has earned a normal return on its long-term investments. In any case, whether FOXTEL has made a normal return on its investments is a separate issue from whether it has market power.
101. Indeed, neither audience share nor an analysis of cash flows provides any real indication of FOXTEL's ability to act without due regard to competitors or potential competitors. Market power was described in *Queensland Wire Industries (1989)*⁵⁶ as the ability to 'give less and charge more', thereby acting without due regard to the constraints imposed by effective competition. This indicator of market power suggests that the best way of approaching the question of whether or not FOXTEL has market power is to consider whether, following entry, it would be reasonable to expect FOXTEL to:
- reduce its price; and/or
 - seek to improve the quality of its digital subscription television service.
102. To the extent that the price and/or quality of FOXTEL's service could be expected not to change materially following entry this would imply an absence of market power, since it could be inferred that the service is currently being provided in a competitive market. On the other hand, if it would be reasonable to expect FOXTEL to reduce its subscription charges and/or alter its programming subscription options in a material way, this would imply that FOXTEL does currently possess market power, because it is able to set prices with a degree of freedom that it would otherwise not enjoy.

⁵⁶ *Queensland Wire Industries Pty Ltd v Broken Hill Pty Co Ltd* (1989) 167 CLR 177 [189].

103. In my opinion, there is sufficient reason to believe that, if entry were to occur as a result of CA/SI unbundling, FOXTEL *would* reduce its prices and may be forced to alter its fundamental programming subscription choices. I explain in the following section that this is principally because unbundling CA/SI reduces a significant barrier to entry posed by the current incompatibility between competing STUs and FOXTELS embedded STU base. I conclude that FOXTEL does therefore possess market power in the supply of digital subscription television services. It follows that the constraints implicit in Dr Williams' more widely defined market do not apply, and so that market definition is itself inappropriate.

6.2.2. Barriers to entry: incompatibility

104. In my opinion the reports of Mr Ergas and Dr Williams understate the relevant barriers to entry since neither adequately accounts for what has been identified in similar circumstances as a critical entry barrier, ie, the reluctance of consumers to purchase an incompatible technology.⁵⁷ In other words, customers subscribing to a potential alternative subscription television service will most likely want the option of also receiving FOXTEL programming at some point in the future,⁵⁸ and potentially programming from other providers as well. Not having that option represents an entry barrier.
105. The barrier to entry posed by incompatibility was recently highlighted by the European Commission – albeit within the context of a different industry – in a proceeding involving allegations that Microsoft withheld information necessary for competitors to create systems that would interoperate fully with Microsoft Windows.⁵⁹ The Commission concluded that competitors were unable to compete with Microsoft's offering, notwithstanding the fact customers rated some of Microsoft's competitors' products higher than Windows for characteristics that are important to them.⁶⁰

“...customers are migrating away from these products in a significant way, and acknowledge that interoperability is an important factor in them doing so. This is already circumstantial evidence that the alternatives to which these other vendors have recourse are not sufficient to offset Microsoft's interoperability advantage.”

106. In other words, despite the existence of alternative products considered superior in some respects to Microsoft's, customers were nevertheless reluctant to substitute away from the Microsoft offering. As the European Commission explained:⁶¹

“Due to the lack of interoperability that competing work group server operating system products can achieve with the Windows domain architecture, an increasing number of consumers are locked into a homogeneous Windows

⁵⁷ Dr Williams does not discuss this barrier to entry at all, possibly because he inappropriately employs the status quo as his counterfactual, which results in identical incompatibility in both states of the world he considers.

⁵⁸ This may particularly likely if FOXTEL were to change the composition of its packages to provide greater choice to customers, eg, by unbundling its basic package and offering more segmented packages of channels.

⁵⁹ See: Commission of the European Communities, Case COMP/C-3/37.792 Microsoft.

⁶⁰ Commission of the European Communities, Case COMP/C-3/37.792 Microsoft, [668].

⁶¹ Commission of the European Communities, Case COMP/C-3/37.792 Microsoft, [694].

solution at the level of work group server operating systems. This impairs the ability of such customers to benefit from innovative work group server operating system features brought to the market by Microsoft's competitors. In addition, this limits the prospect for such competitors to successfully market their innovation and thereby discourages them from developing new products."

107. In much the same way that customers purchasing a personal computer operating system are reluctant to purchase a system that is incompatible with the Microsoft software suite, in my opinion, it is reasonable to conclude that prospective digital pay-TV customers will likely be reluctant to subscribe to a pay-TV service unless they are also able to receive FOXTEL programming through the provided STU. This is because:

- if a new customer subsequently wanted to get FOXTEL services, that customer would be reluctant to switch to or buy a second STU, both of which are costly and inconvenient; and
- it reduces switching costs for existing FOXTEL customers.

108. In my opinion, it is therefore likely that a typical access seeker will wish to offer its package to consumers using FOXTEL-compatible STUs rather than providing its own STU and CA/SI infrastructure. The fact that Optus and Austar currently utilise alternative CA/SI systems does not affect this conclusion since both simulcast a substantial proportion of FOXTEL programming despite utilising alternative CA/SI systems.⁶² In other words, a lack of CA/SI interoperability is not an issue for prospective Optus and Austar customers since they receive (and so offer to their customers) FOXTEL programming regardless. Customers of a prospective access seeker would not have this assurance.

109. The barrier to entry posed by incompatibility in the subscription television industry was highlighted in 1998 by the Deputy Director General for Competition for the European Commission:⁶³

"In the future, digital set top boxes will be replaced by integrated digital television sets. The Advanced TV Standards Directive to which I have already referred, requires such integrated sets to allow for the addition of modules containing different proprietary conditional access systems and other relevant technical services. In this way, consumers can be confident in buying such a set that they will not be tied to any one digital service provider.

However, the transition to integrated digital television sets is likely to take a significant number of years. In the meantime, there is a need to ensure that consumers buying a proprietary digital set top box are not tied to a single provider of digital services."

⁶² See Appendix A.

⁶³ Pons, J (1998), *The application of competition and anti-trust policy in media and telecommunications in the European Union*, Speech to International Bar Association, Vancouver. See also: *Directive 95/47EC of the European Parliament*, 24 October 1995, available at: <http://europa.eu.int/ISPO/infosoc/legreg/docs/dir95-47en.html>.

110. Mr Ergas discusses this form of barrier to entry mainly in terms of ‘efficiency’ from the perspective of consumers. Specifically, he contends that consumers are prepared to stack additional STUs and that CA/SI unbundling would not reduce switching costs in any event. I address these two contentions below.

6.2.2.1. Stacking or switching

111. Mr Ergas assumes that consumers would be prepared to ‘stack’ multiple STUs:⁶⁴

“...concerns that a reluctance to ‘stack’ will act as a barrier to services which require an additional item of equipment would seem to be unfounded. New technologies and services in home entertainment have been widely adopted, leading to multiple technology formats in the home. The uptake of DVD players in Australia demonstrates this.”

112. In my opinion, the examples cited by Mr Ergas do not provide evidence of the likely willingness of consumers to stack STUs. Rather, in my opinion the stacking of DVD and VHS players should more appropriately be characterised as a consequence of gradual technological change. For the period while both formats are in popular use consumers may require both technologies to access both current content and their own collections of historical content.⁶⁵ Moreover, DVD and VHS players initially had separate functions. Many consumers purchased DVD players for their enhanced quality of playback, but retained VHS recorders for recording television programs until DVD recorders came on the market and became competitively priced, which occurred several years after DVD players became popular.⁶⁶
113. In my view, Mr Ergas’ reference to consumer willingness to stack DVD and VHS players does not constitute a ‘like-for-like’ comparison. The stacking of STUs, as described by Mr Ergas, would arise neither because of technological change nor because of differing functions of the units. In my opinion, a more appropriate comparison would be consumers’ willingness to stack multiple video cassette recorders (VCRs). History is instructive in this regard.
114. The development of VCRs in the United States was initially characterised by two competing technological formats: Betamax and VHS. The Betamax VCR format was introduced to the market first, in 1975. However, by 1989 the competing VHS format had become the de facto standard. Although entering the market after Sony’s Betamax format, JVC’s VHS was initially successful in gaining market share by providing for longer recording times and lower prices. However, by the early 1980s, there was no significant difference between the two formats in performance, features, or prices.⁶⁷

⁶⁴ Ergas report, p31.

⁶⁵ The gradual move from cassette audio tapes to CDs and then to MP3 files as the storage medium for recorded music can be seen in a similar light.

⁶⁶ Again, a similar development can be seen in the shift from audio tapes to CDs and then to MP3 files.

⁶⁷ Park, “Quantitative Analysis of Network Externalities in Competing Technologies: The VCR Case”, *The Review of Economics and Statistics*, November 2004, 86(4), p939.

115. An important reason that VHS subsequently became the dominant video recording technology in the 1980s was JVC's decision to offer its standard to manufacturers with minimal restrictions. Sony was more selective in its partners and offered less generous licensing conditions than JVC. Sony lost the support of most of these partners in 1984 when they switched production to the competing standard.⁶⁸ This coincided with the emergence of the market for rented video films. Because VHS was the most popular technology, the majority of video clubs aligned themselves with VHS, which in turn meant:⁶⁹

“Suddenly, each user felt the imperative need to make a choice of machine in line with that of its nearest video club.”

116. Subsequently, there was a significant increase in the sales of VHS relative to Betamax, since this was the format in which most content was available. Betamax rapidly lost market share to VHS and in 1989 exited the market. One clear inference is that very few households were prepared to purchase and stack both a VHS and a Betamax recorder – they purchased one or the other, with most purchasing VHS. In my opinion, the rather different experience of competing video recording formats in the 1980s suggests that customers are unlikely to be prepared to stack – in terms of today's technology - multiple DVD recorders.

117. In contrast to Mr Ergas' assumptions, the UK Office of Fair Trading Report into the British pay TV market in 1996 identified consumers' aversion to stacking STUs as a significant hurdle for entrants seeking to compete with the incumbent operator:⁷⁰

“If a new entrant wished to broadcast using the Astra satellite system but adopted a different encryption system to that used by BSkyB, it would still require subscribers to buy a new set top box. Consumers might be reluctant to have two set top boxes, and might object to the need to physically switch between the two when switching between BSkyB's package and a new entrant's package. It did not seem implausible that a new entrant on the Astra system offering quality programming could attract some subscribers by this route (in addition to distributing through cable). However, it remained likely that entry using a new encryption system was largely precluded, for analogue at any rate.”

118. The Deputy Director General for Competition for the European Commission has similarly stated:⁷¹

“In theory, a new entrant into the pay-TV market has a choice between launching a set top box population using his own technical services for

⁶⁸ Grindley, “Standards Strategy and Policy: Cases and Stories”, Oxford University Press, 1995.

⁶⁹ Olloros, “Betamax revisited: a contextual view of the battle for the home VCR market”, University of Quebec, Montreal, p6. See: http://www.sba.muohio.edu/abas/2003/brussels/olloros_betamax%20revisited.pdf.

⁷⁰ Office of Fair Trading (1996), *The Director General's Review of BSkyB's Position in the Wholesale Pay TV Market*, para 4.74.

⁷¹ Pons, J (1998), *The application of competition and anti-trust policy in media and telecommunications in the European Union*, Speech to International Bar Association, Vancouver.

reception of his service and seeking to use the set top box population of the incumbent pay-TV operator.

In practice, however, the scale of investment required means that the new entrants' most realistic option is to provide a pay-TV service using the set top boxes which already exist. Quite apart from the investment required, consumers are reluctant to buy or rent more than one digital set top box."

119. In my opinion, it is reasonable to conclude that consumers would be reluctant to stack an additional STU. Moreover, irrespective of consumers' willingness, the stacking of multiple STUs would seem to be inefficient from society's perspective when a single STU would be adequate. By way of analogous example, it would also be inefficient if consumers were required to purchase multiple DVD or VCR players in order to view different content, ie, if movies from different film studios required different DVDs or VCR players. I explain in section 6.2.3 below that it is for this same reason that a degree of standardisation can be observed in almost all electronic appliances.
120. While dismissing the notion that consumers may be unwilling to 'stack', Mr Ergas does acknowledge that the cost of additional STUs may be a barrier to entry to some retail customers. However, he contends that CA/SI unbundling will not affect this because non-FOXTEL retail customers will have to purchase an STU in any case.⁷² Put another way, Mr Ergas claims that CA/SI unbundling will not reduce consumer switching costs and, on the contrary, may increase switching costs, since:⁷³
- a FOXTEL-compatible STU has a high level of functionality, whereas other STUs may be cheaper; and
 - if unbundling were to lead to a retail model, customers may pay more for the STU than they would if it were owner-provided, while bearing the risk of obsolescence.
121. Neither of these points addresses the fundamental barrier to entry I have identified, ie, that customers will take into account the lack of interoperability between competing STUs and FOXTEL's CA/SI system and incorporate this into their assessment of the costs of switching away from FOXTEL to a competitor. I note that, for the reasons I outlined above, history suggests few customers were prepared to pay for a Betamax VCR, since they would have been unable to view a significant amount of content using that technology.
122. In my opinion, Mr Ergas understates the impact of the SAU on consumer switching costs relative to CA/SI unbundling, since customers will take into account a lack of compatibility when assessing the cost of a competing provider's service. Incompatibility represents a significant barrier to entry and creates inefficiencies from society's perspective. For the reasons I outline below, the reports of neither Mr Ergas nor Dr Williams adequately take this perspective into account.

⁷² Ergas report, p32.

⁷³ Ibid.

6.2.2.2. Other forms of distribution

123. Technical incompatibility with FOXTEL's infrastructure can potentially be overcome if alternative distribution platforms exist over which to provide a competing service to FOXTEL. For example, Mr Ergas states that Broadband/IP television and subscription television over competing telecommunications networks provide such opportunities.⁷⁴ I concur that there are alternative forms of distribution available upon which to provide competing programming. However, such opportunities will be the same under both the SAU and CA/SI unbundling and so have little bearing on the assessment of whether competition for listed services has been promoted.

6.2.2.3. Consequences of incompatibility

124. For the reasons outlined above, in my opinion Mr Ergas and Dr Williams significantly underestimate the barrier to entry in the markets for subscription television services posed by incompatibility with FOXTEL's CA/SI technology. In consequence, their analysis does not address the prospect that the SAU will make it more difficult for a *competitor* to develop its own subscriber base, as compared with CA/SI unbundling. In not addressing the barrier to entry posed by incompatible technologies, neither Mr Ergas nor Dr Williams account for a number of factors that, in my opinion, are likely to reduce competition under the SAU relative to CA/SI unbundling. I discuss those factors below.

6.2.2.3.1. *Reduced competition and allocative efficiency losses*

125. A critical feature of the SAU is that customers of alternative pay-TV providers delivering service over FOXTEL's STUs must also purchase the FOXTEL basic package. If consumers place any value at all on the compatibility of STUs between one pay-TV provider and another, then the tie to the FOXTEL basic package will have the effect of reducing the demand for any alternative service. It follows that the prospects for competition will be reduced relative to a situation where FOXTEL's CA/SI is unbundled.⁷⁵
126. More specifically, this outcome arises under three distinct circumstances. First, some customers who view FOXTEL and alternative providers as substitutes may only purchase FOXTEL, despite the fact they may benefit from being able to purchase the alternative channels alone. These customers may not be willing to pay extra for the new services given that they are already required to pay for FOXTEL's basic package. These customers may reduce their purchases of at least some FOXTEL programming if they had access to compatible STUs. When set against the counterfactual of unbundling CA/SI, the SAU will reduce competition and allocative efficiency by causing unmet demand from customers that would be willing to buy the new programming but for the tie with FOXTEL's basic package.

⁷⁴ Ergas report, p48.

⁷⁵ The following example is drawn largely from a similar example presented in: Core Research (2002) "Competitive effects of the FOXTEL undertakings: A report on behalf of C7", p5. The Federal Communications Commission presents a number of similar examples in its recently released paper on the bundling of video channelling services over cable television, see: Federal Communications Commission, "Further Report on the Packaging and Sale of Video Programming Services to the Public", 9 February 2006, Economic Appendix.

127. Second, some customers who value the new services relatively highly may purchase FOXTEL to gain access to that new service, even though they would not otherwise buy FOXTEL alone.⁷⁶ For those customers who value the basic FOXTEL channels at less than the cost of taking the service there is a further allocative efficiency under the SAU, as compared with CA/SI unbundling, because customers would not otherwise need to take FOXTEL's basic package. For example, suppose a new provider offered a suite of sports channels on a tier to FOXTEL. Some customers may be prepared to pay for FOXTEL's basic package in order to receive the new service, despite placing a very low valuation on the basic package. Allocative efficiency and competition would be improved if that customer had the option of purchasing only the new service, which CA/SI unbundling would allow.
128. Third, some customers who value alternative channels at more than the cost of their provision (including STU costs) may not purchase any pay-TV services because of the need also to purchase FOXTEL.⁷⁷ This means that to entice *new* customers to subscribe to their service, alternative channels must provide sufficient extra value to entice customers who would not otherwise purchase FOXTEL to subscribe both to the additional programming and to FOXTEL itself. The additional expense of having to purchase the FOXTEL basic package may make the difference between many customers subscribing to a new service and not, despite the fact that they may value the new service significantly above cost. For such customers, the SAU again reduces competition relative to unbundling CA/SI and causes allocative inefficiency from unmet demand.
129. Similar conclusions were recently drawn by the US Federal Communications Commission (FCC) in its investigation into the bundling of channels by multi-channel video programming ('MVPDs') distributors. The FCC concluded that MVPD's tendency to bundle channels rather than provide them on an 'a la carte' basis likely increased the price and reduced demand for video programming. It estimated that consumers purchasing eleven cable channels would save as much as a 13 per cent decrease in their cable bills, with a decrease in three out of four cases.⁷⁸ The FCC concluded:⁷⁹
- "...bundling can raise prices sufficiently to drive some consumers out of the market. Making networks available a la carte could lower prices and increase consumer purchases of cable networks."*
130. The tie to FOXTEL's basic package that would exist under the SAU is no different in principle from the scenario examined by the FCC. Because access under the SAU is contingent upon customers first purchasing FOXTEL's basic package, all channels offered by alternative providers form part of a bundle and cannot be offered on an a la carte basis. In my opinion it is reasonable to assume that customers are likely to be unwilling to purchase or rent an STU that is incompatible with FOXTEL's CA/SI. On that basis, I conclude that Mr Ergas

⁷⁶ However, those customers may wish to retain the option of receiving FOXTEL programming, and programming offered by alternative providers, in the future.

⁷⁷ Again, those customers may wish to retain the option of receiving FOXTEL programming in the future.

⁷⁸ Federal Communications Commission, "Further Report on the Packaging and Sale of Video Programming Services to the Public", 9 February 2006, p4.

⁷⁹ Federal Communications Commission, "Further Report on the Packaging and Sale of Video Programming Services to the Public", 9 February 2006, p51.

and Dr Williams have not sufficiently considered that the bundling of any alternative service with FOXTEL's basic package is likely to reduce competition and lead to allocative efficiency losses under the SAU relative to a counterfactual in which FOXTEL's CA/SI technology is unbundled.

6.2.2.3.2. *Greater risk of manipulation of the basic package*

131. In my opinion, there is also a greater risk under the SAU that FOXTEL may attempt to alter the composition of its basic package to disadvantage new entrants. For example, if an access seeker with innovative content were to launch a successful tier channel, FOXTEL may seek to introduce a similar channel as part of its basic package, potentially undermining that entrant's core audience. The Tribunal also recognised this risk:⁸⁰

"We are also concerned that a prospective access seeker is vulnerable to manipulation by FOXTEL of the Basic Package to prevent or to preclude competitive conduct ... we are concerned at the prospect of FOXTEL being able to adjust the contents of the Basic Package in response to competitive conduct by an access seeker."

132. In its submission, FOXTEL contends that it is not able to alter its basic tier at will, stating:⁸¹

"...it is reasonable to assume that FOXTEL's current basic tier price is profit maximising (ie, that no higher prices would lower FOXTEL's losses). Accordingly, increasing basic tier prices is likely to lead to decreased subscriber numbers, and lower overall revenues from that tier."

133. In my opinion, FOXTEL's submission does not adequately address the risk identified by the Tribunal. First, whilst it is likely to be the case that FOXTEL's basic and premium packages currently represent the profit maximising price/content mix, this mix may well change following the entry of a competitor. In my opinion FOXTEL may well have an incentive to alter the composition of its basic package by adding additional channels (not necessarily taken from the premium tiers), eg, by employing a 'copying' strategy. Indeed, it is a normal competitive response for firms to seek to replicate or to improve upon services offered by their rivals. However, in circumstances where the customers of rivals operating under the arrangements set out in the SAU must also subscribe to the FOXTEL basic package, FOXTEL is potentially able to foreclose any competing provider.
134. The fact that such conduct is also consistent with that one would expect to observe in a competitive market makes it difficult to detect and address under Parts IV and XIB of the Act, despite FOXTEL's assertion to the contrary.⁸² In circumstances where the FOXTEL basic package is tied to the form of CA/SI access set out in the SAU, I agree with the assessment of the Tribunal, which stated:⁸³

⁸⁰ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [298].

⁸¹ FOXTEL Submission, p44.

⁸² FOXTEL Submission, p44.

⁸³ *Seven Network Limited* (No 4) [2004] ACompT 11 (23 December 2004) [300].

“...in our view, an ability to resort to the prohibitions against anti-competitive conduct contained in either Pt IV or Pt XIB of the Act is unlikely to be sufficient to reassure a prospective access seeker that its ability to compete for market share cannot be undermined by potential manipulation of the Basic Package by Foxtel.”

135. In my opinion, FOXTEL has understated both its ability and incentive to alter its basic package of programming so as to disadvantage competitors. To the extent that FOXTEL is able to engage in such a foreclosure strategy this will lessen competition in the market for subscription television services and cause efficiency losses. In my opinion the risk of such conduct occurring is significantly greater when access is tied to the basic package, as is the case in the SAU, than it is in a scenario under which CA/SI is unbundled.

6.2.2.4. Summary

136. On the assumption – which I believe to be realistic - that customers are reluctant to purchase or rent an STU that is incompatible with FOXTEL’s CA/SI, Mr Ergas and Dr Williams have given insufficient consideration to a significant factor that is likely to reduce competition and lead to allocative efficiency losses under the SAU relative to a counterfactual in which FOXTEL’s CA/SI technology is unbundled.

6.2.3. Standardisation and Competition in Infrastructure Development

137. Mr Ergas places significant emphasis on the potential detriment to competition in *infrastructure development* from standardising STU provision through unbundling. He states that if open access to FOXTEL’s CA/SI/STUs is permitted then it is more likely that these will become ‘standards’. Mr Ergas contends this would reduce the incentives for both competitors and FOXTEL to invest in the development of CA/SI/STU technologies, reduce choices for consumers and raise costs for access seekers, who might prefer to use lower cost technologies to distribute their services.
138. Mr Ergas does acknowledge the likely benefits of achieving compatibility, and identifies the avoidance of duplicated development costs and a possible increase in price competition as being advantages of CA/SI unbundling. However, no attempt is made by Mr Ergas to compare the relative magnitudes of these effects, other than to note that:⁸⁴

“it is far from obvious that CA/SI unbundling would enhance competition or benefit end users”

139. In my opinion Mr Ergas overemphasises the potential detriment to competition from standardisation of CA/SI/STU technologies and understates the likely benefits that establishing an industry standard would have for competition on the price, content and quality of subscription television. By contrast, I believe it reasonable to conclude that unbundled access to FOXTEL’s CA/SI system, and the standardisation that implies, is more likely to promote competition for listed services than the SAU.

⁸⁴ Ergas report, p40.

6.2.3.1. Standardisation defined

140. In considering the relative merits of potential competition in CA/SI/STU technologies, and potential competition for listed services, it is first useful to identify what is meant by the term 'standardisation' in this context. The CA/SI unbundling counterfactual envisages the technological separation of FOXTEL's conditional access system from its set-top units. Whereas presently FOXTEL's CA/SI can only communicate with its own STUs, under CA/SI unbundling access seekers would be able to provide their own STUs capable of interoperating with FOXTEL's CA/SI. This would eliminate the need for access seekers to establish their own CA/SI systems to access non-FOXTEL retail customers, since this could be achieved by extending the roll-out of the existing infrastructure.
141. Effectively this would establish FOXTEL's CA/SI system as the technological benchmark, or minimum standard, for potential access seekers. It would also establish FOXTEL's STU as a standard, because a substantially similar STU would be required to interact with FOXTEL's CA/SI system.
142. Standardisation may serve to reduce competition in some areas and/or to promote it in others. Its potential to reduce competition has been extensively documented by Mr Ergas in his report. Competition *for* the standard would be reduced due to the weaker incentives of system providers to invest in the development of their technology. However, once a standard is selected, significant benefits become available through competition *on* that standard.⁸⁵

“Agreeing on a standard may eliminate competition between technologies, but it does not eliminate competition altogether. Instead, it channels it into different and (to economists) more conventional dimensions, such as price, service and product features”

143. It is not possible to say, *a priori*, that standardisation will or will not have a net positive effect on competition in the relevant markets. Such a conclusion must be the result of a fact-based inquiry weighing the potential loss of competition in the development of technology against the potential gains in competition by adopting a standard. I do not consider Mr Ergas' analysis of these issues is sufficient to draw the conclusions that he adopts.

6.2.3.2. Detriment to competition from standardisation

144. I explain my opinion in the preceding section that if a subscription television provider's CA/SI/STU systems cannot be used to deliver FOXTEL programming, consumers may be reluctant to subscribe to that service. It follows that, while alternatives for FOXTEL's system may exist, they may not be close substitutes for obtaining unbundled access to FOXTEL's STUs from a consumer perspective. In this respect, FOXTEL's CA/SI/STU technology might *already* be reasonably considered to represent the current industry standard. This is acknowledged by Mr Ergas:⁸⁶

⁸⁵ Besen, S. and Farrell, J. (1994) "Choosing how to compete: Strategies and tactics in standardization", *Journal of Economic Perspectives*, 8, p117-31.

⁸⁶ Ergas report, p38.

“...while FOXTEL might currently set the technological standard, CA/SI unbundling would diminish FOXTEL’s (as well as anyone’s) incentives to invest aggressively in order to maintain its position when it comes to further developing the standard.”

145. This was effectively the conclusion reached by the European Commission in its 2000 decision on the merger between BSkyB and KirchTV:⁸⁷

“...the entry of KirchPayTV into this market at an early stage is likely to significantly raise barriers to entry for other potential suppliers by establishing the d-box as the standard decoder in Germany. Given the proprietary technology on which the box is based, such an entry is likely to create a dominant position.”

146. On the assumption that FOXTEL’s CA/SI/STU systems could reasonably be considered the technological standard, the effects of unbundling CA/SI on incentives for competitors to invest in competing CA/SI/STU systems is likely to be modest. For similar reasons I consider that any diminution in FOXTEL’s incentives to invest in development of its own CA/SI/STU system is also likely to be modest. Accordingly, in my opinion, it is unlikely that consumer choice over such systems would be greatly reduced by CA/SI unbundling relative to the SAU. This is because potential alternative providers of subscription television may be unwilling to invest in CA/SI systems to serve networks of STUs that would be unable to receive FOXTEL’s programming.
147. If consumers are unwilling to purchase STUs and associated CA/SI systems that lack access to FOXTEL programming, then the level of competition in the factual case will be modest. It follows that any detriment to competition from standardisation of STUs under CA/SI unbundling is also likely to be modest. I note again that STUs are *not* a ‘listed service’, since they do not carry communications from one point to another.⁸⁸ Accordingly, whether or not competition *for STUs* is promoted is, in isolation, would not appear to be relevant for the purposes of the statutory test, which I understand to be focused on the promotion of competition in markets for listed services.

6.2.3.3. Enhanced competition from standardisation

148. In my opinion, if a standard was established for CA/SI/STUs through CA/SI unbundling, greater competition on price, content and quality of subscription television would be possible and, indeed, likely. Effective competition for the supply of subscription television content seems unlikely to develop – at least within the term of the undertaking - unless consumers can purchase an STU that incorporates the relevant information technology. In other words, the enhancement of competition *requires* a degree of standardisation in service provision.⁸⁹

⁸⁷ Commission of the European Communities, Case No. COMP/JV.37 – BskyB / Kirch Pay TV [75].

⁸⁸ See section 2.1.1.1.

⁸⁹ For the reasons I provide in section 6.2.2 above, the fact that Optus and Austar utilise alternative CA/SI/STU systems does not affect this conclusion. Their customers are able to receive FOXTEL programming by virtue of the content

149. I note that several regulators of markets for subscription television in other jurisdictions, as well as in other industries with similar characteristics have arrived at a similar conclusion. The European Commission required undertakings from Kirch to ensure that third parties, whether operators of digital television or digital interactive TV services, were offered fair, reasonable and non-discriminatory access to all proprietary components of the digital set top box.⁹⁰ Kirch also undertook to enter simulcrypt agreements to ensure interoperability between different STUs.⁹¹ A broadly similar outcome was reached in the BiB case.⁹² In similar circumstances, albeit in a different industry, Microsoft was required to provide interoperability information on reasonable and non-discriminatory terms, thereby allowing competitors to make their software work more smoothly in conjunction with other Microsoft products.⁹³
150. In the United States, the Federal Communications Commission ('FCC') issued a directive in 1998 ordering multi-channel video programming distributors to make available separate security components, or security modules, which could be used by consumers in their own STUs to receive their broadcasts.⁹⁴ The sale of integrated STUs, where security functions are not separated from non-security functions, is scheduled to be banned in 2007.⁹⁵ By making such modules available, consumers are easily able to switch between providers by attaching a new security module without the need to purchase a new STU or paying for additional installation costs. Service providers have been directed to provide sufficient technical information to allow other STUs to interface with their systems.
151. In each of the above instances, requiring disclosure of information to enable a degree of standardisation was mandated so as to improve the prospects for competition in related markets. Standardisation was considered likely to *enhance* competition by overcoming a critical barrier to entry – the incumbent (and proprietary) technology that had come to represent the industry standard. In my opinion, the present circumstances are the same, in principle, as those described above. In the preceding section I explained my opinion that it is likely that customers will favour the convenience of a single STU and, given that FOXTEL has a large installed base of STUs compatible with its CA/SI system, any alternative system is likely to face a significant competitive disadvantage.

sharing agreement hence do not face the incompatibility issue that would confront a new entrant. TransACT and Neighbourhood Cable are only minor players with extremely small market shares.

⁹⁰ Commission of the European Communities, Case No. COMP/JV.37 – BskyB / Kirch Pay TV, Annex 1, p20.

⁹¹ Commission of the European Communities, Case No. COMP/JV.37 – BskyB / Kirch Pay TV, Annex 1, p22.

⁹² BiB was a joint venture between BskyB, BT, Matsushita and Midland Bank. It was to provide digital interactive TV services in the UK, such as limited internet access, home-banking, home-shopping and e-mail via television sets, by means of digital satellite broadcasting with a telecommunications return path. BiB would not be active in the pay-TV market. BskyB and, to a lesser extent BiB, would, however, be active in the technical services market. BiB was also required to offer fair, reasonable and non-discriminatory access to all proprietary components of its digital STU. BskyB was also obliged to enter simulcrypt agreements to ensure interoperability between different STUs. The joint venture commenced on 12 October 1999, see: <http://news.zdnet.co.uk/internet/0.39020369.2074329.00.htm>.

⁹³ See: Commission of the European Communities, Case COMP/C-3/37.792 Microsoft, Article 5, p299. In an attempt to comply with this order Microsoft recently announced that it would provide its Windows source code to rivals, see: Buck, T, *Microsoft offers rivals source code*, Financial Times, 26 January 2006, p1.

⁹⁴ Federal Communications Commission Media Release, June 11 1998.

⁹⁵ Federal Communications Commission Media Release, March 17, 2005.

152. In my opinion the reduction in this barrier to entry following from the introduction of a degree of standardisation in CA/SI/STU services would improve the conditions and environment for competition and increase the likelihood of entry by competing providers of subscription television services.

6.2.3.4. Overall impact of standardisation

153. To summarise, in my opinion Mr Ergas overemphasises the potential detriment to competition from standardisation of CA/SI/STU technologies and understates the potential benefits that creating an industry standard would have on competition for the price, content and quality of subscription television.
154. I consider that allowing access to a standardised unbundled CA/SI/STU technology to both FOXTEL and non-FOXTEL retail customers would significantly enhance competition in areas *beyond* CA/SI/STU provision by removing the barrier to entry represented by incompatibility. This is likely to outweigh the loss of competition on delivery technology and performance. This is an unsurprising result, since a degree of standardisation is common in many electronic appliances, eg, CDs and DVDs operate on a standard, and television sets in Australia decode a common programming standard.

6.2.4. Prospect of entry

155. Dr Williams and Mr Ergas both maintain that the likelihood of a new entrant wishing to supply a full 'basic' subscription television service in competition with FOXTEL is low.⁹⁶ Dr Williams concludes that, to the extent that entry does occur, it will only be by 'niche' broadcasters selling their channels on a 'tier' to FOXTEL's basic package. He concludes that the SAU will have only a cursory impact on the prospect for new entry, since it does not affect what he considers to be the principal barriers to entry into the subscription broadcasting market, ie:
- government licensing; and
 - scale/scope economies – particularly the sunk costs associated with long-term contractual commitments to secure content.
156. However, I explain in section 5.2 that, in undertaking his analysis, Dr Williams compares the SAU with a counterfactual in which the existing s87B undertaking continues, rather than a counterfactual in which CA/SI is unbundled. This has a number of consequences which, in my opinion, greatly affect his analysis. Specifically:
- the barrier to entry posed by incompatibility with FOXTEL's STUs that I identify in section 6.2.2 is not considered – perhaps because it is identical in Dr Williams' factual and counterfactual. Dr Williams' analysis does not therefore reflect the fact that CA/SI unbundling may significantly reduce this barrier, thereby allowing economies of scale and scope to be more easily obtained; and

⁹⁶ See Ergas report, p48; and Williams report, p51.

- ‘niche’ broadcasters are characterised as entrants selling their channels on a tier to FOXTEL’s basic package, whereas if CA/SI were to be unbundled those channels would be available separately. A customer would not therefore need to purchase FOXTEL’s basic package to receive the entrants’ programming. This would lead to significantly different entry conditions between the SAU and the appropriately specified counterfactual.

157. I outline in section 6.2.2.3.1 above that, in my opinion, once these factors are taken into account, CA/SI unbundling seems likely to encourage entry as compared with the SAU, since:

- some customers who view FOXTEL and alternative providers as substitutes may only purchase FOXTEL, despite the fact they may benefit from being able to purchase the alternative channels alone; and
- some customers who value alternative channels at more than the cost of provision (including STU costs) may not purchase any pay-TV services because of the need also to subscribe to FOXTEL.

158. I also note that, in Australia, the anti-siphoning legislation has prevented FOXTEL from securing all of the ‘prime’ content on an exclusive basis for prolonged periods.⁹⁷ In this respect the Australian situation is quite different from that prevailing in, say, New Zealand or the United Kingdom where the largest subscription television providers, Sky and BSkyB, respectively, have live broadcasting rights to the most popular sports.⁹⁸ This may give rise to comparatively greater scope in Australia for entry by broadcasters seeking to compete with FOXTEL by offering differentiated packages – particularly if CA/SI is unbundled.

159. Dr Williams also emphasises what he describes as FOXTEL’s ‘disastrous profit record’ as a factor discouraging *de novo* entry.⁹⁹ I discuss in section 6.2.1 above why I consider this to be of little relevance for assessing the likelihood of entry. Moreover, I note that recent media reports indicate that FOXTEL is now profitable and exceeding its revenue expectations. The roll-out of its digital service is thought to have allowed it to become profitable much faster than anticipated:¹⁰⁰

“It is understood FOXTEL posted an operating profit after interest and tax for the first time in the first week of January and has been in the black since, which is well ahead of the company’s internal forecasts.”

⁹⁷ Anti-siphoning obligations are imposed on commercial television licensees as a condition of their licences. Pay-TV licences are prevented from acquiring exclusive rights to listed events, which are specified by the Minister of Communications, Information Technology and the Arts. The Minister has a wide discretion to add or remove events from the list, which currently comprises domestic and international sporting events in eleven categories, including, cricket, tennis, golf, motor sports and the football codes. The scheme permits pay-TV licensees to acquire rights to these listed events only after a right has first been acquired by a commercial FTA broadcaster reaching more than 50 per cent of the Australian population, or where no such rights have been purchased six weeks before the event.

⁹⁸ In New Zealand, for example, Sky has the live broadcasting rights to All Black rugby test matches and Super 14 rugby matches. In the United Kingdom, BSkyB has exclusive rights to the best live matches from the English Premier Football League.

⁹⁹ Williams report, p61.

¹⁰⁰ Kitney D, “Digital signals profit at FOXTEL”, *Australian Financial Review*, 30 January 2006, p13.

160. Mr Ergas also concludes that the likelihood of entry by providers offering a competing 'basic package' is very low.¹⁰¹ First, he claims that broadband/IP television and subscription television over competing telecommunications networks provide opportunities for competing services. I discuss in section 6.2.2.2 above the reasons for my conclusion that the likelihood of entry over competing platforms such as broadband/IP television will be the same in both states of the world and so is of limited relevance.
161. Second, Mr Ergas states that there are greater barriers to entry in the provision of a competing basic package than for 'tier' content, and CA/SI unbundling would not appear significantly to reduce those barriers. However, this conclusion does not take account of the fact that CA/SI unbundling reduces an important barrier to entry posed by incompatibility for *all access seekers*, irrespective of the number of channels they wish to supply. Even if an access seeker is a 'niche' broadcaster that wishes to provide a single or select number of channels, for the reasons I outline in section 6.2.2.3.1 above the conditions for entry are improved under CA/SI unbundling.
162. To summarise, in my opinion, the prospect for entry in subscription broadcasting is understated by Dr Williams and Mr Ergas, principally because neither takes sufficient account of the barrier to entry posed by incompatibility and its consequent effects on consumer behaviour.

6.2.5. Summary

163. In my opinion, the Commission cannot be satisfied that the SAU would provide better opportunities and environment for competition than a counterfactual in which FOXTEL's CA/SI services are unbundled. This opinion is based on the following findings:
- FOXTEL currently possesses market power in the supply of digital subscription television services;
 - Mr Ergas and Dr Williams do not take sufficient account of the barrier to entry posed by incompatibility between competing STUs and FOXTEL's established systems;
 - CA/SI unbundling would go some way to reducing FOXTEL's market power by reducing this barrier;
 - Mr Ergas and Dr Williams understate the prospect of new entry. Reducing the barrier to entry posed by incompatibility will provide greater opportunities for new entry by all forms of access seekers, irrespective of the number of channels they wish to offer; and
 - Mr Ergas over-emphasises the potential detriment to competition from standardisation of CA/SI/STU technologies and understates the potential benefits that creating an industry standard may have for competition on the price, content and quality of subscription television.

¹⁰¹ Ergas report, p48.

164. Accordingly, in my opinion, it has not been demonstrated that the SAU promotes competition within the meaning of s152AB(2)(c) of the Act relative to a counterfactual in which CA/SI is unbundled.

6.3. Would the SAU encourage economic efficiency?

165. In this section I examine whether it has been established that the SAU will encourage the economically efficient use of and investment in infrastructure within the meaning of s152AB(2)(e) of the Act, relative to CA/SI unbundling.

6.3.1. Allocative efficiency

166. In my opinion, for the reasons I discuss in section 6.2.2, customers are likely to be unwilling to purchase or rent an STU incapable of receiving FOXTEL programming from a pay-TV competitor. Accordingly, the SAU seems likely reduce retail competition for subscription television services and lead to allocative efficiency losses relative to the counterfactual in which CA/SI is untied from FOXTEL's basic package in ways that neither Mr Ergas nor Dr Williams give sufficient emphasis. Specifically, I discuss in section 6.2.2.3 above that:

- some customers who view FOXTEL and alternative providers as substitutes may only purchase FOXTEL, despite the fact they may benefit from being able to purchase the alternative channels alone;
- some customers who value alternative channels relatively highly may purchase FOXTEL to gain access to the alternative channels, even though they would not buy FOXTEL alone;
- some customers who value alternative channels at more than the cost of provision (including STU costs) may not purchase any pay-TV services because of the need also to purchase FOXTEL; and
- there is a greater risk under the SAU that FOXTEL may attempt to alter the composition of its basic package to disadvantage new entrants.

167. Because Mr Ergas and Dr Williams do not take adequate account of the barrier to entry posed by a lack of compatibility, they do not address these factors. In my view, this leads them to understate the likely allocative efficiency losses arising in the factual case.

6.3.2. Efficiencies from vertical integration

168. Mr Ergas contends that inefficiencies would follow from FOXTEL having to alter its business model to comply with CA/SI unbundling requirements and, in particular:

- its strategy of encouraging uptake of subscriptions by 'subsidising' the cost of the STU would be affected;¹⁰²

¹⁰² Ergas report, p56.

- its practice of retaining ownership of STUs and collecting them from churning customers would be undermined by the availability of FOXTEL-compatible STUs from other sources;¹⁰³ and
- it would no longer be able to optimise its CA/SI for its own STU and content requirements, since it would also be obliged to serve the STUs and content of access-seekers.¹⁰⁴

169. In my opinion, Mr Ergas does not present a clear or compelling case as to why unbundling the provision of CA/SI from FOXTEL's content would entail efficiency losses overall since:

- it is not clear why FOXTEL would be prevented from continuing to 'subsidise' the provision of STUs to encourage uptake under CA/SI unbundling (see section 6.3.2.1);
- it is not clear why FOXTEL would be unable to continue pursuing its ownership model, to the extent that this was efficient (see section 6.3.2.2);
- it is not clear whether the economies offered by the simultaneous development of content and functionality would be significantly diminished by CA/SI unbundling (see section 6.3.2.3) and
- even if CA/SI unbundling did impose costs on FOXTEL through reduced integration between CA/SI/STU and content, this may be more than off-set by the allocative efficiency improvements (see section 6.3.2.4).

6.3.2.1. 'Subsidising' STUs

170. FOXTEL's 'subsidy' of the upfront cost of an STU is conceptually distinct from its practice of retaining STU ownership. Mr Ergas does not address the question as to why FOXTEL cannot continue to subsidise the upfront cost of its STUs to new customers, other than linking it to the development of a 'retail' model.¹⁰⁵

171. As with many other sale or lease agreements for consumer durables, FOXTEL can presumably include contractual arrangements whereby, if the consumer wants to switch to a non-FOXTEL provider, a penalty payment can be levied to recover the balance of any upfront subsidy, irrespective of whether the customer retains ownership or not. I set out at Appendix B that the FOXTEL Pricing Guide currently stipulates a penalty payment of \$390 or the remainder of the contractual revenue for customers churning off early, whichever is the lesser. In my view it seems plausible that these terms and conditions could be modified relatively easily also to recover 'subsidies'. For example, the market for mobile phone handsets is characterised by broadly analogous arrangements: despite the existence of a retail market for handsets, providers continue to subsidise handsets for customers on long term contracts. This is explored in greater detail below.

¹⁰³ Ibid.

¹⁰⁴ Ergas report, p53.

¹⁰⁵ Ergas report, p47.

172. Moreover, in my opinion it is likely that *entrants* would wish to adopt a similar strategy. Indeed, it is widely accepted that promoting uptake is a dominant business strategy in pay-TV markets. For example, the European Commission in the BSkyB / Kirsch Pay TV merger stated:¹⁰⁶

“Potential entrants must have the resources not only to develop the advanced technology necessary to provide such services but also to promote and, almost certainly, subsidise the rental or sale of digital decoders to consumers”.

173. In my view, there is no evidence to suggest that FOXTEL would not be able to continue to pursue subsidisation of the upfront cost of STUs under the counterfactual of CA/SI unbundling. Furthermore, it seems likely that entrants would also want to adopt such a strategy. In my opinion, this would likely be the case whether or not a retail market for STUs developed.

6.3.2.2. FOXTEL's ownership model

174. On the question of FOXTEL's ownership model, Mr Ergas expresses the opinion that:¹⁰⁷

“... CA/SI unbundling may prevent FOXTEL from pursuing its STU ownership model, because STUs not owned by FOXTEL would be connected to the system. Potentially, end-users may own the STUs, which may place pressure on FOXTEL to adopt a retail model as well, despite its inefficiencies. This is because a potential customer that already owns an STU would be unlikely to accept paying a rental fee for using FOXTEL's STU.”

175. The scenario raised by Mr Ergas of end-user ownership is feasible. Some customers who purchase a FOXTEL-compatible STU from an alternative provider of subscription television may prefer to access FOXTEL's content unbundled from STU provision. If FOXTEL elected to provide such access, then it would no longer be in the position of owning all STUs capable of accessing its programming. Moreover, FOXTEL may choose to compete with other providers of STUs by selling, or renting, these to consumers, thereby unbundling this service from the provision of content.

176. However, I do not accept Mr Ergas' contention that the existence of customer-owned STUs might prevent FOXTEL from pursuing the ownership model. FOXTEL could still retain ownership of many of its STUs by including this as a condition of a bundled offer to consumers. Indeed, if the vertical efficiencies offered by ownership are as significant as Mr Ergas describes then FOXTEL would presumably be able to price such a bundle very attractively, as compared with the disaggregated products. Such an outcome would allow FOXTEL to retain its business model while increasing the range of choices available to consumers.

177. To summarise, no change in business strategy would be *forced* upon FOXTEL in the event of CA/SI unbundling. FOXTEL would only need to alter its business model if it *elected* to do

¹⁰⁶ Commission of the European Communities, Case No. COMP/JV.37 – BskyB / Kirch Pay TV [74].

¹⁰⁷ Ergas report, p56.

so in the face of increased competition in order to improve the attractiveness of its service. In my view, the likelihood of this eventuating would be determined by the extent of the technical efficiencies available to FOXTEL from its STU ownership model, and their attendant benefit of consumers.

6.3.2.3. Reduced integration between CA/SI/STU and content

178. The third element of FOXTEL's business strategy that Mr Ergas contends may be jeopardised by CA/SI unbundling is the relationship between STU provision and content, ie, the economies offered by the "simultaneous development of content and functionality".¹⁰⁸ He concludes:¹⁰⁹

"The loss of CA/SI/STU – content integration similarly decreases productive efficiency in all conceivable scenarios"

179. It is conceivable that there are advantages to FOXTEL in being able simultaneously to produce content whilst developing the requisite functionality to broadcast that content. A scenario in which these advantages may be threatened could occur if an alternative provider of content were to require CA/SI functionality above and beyond that needed by FOXTEL. However, any such costs to FOXTEL would need to be balanced against the possible benefits to society from increased channel offerings, decreased prices and improved quality. In other words, it is not at all clear that Mr Ergas is correct to conclude that, from society's perspective, as distinct from FOXTEL's, that:¹¹⁰

"There is no conceivable case where CA/SI unbundling leads to an increase in these economies of vertical integration."

180. Moreover, in my opinion, it is not clear that CA/SI unbundling would significantly disadvantage FOXTEL in this respect in any case. An alternative content provider would appear to have an incentive to work closely with FOXTEL in order to enable the CA/SI to be developed to the necessary standard to support its content. This would presumably require early notification of the necessary functionality, cooperation between technical departments to ensure compatibility and appropriate compensation for costs to FOXTEL associated with any required upgrade.

6.3.2.4. Competition and the status of the basic package

181. In my opinion, much of Mr Ergas' analysis appears predicated on the assumption that FOXTEL's existing business arrangements are efficient. For the reasons I discuss above, it is my opinion that FOXTEL would be able to continue to 'subsidise' the provision of STUs to encourage uptake under CA/SI unbundling, to continue to pursue its ownership model, to the extent this is efficient and would face limited costs from reduced integration between CA/SI/STU and content. In other words, those elements of FOXTEL's existing arrangements that potentially *do* entail efficiencies are not threatened by CA/SI unbundling.

¹⁰⁸ Ergas report, p53.

¹⁰⁹ Ergas report, p54.

¹¹⁰ Ibid.

182. However, one aspect of FOXTEL's current operations that likely *would* need to be re-evaluated in the face of competition is the composition of its basic and premium tiers, and potentially the tie of access to the basic package itself. In its submission, FOXTEL effectively argues that the current composition of its basic and premium tiers is efficient and profit maximising:¹¹¹

“FOXTEL differentiates its content products by positioning them within basic and premium tiers, and charging different prices for each tier. This is efficient and normal pricing, because the pricing of different programs reflects users’ willingness to pay ... With the experience of nearly 10 years retailing subscription television in Australia, it is reasonable to assume that FOXTEL’s current basic tier pricing is profit maximising, (ie. that no higher prices would lower FOXTEL’s losses).”

183. In my opinion, whether FOXTEL's programming packages reflect consumers' preferences, or are profit maximising are of limited relevance for determining whether *society* would benefit from FOXTEL altering its channelling options in the face of increased competition. Consider again a situation in which an alternative provider seeks to offer a new service and that incompatibility is a barrier to entry for the reasons I discuss above. Under the SAU, to receive the new service customers must also purchase (or be currently purchasing) at least FOXTEL's basic package. Under these circumstances, the alternative provider may struggle to establish a foot-hold in the market, for the reasons I explain in section 6.2.2.3.1 above.¹¹²
184. Now consider the same situation under CA/SI unbundling. The new service can now be offered to consumers on a stand-alone basis at a significantly lower 'unbundled' monthly price. Customers would then have greater freedom to purchase FOXTEL, the new service, or both. If a new entrant is successful in attracting customers from FOXTEL, it would cause FOXTEL to respond to that competition. This might entail FOXTEL improving the quality of the content it offers, or potentially altering the composition of its basic and premium packages, perhaps by providing a more disaggregated menu of channel and pricing options, eg, it may offer a lower monthly prices to customers wishing to only purchase, say, FOX Sports or its Showtime channels.
185. In my opinion, allowing for this greater choice is an important element of competition and of significant benefit for consumers. If alternative providers, by introducing a greater range of alternative programming from which consumers can choose, cause FOXTEL to respond to that competition by offering improved quality and greater choice, this would seem to me to be desirable from society's perspective. As the FCC recently stated:¹¹³

¹¹¹ FOXTEL Submission, p43.

¹¹² Further, as section 6.2.2.3.1 explained, there is a further potential allocative efficiency loss since customers who value the new service relatively highly may purchase FOXTEL to gain access to that service, even though they would not buy FOXTEL alone.

¹¹³ Federal Communications Commission, "Further Report on the Packaging and Sale of Video Programming Services to the Public", 9 February 2006, p30.

“If bundling, as compared to a la carte, causes consumers to pay more or prevents customers from getting the programming they want, then bundling has made them worse off.”

186. I recognise that this may result in foregone technical efficiencies from FOXTEL’s perspective, as Mr Ergas identifies.¹¹⁴ However, as I explain in section 2.1.2 above, I do not consider that the legitimate business interests of the carrier extend so far as to warrant insulation from competition in downstream markets. In my opinion any cost to FOXTEL needs to be weighed against the allocative efficiency improvements brought about by greater competition for the price, content and quality of subscription television.

6.3.2.5. The market for mobile phones

187. In my opinion, the provision of STUs by subscription television companies is, in principle, little different to the provision of handsets by mobile phone companies. The market for mobile phone handsets provides a useful analogy of how the vertical efficiencies implicit in the provision of subscription television may be maintained, and customer choice potentially enhanced, by CA/SI unbundling. Recognising that prospective customers have differing characteristics, mobile phone service providers offer a range of choices, for example:

- plans in which customers must sign one- or two-year contracts and are not charged an explicit up-front price for their handset.¹¹⁵ This is broadly similar to FOXTEL’s strategy of subsidising STUs and mandating uptake of the basic package, with the exception that FOXTEL insists on retaining ownership of that STU; and
- plans for those customers that wish to purchase a handset up-front and be more selective about their contract (or opt for a pre-pay plan), and those customers that already have handsets.¹¹⁶ This would be similar to the scenario in which pay-TV customers purchased an STU up-front or paid an explicit, unsubsidised monthly rental fee to a pay-TV provider and were more selective in the programming they chose.

188. Mobile phone service providers are therefore able to continue to encourage up-take of contracts by subsidising hand-sets for new customers, whilst recognising that some consumers will want to be more selective about their contract, or opt for a pre-pay plan, either because of personal preference or because they already have a handset. The greater choice offered to consumers as a result is desirable from a societal perspective. In my opinion, there is no compelling reason why a similar outcome might not eventuate in the provision of STUs.

6.3.2.6. Summary

189. In my opinion, Mr Ergas does not establish:

¹¹⁴ With respect to the claimed technical inefficiencies, we note that in other markets, including in the UK, it is possible to purchase a digital STU from a pay-TV provider and receive channels provided from other pay-TV operators – at least on a satellite platform. This would seem to cast some doubt on FOXTEL’s assertions regarding the technical difficulties associated with such arrangements.

¹¹⁵ The cost of the handset is effectively paid by customers over the course of their contract.

¹¹⁶ Either because they purchased them at an earlier date, or as a result of an expired contract for which they were provided with a handset.

- why the vertical efficiencies implicit in FOXTEL's 'subsidisation' of STUs to encourage up-take would be unavailable to it in either counterfactual;
- why FOXTEL would be unable to pursue its STU ownership model, given that this is efficient;
- why the economies offered by the simultaneous development of content and functionality would be significantly diminished by CA/SI unbundling; and
- why it would be detrimental to society, as opposed to FOXTEL, if it were to cause it to alter some aspects of its business model, eg, its programming selection.

190. In my opinion, it is not at all clear that there would be a significant reduction in the vertical efficiencies intrinsic in FOXTEL's business model as a result of CA/SI unbundling. Moreover, on balance, I believe that any such decrease would likely be more than off-set by allocative efficiency improvements brought about by greater competition for the price, content and quality of subscription television in the manner I describe in section 6.3.1.

6.3.3. Dynamic incentives

191. Mr Ergas claims that FOXTEL's dynamic incentives would be compromised by CA/SI unbundling. This is said to occur by two means:

- unbundling would lead to the use of compatible technology, or standardisation, for CA/SI systems and STUs. This in turn would be likely to reduce or eliminate competition in the development of these technologies, resulting in reduced incentives for FOXTEL and its competitors to invest in such development under the counterfactual; and
- the resulting increase in the variety of STUs connected to FOXTEL's network would increase costs for network development, since greater testing would be required to implement improvements. For similar reasons this heterogeneity would also retard the development of new services and applications by FOXTEL.

192. I have addressed the issues raised in the first point in section 6.2.3. I concluded there that the level of competition for the development of CA/SI/STU systems is not likely to be vigorous under the SAU, due to the unwillingness of consumers to buy systems unable to receive FOXTEL's programming.¹¹⁷ In other words, FOXTEL will have the de-facto industry standard technology under the STU and CA/SI unbundling. Hence, in my opinion, standardisation would not be likely to have a material effect on the level of FOXTEL's incentives to develop its network.

193. On Mr Ergas' second contention, I agree that it is not reasonable to expect FOXTEL to bear the costs of competitors connecting to its network and unbundling would require arrangements to ensure that this was not the outcome. However, I explain in section 6.3.2

¹¹⁷ As I explained in section 2.1.1.1, whether or not competition *for STUs* is promoted is, in isolation, irrelevant for the purposes of assessing reasonableness. It is only relevant to the extent that it then promotes competition for *listed services*.

that there appears to be no compelling case presented in FOXTEL's submissions as to why this assurance could not be met through appropriately determined access charges.

194. In my opinion Mr Ergas does not establish why FOXTEL's dynamic incentives would differ significantly as between the SAU and CA/SI unbundling.

6.3.4. Summary

195. In my opinion, the Commission cannot be satisfied that the SAU would encourage the economically efficient use of and investment in infrastructure within the meaning of s152AB(2)(e) of the Act, relative to CA/SI unbundling. I reach this conclusion on the basis that:

- unbundling CA/SI would provide for significant allocative efficiency improvements by reducing the barrier to entry posed by a lack of compatibility relative to the SAU;
- Mr Ergas overstates the efficiency losses entailed in unbundling CA/SI relative to the SAU, since he:
 - does not provide a compelling case as to why the vertical efficiencies implicit in FOXTEL's current business arrangements would be unavailable to it in either counterfactual; and
 - does not explain why FOXTEL's dynamic incentives would differ significantly as between the factual and the respective counterfactuals.

196. In my opinion the efficiency gains obtainable from unbundling are very likely outweigh the efficiency losses. Accordingly, I conclude that it has not been established that the SAU as submitted encourages the efficient use of, and investment in, infrastructure.

7. Conclusion

197. In my opinion, the reports of Mr Ergas and Dr Williams:
- do not establish that the SAU promotes competition by creating the conditions and environment for improving competition relative to the scenario in which CA/SI is unbundled; and
 - do not establish that the SAU encourage the efficient use of, and investment in, infrastructure, as compared to CA/SI unbundling.
198. Accordingly, the Commission cannot be satisfied that it is reasonable for FOXTEL to limit the supply of its CA/SI services to those retail customers to whom it currently supplies, and continues to supply, a retail service.

Gregory John Houston, 14 February 2005

Appendix A. Programming for Pay-TV

Table 1 below provides a snapshot of the programming currently available on the principal Australian digital pay-TV providers. The red ticks indicate that the channel is available as part of the providers minimum ‘basic package’ that all customers receive by virtue of taking the service. The green ticks indicate channels that customers can obtain through purchasing ‘premium packages’ in addition to the various ‘basic packages’.

Table 1: Programming for Pay-TV

			FOXTEL	Austar	Optus	Neighbourhood Cable	TransACT
Movies	Sony/Universal/ Paramount/20 th Fox/ Liberty Media	Showtime (and Showtime Greats)	☑	☑	☑		
	Turner Broadcasting	TCM	☑	☑	☑	☑	☑
	SBS 40% Aust Radio Net. 30% Others	World Movies	☑	☑	☑		
	Warner/MGM/ Disney/Village	Movie One Movie Extra Movie Greats	☑ ☑ ☑	☑ ☑ ☑	☑ ☑ ☑	☑ ☑ ☑	
Sports	News Corp/PBL	Fox Sports (and Fox Sports 2)	☑	☑	☑		
	FOXTEL	Fox Footy	☑	☑	☑	☑	☑
	TABCORP	Sky Racing	☑	☑	☑	☑	
	ESPN	ESPN	☑	☑	☑		☑
	News Corp/PBL	Fuel TV	☑	☑	☑		
	Eurosport	Eurosportnews	☑	☑	☑		
News	Nine/Seven/BSkyB	Sky News (and Sky News Active)	☑	☑	☑	☑	
	Turner Broadcasting	CNN	☑	☑	☑	☑	☑
		CNN Headline News				☑	
	BBC	BBC World	☑	☑	☑	☑	☑
	XYZ	The Weather Channel	☑	☑	☑		
	Bloomberg	Bloomberg	☑	☑	☑	☑	☑
	News Corp	Fox News	☑	☑	☑		
	NBC/Dow Jones	CNBC	☑	☑	☑	☑	☑
	DW					☑	
	Channel NewsAsia					☑	
Documentaries	National Geographic	National Geographic	☑	☑	☑	☑	☑
	Discovery, distributed by XYZ	Discovery Channel	☑	☑	☑		☑
		Discovery Home & Health, Science, Travel & Living	☑	☑	☑	☑	☑
	FOXTEL	The History Channel	☑	☑	☑		
	Discovery/BBC	Animal Planet	☑	☑	☑	☑	☑
	FOXTEL	Biography Channel	☑	☑	☑		
	National Geographic	A1	☑	☑	☑		☑
	Crime & Investigation Network	☑	☑	☑			

Music	XYZ	Max	ü	ü	ü		
		Channel V	ü	ü	ü		
		Club V	ü	ü	ü		
	Austar	Country Music	ü	ü	ü		
	Optus (licenced by MTV)	MTV	ü	ü	ü	ü	
MTV	VH1	ü	ü	ü			
Kids	XYZ/Nickelodeon	Nickelodeon	ü	ü	ü		
		Nick Jr.	ü	ü	ü		
	Turner Broadcasting	Cartoon Network	ü	ü	ü	ü	ü
	Buena Vista	Disney Channel	ü	ü	ü	ü	ü
		Disney Playhouse	ü	ü	ü		
Turner Broadcasting	Boomerang	ü	ü	ü	ü	ü	
Entertainment	XYZ	The Lifestyle Channel	ü	ü	ü		
		Lifestyle FOOD	ü	ü	ü		
	FOXTEL	Fox 8	ü	ü	ü		
		Fox Classics	ü	ü	ü		
	FOXTEL	W	ü	ü	ü		
	XYZ	Arena	ü	ü	ü		
	Sony/Universal/ Paramount	TV1	ü	ü	ü		
	FOXTEL 60% BBC 20% Fremantle 20%	UK TV	ü	ü	ü		
	Buena Vista	Fashion TV	ü	ü	ü	ü	ü
	Interfine	TVSN	ü	ü		ü	
	Optus	Ovation	ü	ü	ü		
	FOXTEL	The Comedy Channel	ü	ü	ü		
	Crown Media	Hallmark	ü	ü	ü	ü	
		NOW TV				ü	
		EWTN				ü	ü
		NHK World				ü	
		TBN				ü	
	FOXTEL/Austar/Optus	Adults Only	ü	ü	ü		
	Overlook	Antenna Pacific (Greek)	ü	ü	ü		
	RAI Italy	RAI (Italian)	ü	ü	ü		
		Al Jazeera (Arabic)			ü*		
		ART (Arabic)			ü*		
		LBC (Lebanese)			ü*		
		Deutsche Welle (German)				ü	
		TRT (Turkish)				ü	
		Aurora, The Community Channel	ü	ü	ü		
		Australian Christian Channel	ü	ü	ü		ü
	E! Entertainment	E! Entertainment	ü	ü	ü		ü
		EXPO	ü	ü	ü		
	News Corp/PBL	HOW TO Channel	ü	ü	ü		
	VisoNik AS/Taito and Two Way TV	Gamesworld (The Arcade, Mindgames)	ü	ü			
		STC			ü*		ü
	MCM			ü*		ü	
	Prime					ü	
	Win TV					ü	
	Channel 31				ü		
	LNTV					ü	
	TV5					ü	
	Channel Vision					ü	
	House of Representatives					ü	

		Senate						ü
		Parliament Committee						ü
PPV	FOXTEL/Austar/Optus	Adults Only Select	ü	ü				
		Box Office/Main Event	ü	ü	ü			
		Video on Demand						ü
		Anytime						ü
		AdultShop.com						ü

Note: Red ticks indicate that the channel is part of the basic package that must be taken as a condition of joining. Free to air channels are not shown in the above table. Multiple owners of content hold equal ownership shares unless otherwise specified. XYZ is a 50/50 joint venture between FOXTEL and Austar. Neighbourhood Cable does not have a basic package, but offers several permutations of channel selections, all of which feature many channels

** I have been instructed to assume that Optus is no longer obliged to offer these channels under its s87B undertaking.*

Appendix B. Summary of Pay-TV Contractual Conditions

§ FOXTEL

- Free installation is available only for a 24-month contract. Customers must take at least the basic package at \$50.95 per month. A minimum contract term of 6-months applies. Maximum penalties of \$390 or the outstanding balance of the contract, whichever is the lesser, are levied if a customer churns off.

§ Austar

- The minimum basic package costs \$46.95 per month, with additional premium content also available. Free installation is available only on a 24-month contract with several premium tiers selected. A minimum contract term of 12-months applies. The cancellation fee is \$250, or the remaining contract amount if this is less.

§ Optus

- If taken with Optus Home Phone and a contract term of one or two years, customers can pay lower monthly charges and greatly reduced installation fees. A minimum contract term of 12-months applies. An early cancellation fee of \$199 applies. The basic package is the minimum level of subscription at \$50.95 per month (less \$5 if on Optus Home Phone). Basic channels and premium tier structure are virtually identical to FOXTEL.

§ TransACT

- Subscription TV is only available with TransACT's phone service. A minimum contract term of 12-months and an early disconnection fee of \$200 applies. Customers must purchase the "Classic Lineup" as a minimum entry which is \$25 per month on top of TransACT's line rental. Premium tiers must be purchased for a minimum of 6-months, and on a month-by-month basis after that.

§ Neighbourhood Cable

- Minimum contract length is 12-months with a \$99 early cancellation fee. There is no "basic package" setup, but several package options available with considerable overlap or 'filler content'. Installation is normally \$99, but is currently free on a 24-month contract unless the cheap 'Starter Pack' at \$14.95 per month is chosen.

Appendix C. CV of Greg Houston

Director

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 Sydney NSW 2000
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 Website: www.nera.com



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 and regulatory economics 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 and regulatory proceedings before the courts, in various arbitration and mediation processes, and before regulatory and appellate bodies in Australia, Fiji, New Zealand, the Philippines 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**
 First Class B.Sc.(Hons) 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

- 2006** **Gilbert + Tobin/AWB**
Access to bottleneck facilities
Retained to provide expert report in an arbitration in relation to the imposition of throughput fees for grain received at port in South Australia
- 2005-06** **Phillips Fox/Fortescue Metals Group, Western Australia**
Access to bottleneck facilities
Retained as expert witness in Federal Court proceedings concerning access to the Mt Newman and Goldsworthy rail lines, serving iron ore export markets in the Pilbara.
- 2005** **Gilbert + Tobin/Hong Kong Government, Hong Kong**
Petrol market competition
Director of a NERA team working with Gilbert + Tobin to investigate the extent of competition in the auto-fuel retailing market in Hong Kong.
- 2005** **Australian Competition Consumer Commission**
Electricity generation market competition
Advice on clearance under S50 of the Trade Practices Act of a proposed transaction involving the merger of two generators in the national electricity market.
- 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 has 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 pending 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 has 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 Philp 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 Adelaide 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. This involved extensive analysis of the Australian domestic airline market, the theory and case law of predatory pricing, and the development of price cost tests for predation. The ACCC withdrew its case 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 with the ACCC 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. This involved comparisons of such procedures elsewhere, an assessment of the potential impact on competition, and whether alternative, less cumbersome, procedures were available and workable.
- 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***
- 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.
- 2002-06** **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.
- 2001-06** **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.

2000-05 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 and the cost of capital. Separately, the provision of strategic advice on all aspects of TransGrid's 2004 revenue cap reset being undertaken 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.

Institutional and Regulatory Reform

- 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.

1999

Department of Natural Resources, Queensland

Water trading arrangements

Acted as expert reviewer of proposals developed by the Department for the introduction of tradeable water rights throughout Queensland. This involved both participation in a workshop and written advice.

1999

World Bank/DKI Jakarta, Indonesia

Water sector regulation

Advised the government of Jakarta on reforming arrangements for the regulation and monitoring of private sector participation in water supply in metropolitan Jakarta. This assignment included: defining the scope, functions and institutional structure of a regulator to monitor and enforce the two concession agreements governing water supply in Jakarta; developing a sector-wide vision for the regulation of the water and sanitation sector in Indonesia; and a review of regulatory initiatives being taken in other infrastructure sectors in Indonesia.

1996-8

Department of Treasury and Finance, Victoria

Competition, institutional and price reform

Director of a NERA team advising the Water Reform Unit on a major review of pricing structures for water and waste water services in metropolitan Melbourne, as well as the planned reform of the institutional, regulatory and competition arrangements for the entire Victorian water sector. Reforms to prices and price control arrangements were designed to pave the way for the introduction of tradeable water entitlements for the metropolitan Melbourne region, a third party access regime for water distribution infrastructure, a substantial revision of bulk supply contract and operating licence terms, and a comprehensive revision and simplification of the legal framework.

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 - these are now the most comprehensive markets for water rights in the world. This work included detailed analysis of the technical, governance, contractual and institutional options for the introduction of bulk water capacity-sharing arrangements for the three new regional water distribution businesses of the city of Melbourne.

Cost and Tariff Analysis

- 2005-06** **Minter Ellison/Santos, Queensland**
Gas supply agreement arbitration
Principal economic expert in the arbitration of the price to apply following review of a major gas supply agreement between the South West Queensland gas producers and a large industrial customer.
- 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.
- 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. An expert report addressed the appropriate market definition, an assessment of comparable prices in that market, an analysis of the costs of providing pole space and the commercial performance of the market for pay TV services delivered by Optus' cable network. The case settled immediately prior to arbitration in line with the recommendations in this report.
- 2001** **Gilbert & Tobin/One.Tel, Australia**
Arbitration on the local loop service
Provided advice to Gilbert & Tobin, legal advisors to One.Tel, on the pricing of Telstra's unconditioned local loop service (ULLS) for use in arbitration. This involved providing an assessment of the appropriate pricing methodology for ULLS, an assessment of the types of costs that might be incurred in the provision of a ULLS, and an initial assessment as to the appropriate prices for ULLS based on publicly available information. Recommendations were used by the ACCC in its audit of Telstra's costs and investigation of suitable benchmarks.

- 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. A draft and then final report were both released for public consultation.
- 1996** **Thames Water, UK**
Cost of water-use restrictions
 Directed a project investigating the costs imposed on industrial, commercial and residential customers of restrictions on water-use during times of supply shortage. The purpose was to inform a possible change to planning standards and so the extent to which enhanced supply capability may be financeable through increased price limits.

Sworn Testimony, Transcribed Evidence

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

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

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

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

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

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

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

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

Expert evidence on behalf of Great Southern Networks in the gas access determination by IPART

Transcribed evidence, Sydney, 12 November 1998

**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

**Expert evidence before the Monopolies and Mergers Commission
inquiry into the proposed acquisition of Northumbrian Water plc
by Lyonnaise des Eaux**

Transcribed evidence, London, March 1995

Speeches and Publications

**Federal Court Judges' Conference
Use of Quantitative Methods in Competition Analysis**

Paper and speech, Sydney, 20 March 2005

**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

**“Assessing the Competitive Effects of Bundling: the Australian
Experience” in Antitrust Insights**

NERA bi-monthly publication, November/December 2003

**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

**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

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
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