FINAL

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Response to the October 2002 Report by Stephen King

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AUTHOR'S STATEMENT

I have read and understood the contents of the Guidelines for Expert Witnesses in proceedings in the Federal Court of Australia supplied to me by Allens Arthur Robinson. I agree to be bound by the contents of those Guidelines.

Henry Ergas

23 June 2006

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1. INTRODUCTION

1 My name is Henry Ergas. I have previously filed two reports in this matter. I am instructed that the Commission has advised FOXTEL that in considering FOXTEL's special access undertaking ('SAU'), the Commission may have regard to a report titled Competitive effects of the FOXTEL undertakings: A report on behalf of C7, dated October 2002, written by Professor Stephen King ('King report'). I have been asked by FOXTEL to comment on the key issue raised in the King Report: the welfare consequences of a purported STU bottleneck.

2 I have been asked to assume:

A. In March 2002, FOXTEL and Optus entered into a content sharing agreement, and sought approval from the Australian Competition and Consumer Commission ('ACCC') in respect of the agreement.

B. In connection with the approval, FOXTEL offered various undertakings to the ACCC under section 87B of the Trade Practices Act. Those undertakings included an offer to provide analogue and digital STU services to access seekers. The terms of the section 87B undertaking are similar, but not identical, to the SAU.

C. Professor King was instructed by C7 to prepare a report considering the competition issues arising from the section 87B undertaking. The King Report was provided by C7 to the ACCC in connection with the ACCC's assessment of the section 87B undertaking. The ACCC decided to accept the section 87B undertaking.

2. WELFARE CONSEQUENCES OF THE PURPORTED STU BOTTLENECK

3 Professor King concludes that FOXTEL's section 87B undertaking would lead to an allocative deadweight loss relative to a counterfactual world in which the unbundling of the FOXTEL STU and FOXTEL's basic tier was mandated. Professor King's analysis relies on the following four assumptions:

A. Subscribers must take FOXTEL's basic tier programming in order to have access to any STU that is compatible with Telstra's HFC;[1]

B. Firms in the retail market for subscription TV subscribers have no fixed costs;

1 See page 5 of the King report, as quoted in paragraph 7 below.

C. Mandatory unbundling of the FOXTEL STU and FOXTEL's basic tier has no cost or price consequences for FOXTEL; and

D. Mandatory unbundling of the FOXTEL STU and FOXTEL's basic tier has no consequences for the size of the future pool of FOXTEL subscribers.

4 Professor King only identifies the first of these assumptions explicitly, but the other three are clearly necessary to his conclusions.

5 However, assumptions B, C, and D are each in my view incorrect. Additionally, in my opinion, assumption A is implausible. It is nowhere substantiated in Professor King's report or any other submission by or on behalf of C7, as far as I am aware.

6 If assumptions B, C, and D are replaced with more realistic ones, but the implausible assumption A is retained for the sake of argument, then the welfare analysis proposed by Professor King changes in important respects, not least of which is that his conclusion no longer follows.

7 Certain information that would be needed to reach a firm view on the net welfare effects of bundling is simply not available. However, it is my opinion that it is more likely than not that the net welfare effects of bundling would be positive.

2.1. RELIANCE ON THE ASSUMPTIONS

8 Professor King states assumption A on page 5:

"For the purpose of the analysis presented in this section, I assume that a customer must buy FOXTEL basic service to gain access to an STU before that same customer can buy any other channels."

9 Amplifying this statement is the following, later on the same page:

"Suppose that (at least in the short term) pay-TV subscribers using the Telstra cable will gain STU services just from FOXTEL."

10 While assumption B is not explicitly stated, it is implied by the statement on page 7 that *"The alternative programming sector is perfectly competitive and sets a price P_A that equals cost."* Further, as regards FOXTEL itself, page 5 contains statements to the effect that any FOXTEL pricing above marginal cost would entail a deadweight loss, which "*is simply a reflection of the current lack of competition in pay-TV services.*" However, in the presence of fixed costs (and assuming marginal costs are not rising), pricing above marginal cost is necessary for suppliers to break-even and would be expected even in a workably competitive market. Professor King's statements would only be valid if FOXTEL faced no fixed costs and/or marginal costs were above average costs. Given the likely importance of fixed costs to subscription TV firms, the welfare analysis is distorted by this assumption.

11 Assumptions C and D are implicit in Professor King's comparison of the Regions 1 and 2 between his figures 1 and 2. Regions 1 and 2 contain subscribers who would subscribe to FOXTEL whether the undertaking were accepted (the factual) or unbundling were to be mandated (the counterfactual). Both in the figures themselves, and in the accompanying verbal description, Professor King indicates that neither region changes when moving from the factual to the counterfactual scenario.[2] If, contrary to assumption C, FOXTEL's prices changed as a result of unbundling there would be a consequent change in the size of Regions 1 and 2.[3]

12 If, contrary to assumption D, unbundling affected the future size of regions 1 and 2 relative to their sizes under the factual scenario (say by affecting the rate of acquisition of new FOXTEL customers), then Professor King's statements that regions 1 and 2 are unchanged by unbundling would be incorrect in the relevant forward-looking sense.

2.2. INCORRECTNESS OF ASSUMPTIONS B, C, AND D

2.2.1. Assumption B

13 Assumption B, that retail subscription TV providers have no fixed costs, is incorrect. The acquisition of content inevitably involves fixed costs, for example in the form of contract prices for the rights to sporting events, or fixed production costs for local content. HFC broadcast channel prices depend on the number of channels purchased, but not on the number of subscribers. The cost of each HFC channel is fixed.[4] Similarly, the cost of satellite transponder capacity does not vary with the number of subscribers. Design and manufacturing set-up costs for STUs also have a significant fixed element.

2.2.2. Assumption C

14 Assumption C, that mandatory unbundling of FOXTEL's STU from its basic tier has no cost or price consequences for FOXTEL, is incorrect. As argued in previous submissions, certain scope economies that arise from bundling would be lost or compromised:

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2 On page 10: "*Region One is unchanged – these are customers who would buy FOXTEL even if there were no alternative channels and buy the alternative channels as well when they are available*." On page 11: "*Because of our independent valuation assumptions, Region Two is also unchanged. These customers just buy FOXTEL*."

3 If FOXTEL's price increased, some FOXTEL subscribers would find the price exceeded their valuation and would therefore unsubscribe.

4 Once demand for channels exceeds supply, then each channel has an opportunity cost which is not fixed with the number of customers and their aggregate willingness to pay.

- **<u>Conditional Access and Billing:</u>** FOXTEL's STUs, along with the FOXTEL CA/SI system with which they are closely integrated, are used for customer permissioning and billing. At a minimum, additional costs would be incurred by FOXTEL in billing and permissioning FOXTEL content customers via non-FOXTEL STUs. Similarly, additional costs and risks would be entailed in modifying FOXTEL's systems to enable third party content to be received by FOXTEL STUs, and to bill FOXTEL STU-only customers. Beyond the additional cash costs, the risk is nontrivial that separate sale of STUs and content may compromise system integrity.

- **<u>New Functionality:</u>** New types of content, particularly those involving interactivity, are appearing and are expected to be more significant in the future. In order to offer existing subscription TV customers these new types of content, it is necessary to jointly modify the content itself and the functionality of the STUs. It would be more difficult and costly to coordinate these modifications if STU and content were not jointly provided by the same organisation.

2.2.3. Assumption D

15 Assumption D, that mandatory unbundling has no consequences for the size of the future pool of FOXTEL subscribers, is incorrect. FOXTEL continues to incur fixed and sunk costs in acquiring new subscribers. These costs include sales and marketing, installation of STUs at customer premises, and subsidising new connections to the HFC. Historically, the ability to offer a bundle of STU and content was important to customer acceptance of subscription TV, which was then a new type of service in this country. Looking to the future, the bundled offering provides FOXTEL with greater certainty that it will earn a return on its investment in customer acquisition through the sale of content.

16 If, in the counterfactual world, the likelihood is significantly increased that subscribers initially won by FOXTEL will churn to an alternative content provider then at current pricing FOXTEL will fail to capture the full return on its investment in acquisition of customers that churn to another provider.[5] In such cases, FOXTEL's loss is a windfall gain to the new content provider—a transfer in welfare terms.

5 In reaching this conclusion I assume that FOXTEL's investments in customer acquisition at current prices earn it no more than its own cost of capital. This is an assumption, but one that appears plausible given the substantial losses FOXTEL has incurred to date.

17 The welfare problem arises when in the counterfactual world FOXTEL, anticipating a reduced return to investment in customer acquisition, either invests less in growing the market or acquires customers in a different and probably more expensive manner, say by targeting customer groups that were less likely to churn. However the customer acquisition strategies play out, the rate of growth of the subscription TV market will be different under the counterfactual than in the factual scenario.[6] Professor King has not considered the possibility that growth will be slower in the counterfactual.

2.3. IMPLAUSIBILITY OF ASSUMPTION A

18 Professor King characterises the STU as an "electronic appliance"[7] and likens it to a television set or a toaster. Given the state of the world market for consumer electronics—vigorous competition between a large number of manufacturing firms each capable of mass producing electronic appliances of various types—it is a stretch to assert that one particular brand of electronic appliance constitutes a bottleneck to the receipt of any type of subscription TV service.

19 While it may be true that a FOXTEL STU is required to receive FOXTEL programming, Professor King's assumption A goes far beyond that statement. His assumption is that in order to access any STU that is compatible with Telstra's HFC, the customer must subscribe to FOXTEL's basic tier "*before that same customer can buy any other channels.*" A necessary implication of this assumption is that it is not possible for a customer to receive non-FOXTEL programming on a non-FOXTEL STU that is compatible with Telstra's HFC. However, this implication is incorrect. The necessity to access FOXTEL's IT (embodied in its CA/SI and smartcard) only arises if FOXTEL content is required. There is no technical impediment whatsoever to the use of 3rd party STUs to access 3rd party content.

20 For these reasons, I find Professor King's principal assumption, on which his conclusions vitally depend, to be implausible. Nevertheless, for the sake of argument, I retain this assumption while revisiting his welfare analysis with the three incorrect assumptions removed.

6 It might be argued that the reduction in FOXTEL's drive to acquire new customers would be compensated by an increased drive by 3rd parties. However, the disincentive to investment in acquisition would apply equally to FOXTEL and 3rd parties, who would also be wary of investing to acquire a customer who will later churn.

7 See p. 2.

2.4. REVISED ANALYSIS WITHOUT ASSUMPTIONS B, C, OR D

21 I proceed to revisit Professor King's welfare analysis, making adjustments for the incorrect assumptions he made. My analysis takes account of the fact that retail subscription TV providers face non-trivial fixed costs and the fact that mandatory unbundling would increase FOXTEL's prices and may reduce the rate of growth of FOXTEL's pool of subscribers. As in the King analysis, the comparison is between the factual (FOXTEL's STU undertaking) and the counterfactual (mandatory unbundling). The analysis is forward-looking, in keeping with the requirements of Part XIC.

22 This discussion makes use of the categorisation of customers employed by Professor King. To recap briefly, customers that were represented on the King diagrams fall into four regions depending on the valuations they place on receiving FOXTEL and alternative content. Customers in region 1 place a value on each type of content that is sufficiently high that they would be prepared to purchase FOXTEL at its current price as well as alternative content at the price that would prevail under the factual scenario. Customers in region 2 place a sufficiently high valuation on FOXTEL to subscribe to it at current prices, but a low valuation on alternative content, so that they would not purchase the alternative, even in the counterfactual. Customers in region 3 value alternative content highly but FOXTEL lowly. Nevertheless, the valuation of alternative content is so high that these customers are prepared to subscribe to FOXTEL in the factual simply to be able to access alternative content. In the counterfactual, these subscribers would buy only the alternative content. Customers in region 4 value FOXTEL content lowly, and have a range of valuations for alternative content. Those who value alternative content the most highly still do not value it enough to subscribe to FOXTEL at current prices to get access to the alternative content. In the factual, none of the region 4 customers buy any subscription TV service. In the counterfactual, some of these customers would buy alternative content only.

23 In addition to the customers represented on the King diagrams there was a group of customers for whom FOXTEL and alternative content represent substitutes. The analysis of regions 1 – 4 relied on an assumption that customer valuations of FOXTEL and alternative content were independent. For the group of customers considering FOXTEL and alternative content to be substitutes, valuations are not independent.

24 The welfare test I apply here is the same test as that implicitly used by Professor King.[8] An individual consumer's valuation of a particular service less the associated resource cost is the welfare gained from providing that service to that customer. As long as exchange occurs, the welfare gain is the sum of the consumer surplus (the sum of the difference value – price for all consumers) and producer surplus [(price – average cost) times the quantity sold]. If the price exceeds customer valuation or falls so low on average that the firm elects not to supply the service, then exchange is unlikely to occur and a deadweight loss is created if the valuation exceeds the resource cost—there was a missed opportunity for welfare-enhancing exchange.

25 Mandatory unbundling would lead to productive inefficiency in the form of increased resource costs as noted above (conditional access and billing, new functionality) and also because it may lead to duplication of fixed content costs without commensurate increase in customer value. For those customers whose subscription decision is unaffected by unbundling, there is a welfare loss in the counterfactual because it has become more costly to provide the same quantum of consumer value. For those customers whose FOXTEL subscription decision is adversely affected by unbundling, an allocative deadweight loss is created because some FOXTEL subscribers:

- Would unsubscribe because of any consequent FOXTEL price increase; or
- Would have subscribed to FOXTEL in the future but for any consequent reduction in customer acquisition activity by FOXTEL; but
- Would not subscribe instead to a rival service.

26 The group of subscribers potentially affected in this manner corresponds to Professor King's regions 1 and 2—those who highly value FOXTEL content. This group is unambiguously worse off as a result of mandatory unbundling. Those that continue to subscribe incur a greater resource cost to receive the same quantum of value. Those that drop out of subscription TV altogether do not buy a service that they value more than the efficient (bundled) cost of provision. Those that do not subscribe do not obtain the gains from trade, even though they could have done so at a cost that was less than their valuation.

8 Professor King does not explicitly set out his welfare test, as far as I can see.

27 Before moving on to consider customers in other groups, I note that in the factual scenario, while the customers in region 2 do pay a price that exceeds the marginal cost, it is incorrect of Professor King to say that, "*The reduction of gains from trade created by FOXTEL setting a price above cost represents the standard deadweight loss of a firm with market power.*"[9] As I noted earlier, retail subscription TV providers face significant fixed costs, meaning that they must charge a price above marginal cost in order to break even. The link between the reduction in the number of region 2 consumers and market power is not made out. Even a firm lacking market power would, in the presence of fixed costs (and constant or declining marginal costs), set price above marginal costs. The fact that FOXTEL has incurred substantial losses to date makes it difficult to believe that its pricing has involved monopoly mark-ups (as against mark-ups over marginal cost aimed at recovering total costs).

28 The welfare effect of mandatory unbundling on customers in region 3 is ambiguous. On one hand, there may be some welfare gain to customers who remain in region 3 both in the factual and counterfactual and who value alternative content very highly because they will no longer be obliged to also buy FOXTEL content, which by assumption they value at less than the cost of providing it.[10] On the other hand, though, the number of customers valuing alternative content who are able to access it by virtue of FOXTEL's STU undertaking may be greater in the factual as a result of FOXTEL's increased customer acquisition activity.[11]

29 To the extent that the number of consumers in the top part of region 4 (who value alternative content very highly, but not highly enough to subscribe to FOXTEL in order to obtain it) is material, then Professor King's welfare conclusions follow for this group. Note, however, that an alternative content provider will also face significant fixed costs, meaning that its price will also be above marginal cost. The size of the top part of region 4 (and therefore the welfare gain from serving this group) will be diminished to the extent that alternative content pricing exceeds marginal cost.

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9 See p. 8.

10 It is not at all clear that there will be any customers who value FOXTEL content at less than its marginal cost. For many types of content, the marginal cost of supplying to an individual consumer would be close to zero.

11 One exception to this conclusion may arise if the reason FOXTEL has invested in acquiring the relevant additional customers is that they were considered unlikely to churn. In any case, the tradeoff for the alternative content provider is to address a large market as a tier on FOXTEL or a smaller market as the sole or primary content provider. It is not clear in general that the alternative content provider would be better off by pursuing the latter strategy.

30 Finally, it is necessary to examine the group of customers that was not included in Professor King's diagrams. This group, discussed on pages 5 and 6, subscribes in the factual to FOXTEL alone even though they would prefer to have subscribed to an alternative content package instead. The nature of the welfare loss among this group is subtle. Despite the fact that they obtain a service (FOXTEL content) that they value more highly than the cost of providing it, in a different scenario they could perhaps have obtained a different service (alternative content) that they value even more highly.

31 It is obviously impossible to say whether this category of customers is material, but it is not intuitive that it would be. These customers value FOXTEL sufficiently highly to subscribe to it; yet it is assumed that they view the alternative package as a superior alternative. While that could of course be the case, one might think (for reasons also discussed below) that most customers who value FOXTEL sufficiently highly to subscribe to it would likely view the content provided by an access seeker as a complement, rather than a substitute (and hence it would be accessible to the access seeker under the mechanism FOXTEL has proposed).

32 Quantification of the loss associated with this customer group would be next to impossible, not least because the alternative content is entirely hypothetical at this point in time. Consequently, it is not possible to say that whatever welfare loss may arise in respect of this group would be material in the factual.

33 To summarise these aspects of an overall welfare evaluation, mandatory unbundling would lead to a deadweight loss among consumers in regions 1 and 2. It would have an ambiguous welfare effect on consumers in region 3. It would have a positive welfare effect on consumers in region 4 and on consumers who buy only FOXTEL but would prefer to buy only alternative content. Taking account of the relevant uncertainties, I evaluate the likely net welfare effect of mandatory unbundling in the following section.

2.5. BALANCE OF PROBABILITIES FOR UNKNOWNS

34 Of all the customer groups discussed by Professor King, the most tangible are the region 1 and 2 groups, as these correspond closely to the current FOXTEL subscriber base of approximately 500,000 cable customers.[12] This group would be worse off as a result of mandatory unbundling for the reasons discussed in this report.

35 It is not clear that unbundling would result in any welfare gains in respect of region 3 customers. As I noted earlier, FOXTEL's STU undertaking could have the effect of increasing the number of customers in region 3 by facilitating access by alternative content providers to a wider audience than they would reach in the counterfactual. I have already noted that the marginal cost of much of FOXTEL's content is likely to be close to zero, making it rather unlikely that the transactions involving these region 3 consumers would lead to a welfare gain from unbundling (because they are unlikely to value FOXTEL at lower than its marginal cost).

36 With regard to the welfare effects associated with bundling for the group of FOXTEL subscribers who would rather subscribe to alternative content only (not shown on Professor King's diagrams) it is impossible at present to say whether they would be material. In my view they are unlikely to be. However, if this group were at all large, the FOXTEL STU would not pose an entry barrier (or would pose much less of an entry barrier) because an alternative content provider could presumably then achieve minimum efficient scale for the launch of its own STU.

12 The region 1 and 2 customers are those that value FOXTEL content at more than its price. The size of the group of current FOXTEL customers provides an estimate of the size of regions 1 and 2, since the subscription decisions of current FOXTEL customers reveal a valuation in excess of the current FOXTEL price. The number of current FOXTEL subscribers may not be a good proxy for the future size of regions 1 and 2, however, since the prospective growth (and churn) rates are not known. The newness of digital subscription TV services makes it difficult to predict future uptake. Given the low level of 3rd party content on FOXTEL at present, it can be inferred that very few of the current FOXTEL subscribers fall into region 3, in which alternative content is valued so highly that the customer subscribes to FOXTEL in order to get it, even though FOXTEL content itself is not otherwise valued at above its own price.

37 Finally, Professor King's customers at the top of region 4 would be better off as a result of unbundling, but the questions must be asked whether this group is numerically significant, and how much better off would they be? As to the first question, it is implausible in my view that this group could be large. By definition, these customers want some content that FOXTEL does not provide. There are potentially two reasons why FOXTEL does not provide it. Either FOXTEL is incapable of providing it (perhaps because of exclusive rights held by another content provider), or FOXTEL simply did not realise the demand for it was strong. In the latter case, unbundling would only induce these customers to subscribe if the other content provider had some insight into customer preferences that FOXTEL did not. In the former case, there would be a bilateral monopoly situation—the entrant with the unique, valuable content, and FOXTEL with the delivery mechanism—which would normally be resolved through bargaining. The more unique, valuable, and inaccessible to FOXTEL is the content, the more likely bargaining could lead to a satisfactory welfare outcome. The less unique, valuable, or inaccessible the content, the less there would be to gain by serving this group. Of course, bargaining inefficiencies may impede successful outcomes; but the mere fact that bargaining has not led to these customers being served does not indicate that there is indeed an inefficiency – or one that unbundling would address in a manner that created fewer costs than benefits.

3. CONCLUSION

38 Weighing all of these considerations, it is my view that mandatory unbundling would likely be harmful to welfare because it would impose an unambiguous deadweight loss on current FOXTEL subscribers, who are the most readily identifiable (and potentially the largest) group of consumers, while providing a very hypothetical welfare gain to a group that is likely to be much smaller and whose desires may be satisfied at least as well through mechanisms other than unbundling (such as market research to determine unforeseen preferences, or bilateral bargaining). The welfare effects on the other groups of consumers identified by Professor King are ambiguous and potentially immaterial.[13]

13 See paragraphs 27 and 34 above.