Competitive effects of the Foxtel undertakings

A Report on behalf of C7

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1 Introduction

The Foxtel/Optus/Telstra arrangement and the associated undertakings provided to the ACCC will have significant implications for competition in the pay-TV industry. The arrangement gives Optus the right to carry all Foxtel channels until 1 December 2010. Optus will be obliged to carry all Foxtel channels if and when it digitizes its cable. If Optus acquires any new programming content then this must be placed on a tier rather than as part of basic service. If the new programming is similar to Foxtel's service, the new programming must be placed on a 'higher tier'. If the new content involves movies or sport, this new content must be made available to Foxtel. The fees Optus pays Foxtel for Foxtel services are determined by a 'retail minus' type formula. Foxtel may grant a license to Telstra to distribute its content. The price that Telstra will pay Foxtel in this situation cannot undercut the price to Optus by more than 3%. Foxtel has certain rights if and when Optus disposes of its assets.

The ACCC has identified a number of competitive concerns relating to the arrangement and undertakings. The Commission identifies four relevant markets and categorizes its concerns by these markets. The Commission is concerned about the reduction in competition in the acquisition of content; the decline in competition in the retail market for pay-TV subscriptions; and that it will be difficult for telecommunications firms wishing to develop their own networks to gain content and offer their own pay-TV services.

The undertakings include an access undertaking for Foxtel's analogue STU services and a digital access regime. Both of these access regimes will require that (1) a customer who wishes to receive Foxtel basic services or other Foxtel pay-TV services from Foxtel will be required to "rent" a STU from Foxtel as a pre-condition of being able to buy the service and (2) a customer who is renting a STU from Foxtel will not be able to continue to "rent" the STU and receive non-Foxtel pay-TV services unless the customer continues to subscribe to the basic Foxtel service. As such, any customer who wishes to buy pay-TV services from a provider other than Foxtel, but to use a Foxtel-supplied STU, will be required to buy the Foxtel basic pay-TV programming.

Foxtel currently has a large installed base of analogue STUs. When Foxtel moves to digital transmissions it will provide its customers with digital STUs. These STUs are tied to the Foxtel basic service. In this paper I consider the competitive implications of the tying of the STU and basic pay-TV services by Foxtel.

2 Set Top Units and the bottleneck to Pay-TV access

The Foxtel STUs currently create a 'bottleneck' for any pay-TV provider who wishes to compete in the provision of retail pay-TV services over the Telstra cable. However, this is an artificial bottleneck that has been created by Foxtel. It involves two interconnected features. First, Foxtel ties the provision of an STU to the purchase of the Foxtel basic service. This has allowed Foxtel to establish an installed base of its STUs that are owned and controlled by Foxtel rather than by the customers. Secondly, Foxtel uses proprietary information technology (IT) in its conditional access system and 'smartcard'. Without access to this IT a competitor would be unable to use the installed base of Foxtel STUs to provide pay-TV services to its customers. I will consider these two features in turn.

The Foxtel STUs are not a standard 'bottleneck' infrastructure. However, for practical purposes, any pay-TV operator who has access to the Telstra cable needs access to the Foxtel STUs in order to compete in the provision of retail pay-TV services. This is because Foxtel has historically tied the provision of STUs (including the related Foxtel IT) with the provision of basic pay-TV services. This tying has allowed Foxtel to use the STUs to create an artificial bottleneck. If the undertakings currently before the Commission are accepted then this artificial bottleneck will continue and possibly be strengthened over time.

The Foxtel STUs involve IT to allow them (through the smartcard) to receive Foxtel pay-TV services. In this sense, the use of an STU relies on it being able to interact with the Foxtel conditional access system. But the STUs themselves are best described as an electronic appliance, like a compact disc player, a computer, a cassette deck, a toaster, or a television set.[1] The STU is an electronic appliance that allows the

[1] For example, a television set is specific to a particular transmission system (such NTSC or Pal-SECAM) and in this sense it interacts with the free-to-air television distribution system. But the set itself is still simply an electronic appliance able to be purchased or leased through a variety of competitive retail suppliers.

viewer to access transmitted pay-TV signals. Foxtel is a retail distributor of these electronic appliances.

Currently, Foxtel is the only retail distributor of STUs that are compatible with services on the Telstra cable. However, this ‘monopoly’ reflects Foxtel’s profit-maximising strategy of tying. Foxtel ties the provision of a set-top unit with the purchase of basic pay-TV services from Foxtel. Foxtel only rents the set-top units to customers as part of a bundle of services including the Foxtel basic pay-TV service, and does not sell them outright. The Foxtel monopoly over set-top units is a direct consequence of Foxtel tying set-top units to its own programme content.

The second reason why an artificial bottleneck exists in STUs is because Foxtel controls the relevant IT. The information technology used by the Foxtel STU smartcard and the associated software on an STU is proprietary software. The intellectual property associated with this software is owned by NDS, a company substantially owned and controlled by News Corporation. The smartcard is a processor that, together with the STU, allows the customer to receive their entitled programs. The smartcard and STU together interpret the conditional access data associated with a subscriber to allow that subscriber to receive their pay-TV content. Standard retail competition in STUs is impossible unless consumers can purchase an STU which incorporates the relevant information technology. This information technology is currently a proprietary system. If Foxtel, for example, refused to make the smartcard technology available to alternative providers (or refused to supply smartcards themselves) then effective retail STU competition is unlikely to develop.[2]

It might be argued that competing IT systems are possible for the delivery of pay-TV, so that control of the IT does not involve an economic bottleneck. The best example of such competing technologies is the video games industry, where alternative systems with console-specific games compete with each other. In the same way, it could be argued, access seekers supplying pay-TV services could compete through their own conditional access systems and STUs. Such competition may be feasible but it is unlikely to be practical or economically desirable. Markets with

[2] Such standards are associated with all electronic appliances. For example, compact cassettes and compact discs involve a standard, DOS-based computers (including those using windows) utilize a standard operating system to allow hardware and software to interact, and television sets in Australia can decode a common programming standard and this is a different standard to the US. At a trivial

competing and incompatible systems are often unstable with one system dominating over time *even if the competitors all start at an equivalent stage of market penetration.* Computers with the relevant operating system software represent a simple example. Microsoft, with its 'Windows' product dominates that market world-wide. In this sense, competition between 'competing' pay-TV systems using the Telstra cable is unlikely to succeed. It is likely that customers will want the convenience of a single STU and, given that Foxtel has a large installed base of STUs compatible with Foxtel's conditional access system, any pay-TV supplier attempting to adopt an alternative system is likely to face a severe competitive disadvantage.

Even if some degree of competition between alternative pay-TV standards is possible, it is unlikely to be economically desirable. The lack of compatibility between standards means that customers will either have to have multiple STUs or will need to choose between technologies (and alternative services) when seeking to purchase pay-TV. This will lead to a needless waste of resources (e.g. multiple STUs where a single STU would be adequate) and is likely to mute competition (i.e. the need to change STUs will raise customers' switching costs at the retail level). It would be more convenient for the customer and competition is likely to be more robust if there is a common standard for the conditional access system and related IT so that a customer can choose to buy alternative pay-TV services through a single STU.

In summary, Foxtel's strategy of tying STUs (and the associated IT) to the purchase of Foxtel's pay-TV basic package has clearly precluded the development of a competitive retail sector to supply STUs to potential pay-TV customers. Put simply, there is a bottleneck access issue to Foxtel STUs in pay-TV, but this bottleneck has artificially been created by Foxtel through the tying of STU services with basic pay-TV services.

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level, even a toaster uses a common standard relating to the voltage and frequency of the public power supply.

3 The consequences of the STU bottleneck

The creation and continuation of the Foxtel STU bottleneck is maintained by the Foxtel/Optus/Telstra arrangement and undertakings. The arrangement allows Foxtel to continue tying the provision of STU services to the purchase of basic pay-TV services. From a practical perspective, this means that almost all customers who buy pay-TV services will use a Foxtel STU and as a result, will purchase Foxtel basic service. *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.* As we show below, the tying of both the Foxtel STU together with the conditional access system and related IT, to the basic Foxtel service will reduce competition in the retail market for the provision of pay-TV services and will lead to an allocative deadweight loss.

Suppose that (at least in the short term) pay-TV subscribers using the Telstra cable will gain STU services just from Foxtel. To the degree that Foxtel is able to sell the tied STU and basic service package at a price above marginal cost, there is a standard allocative deadweight loss associated with Foxtel's pricing policy. This deadweight loss is simply a reflection of the current lack of competition in pay-TV services.

Now consider that there are competitive suppliers of additional pay-TV channels. To access any of these new suppliers, customers have to purchase STU services. But these are tied to Foxtel's basic service package. Customers relevant to the current discussion can be grouped into four broad categories:

1. Some current Foxtel subscribers will choose to also subscribe to the new competitive suppliers. These are the customers who value both Foxtel basic services and the new services relatively highly (and might even view the new services as complementary to the Foxtel basic service). For these customers, the new entry has increased the gains from trade.
2. Some current Foxtel customers will continue to subscribe to just Foxtel even though they would prefer just to subscribe to the services provided by the new competitive entrants. These are customers who view Foxtel's services and the product provided by the new entrants as substitutes. Because access to the

STU is tied to the purchase of Foxtel basic services, these customers buy Foxtel basic services and are not willing to pay extra for the new services given that they are already required to buy Foxtel basic service. These customers would stop buying Foxtel if they had access to competitively provided STUs. In this situation, there is a deadweight loss created because these customers face economic disincentives to buy the new programmes even though they value those programmes at more than the price (and the cost) of those programmes and also value the new programmes more than the Foxtel services. But given that they must buy the Foxtel services to gain an STU, they are not willing to pay the extra amount to gain the competitive services *given* that they already receive Foxtel.

3. Some customers who are not current subscribers to Foxtel will start to subscribe to Foxtel in order to gain the STU and purchase products from new providers. These are customers who either (a) value the new programmes very highly and are willing to buy Foxtel to gain access to these programmes, even though they value the Foxtel services at less than the *cost* of supply of those programmes; or (b) value Foxtel programs at more than the cost of supply but at less than the Foxtel *price*, and who value the joint package of Foxtel and new programmes at more than the joint price. For these customers, Foxtel's sales (and profits) rise due to the ability to 'free ride' off the economic surplus created by the new entrant's. Part of this profit increase (for group (b) customers) may only represent a transfer from consumers and so does not represent a deadweight loss. However, some consumers (i.e. those in group (a)) may buy the package of Foxtel and the new services even though their individual value of the Foxtel services is below the true economic cost of providing those services. For such customers, there is an additional allocative deadweight loss.

4. Finally, some customers who value the new services above the cost of providing those services will not buy the new programmes because of the need to also purchase Foxtel. These consumers will not buy any pay-TV services

and there is a loss of gains from trade as these consumers do not buy the new services even though their willingness-to-pay exceeds the cost of provision.[3]

Three of these types of consumers can be represented on a simple diagram such as figure one. This figure assumes that customer valuations for Foxtel and alternative programmes are independent, but that a consumer must subscribe to Foxtel in order to gain an STU. Consumers' valuations of Foxtel (denoted by v_F) range between 0 and V_F while valuations for alternative programming (denoted by v_A) range between 0 and V_A. Foxtel sets a price P_F for basic service including the STU service. For convenience this is assumed to exceed cost for Foxtel.[4] The alternative programming sector is perfectly competitive and sets a price P_A that equals cost. The price of the alternative services *if* those services could separately supply an STU with the related IT is given by $P_A + C_{STU}$.

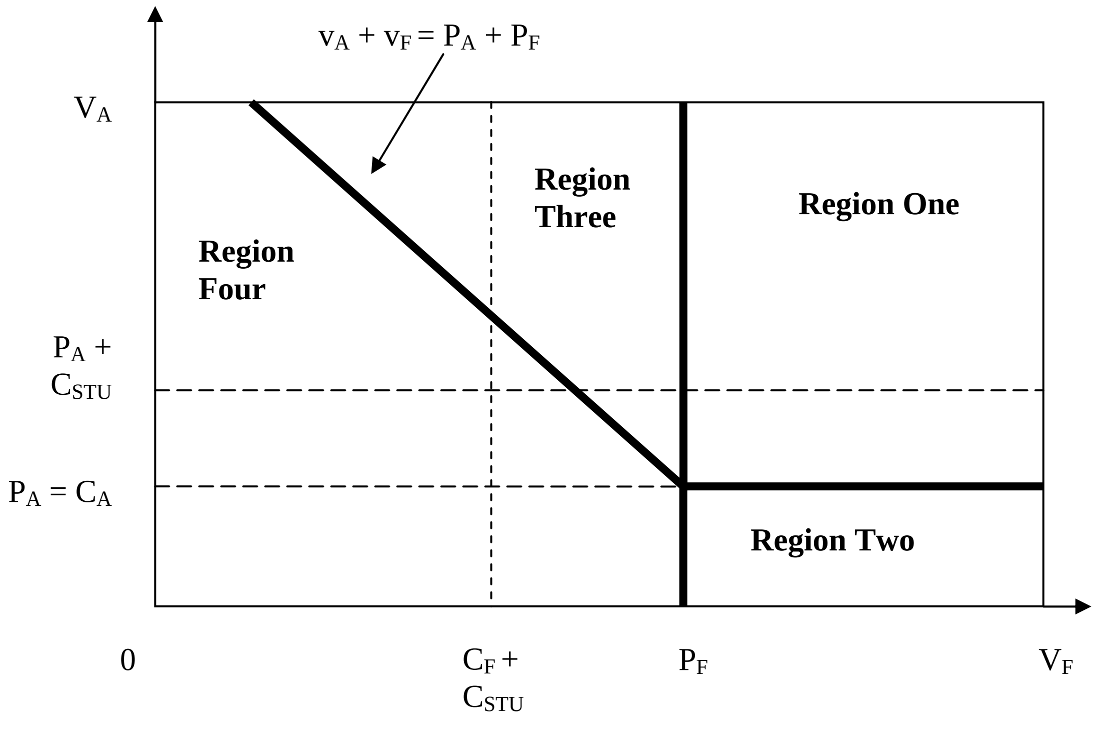

Figure One

Four areas are shown in the figure, separated by the thick solid lines. Region One are the consumers who buy both Foxtel and the alternative services after the

[3] While these categories cover the main types of customers relevant for the current discussion, there are obviously some other customers such as those who place little value on any pay-TV services at all.

introduction of alternative programming services. These are the first type of customers listed above. These customers gain from the introduction of alternative services even though the STUs are tied to Foxtel basic service. These customers do not care about the tying – they will purchase Foxtel anyway.

Region Two shows customers who only purchase Foxtel both before and after the introduction of alternative services. These customers do not value alternative services highly enough to warrant their purchase but do value Foxtel highly enough to purchase this service. Note that because Foxtel charges a price above cost, the number of these consumers is smaller than otherwise. 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.[5]

Region Three represents the third type of customers noted above. These customers would not buy Foxtel by itself but will purchase it in order to gain access to the alternative channels.[6] As noted above, there are two subclasses of these customers. Those to the right of the vertical dotted line are customers who value Foxtel above cost but are not willing to pay the price charged by Foxtel. When alternative programming becomes available however, these customers are willing to buy Foxtel because they value the purchase of Foxtel and the alternative programming above cost. From a social perspective, these customers value both Foxtel and the alternative programming above cost and it is desirable that they purchase both programs. However, their payments represent an increase in Foxtel's profits as the consumers are forced to pay above cost for the Foxtel product. In this sense, Foxtel 'free rides' off the alternative channels to raise its profits from these customers.

The left-hand side of Region Three represents customers who value Foxtel below cost but highly value the alternative channels. In this situation, they are willing to pay for Foxtel in order to gain the STU and access alternative programming. This raises Foxtel's profit but creates a deadweight loss. Foxtel again 'free rides' off the

[4] The figure can easily be modified to set the price of Foxtel equal to cost. The only difference is that this removes the right-hand part of Region Three.

[5] Because figure one is drawn assuming that consumers' valuations of Foxtel and alternative programming are independent, we cannot show the second type of customers and the related welfare loss on this diagram. These are the customers who view Foxtel and alternative programmes as substitutes. I discuss these customers is more detail below.

[6] In other words, for these customers, their individual value of Foxtel, v_F is below the stand-alone price of Foxtel, P_F. But the value of Foxtel and alternative programming together, $v_F + v_A$ is at least as great as the price of buying both Foxtel and the alternative programming, $P_F + P_A$.

alternative channels to raise its profits from these customers. But customers are buying a product (Foxtel) that they value below cost because this is the only way to gain an STU to purchase the alternative programming. The deadweight loss is represented by the difference between the value of Foxtel to these customers and the cost of providing Foxtel to these customers.

Region Four includes the last group of customers referred to above. This region includes all the customers who do not buy any Pay-TV services. Some of these customers simply place too low a value on pay-TV and it is desirable that they do not purchase. But Region Four also has customers who value alternative programming at more than the cost of provision (including the STU cost) but who do not buy the alternative programming. These customers are given by the upper part of Region Four, above the dotted (P_A + C_{STU}) line. These customers would gain from competitive purchase of alternative programming and STU services, but are not willing to buy Foxtel in order to gain the STU services. Because Foxtel ties the STUs to its basic service and is the sole STU supplier, the gains from trade that would be created for these customers in a competitive market are lost. This represents the deadweight loss of these customers.

The second type of customer noted above cannot be represented on Figure One. This is because Figure One assumes independent valuations between Foxtel and alternative programmes. In contrast, if Foxtel and alternative programmes are substitutes to some consumers, then there would be an additional distortion. Some consumers who would be best serviced by buying alternative programmes and competitive STU services will only purchase Foxtel. Given that they have to buy Foxtel to gain STU services, these customers are not willing to pay above cost to gain the alternative programmes, even though they would otherwise have chosen these programmes in preference to Foxtel.

The problems created for alternative programmers by the Foxtel STU bottleneck are easily seen from the four categories of consumers and Figure One. The second type of customers reflect how, to the degree that Foxtel and alternative channels are substitutes, Foxtel gains a ‘first mover advantage’ by providing the STU and the initial block of programmes. Alternative providers are limited to competing for any consumers who are willing to pay for additional content to the Foxtel basic service. The third type of customers shows how Foxtel creates an artificial burden for the alternative channels. To entice new customers to buy pay-TV it is not enough for alternative channels to provide consumer value greater than cost. The alternative channels must provide sufficient extra value to entice customers who would not otherwise purchase Foxtel to both buy Foxtel and then subscribe to the additional programming. And, of course, this burden will be too great for some customers. These are represented by the upper part of Region Four in figure one.

To see the distorting effects of the artificially-created STU bottleneck, consider Figure Two. This diagram presents the same information as figure one and makes the same independence assumptions *except* that figure two assumes that there is a competitive market for STUs (i.e an open standard for the conditional access system and competitive retail STU supply).

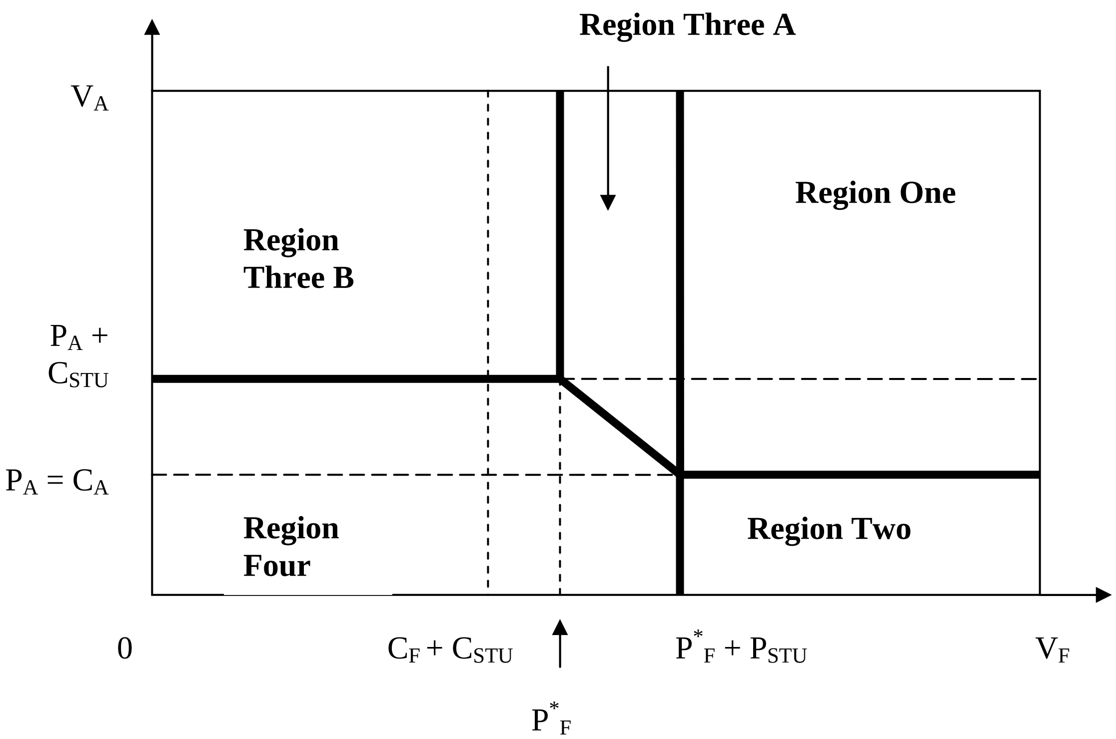

Figure Two

In figure two, the original Foxtel price can be broken into two parts, the STU price, which by competition is equal to the STU cost, and the Foxtel programming price, P^*_F. The regions change as illustrated by figure two. 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. Because of our independent valuations assumption, Region Two is also unchanged. These customers just buy Foxtel.[7]

The big change is to Regions Three and Four. Region Three A includes the customers who originally would not buy Foxtel but do buy both Foxtel and alternative channels once alternative channels are offered. Notice that this area is less than the right-hand-side of Region Three in figure one. This reflects that Foxtel can no longer free-ride on the alternative channels once there is a competitive STU market. To the degree that Foxtel charges above cost, Foxtel must now wear the consequences of its high pricing by selling to fewer customers even though these customers might buy alternative channels. In essence, the reduction in Region Three A (compared to the right-hand side of Region Three in figure one) represents a fall in Foxtel's market power due to the removal of tying.

Region Three B in figure two shows customers who now purchase alternative channels but not Foxtel. Under Foxtel's STU tying arrangement in figure one, these customers either (a) purchased Foxtel and alternative channels even though they did not value Foxtel above the price of Foxtel; or (b) did not purchase any pay-TV services. The welfare of all customers in Region Three B has increased due to the availability of competitive STUs. This increase in welfare reflects the deadweight loss associated with the artificial STU monopoly created by Foxtel.

Finally Region Four represents those customers who do not buy any Pay-TV services. This region has fallen in figure two relative to figure one. This reflects how more people access Pay-TV once there is competitive provision of STUs. This fall in Region Four again reflects the increase in consumers' surplus created by the freeing-up of the STU market.

There are two additional reasons why competition might be moderated to an even greater degree by the tying of STUs to Foxtel's basic service than that illustrated by figure one. First, both figure one and figure two assumed that Foxtel's pricing strategy was unchanged by the introduction of alternative services. But, as shown by figure one, when alternative channels become available, the demand for Foxtel basic service rises. This is not due to complementarity between the services. Rather it is due to the ability to share an STU and, more importantly, because Foxtel can act as a gate-

[7] If Foxtel and alternative programmes were substitutes, some consumers may stop buying just Foxtel

keeper to the STUs and to access to the alternative channels. Because Foxtel faces an increase in its demand after alternative channels become available, Foxtel's profit-maximising price will rise when it is the only source of STUs. Such a price rise will exacerbate the deadweight loss created by Foxtel. While Foxtel has set a cap on its basic service under the undertakings for a period of three years, it is my understanding that this cap is greater than Foxtel's current price for basic access through cable.

Secondly, there will be a dynamic disincentive effect for alternative pay-TV providers created by Foxtel tying STUs to its basic service. Suppose that an alternative provider creates a channel to exploit a particular niche of customers and works to grow that niche. If this alternative product is successful, Foxtel can copy that type of programming and include it in its basic service. While the Foxtel undertakings place a price cap on the basic service, they do not specify exactly which channels will be in the basic service. Thus, Foxtel can readily take a good idea for programming and include this programming in its own basic package. Ordinarily, such competition would merely lead to robust competitive results that benefit consumers. But for pay-TV, if Foxtel includes the programming in its basic package, then customers *must* buy the Foxtel programming before buying the programmes provided by the alternative provider. Rather than having robust competition between alternative providers, Foxtel automatically wins the customer by its first-mover advantage.[8] As a result, alternative programmers with innovative content may not find it worth their while to enter the pay-TV market in the first place.

In summary, if customers must access an STU by purchasing Foxtel's basic service then this will lead to a variety of market inefficiencies. Some customers who view Foxtel and alternative providers as substitutes will purchase Foxtel alone even though they would gain greater surplus if they could buy the alternative channels alone. Some customers who value alternative channels relatively highly will purchase Foxtel in order 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

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and decide to just buy the alternative programmes and an STU.

[8] Foxtel's dynamic incentives will probably depend on the extent of pay-TV competition. It could use a 'copying' strategy to undermine new entry and maintain an effective monopoly on the supply of pay-TV over the Telstra cable. Alternatively, if pay-TV competition were able to develop, Foxtel might have an incentive to downgrade its basic service over time. As customers must buy the basic service to gain an STU and buy competitors' programming, Foxtel may decide to simply 'free ride' off these alternative suppliers, lowering the quality and cost of its basic service, knowing that customers will still buy this service in order to access the other suppliers.

cost of provision (including STU costs) will not purchase any pay-TV services. Further, the tying will tend to raise Foxtel's market power. In the short-term it will create disincentives for innovative development of alternative programming as Foxtel can both copy that programming and receives 'first right' to sell to customers. In the longer term, if pay-TV competition develops, it may create incentives for Foxtel to downgrade its basic service and to simply exploit its position as monopoly gatekeeper.

4 The long-term solution

The long-term solution to the competitive distortions created by Foxtel tying STUs to its basic package is to remove the tying. In the long term, freeing up the STU market and allowing standard retail competition to develop will have significant benefits to consumers and alternative channel providers. Both the removal of any tying between Foxtel's STUs and basic service and the development of a competitive market for the retail provision of STUs will enhance economic welfare.

For a competitive market in STUs to develop, an industry standard on STU software and the conditional access system must be adopted. Such a standard could be set by a government body.[9] Foxtel must not be able to control the standard or else it could undermine any competitive STU provision.

The preferable long-term solution will mean that a customer can buy an STU from a retail outlet and use that STU to access any relevant channels or services (i.e. from Foxtel or any access seeker) through the Telstra cable. Smart cards may be provided by individual pay-TV operators but these cards would be mutually compatible so any customer only needs one such card per STU.[10] Customers may still be able to rent (or buy) an STU through a channel provider but they will not have to do this. Most importantly, they will not have to buy Foxtel basic service in order to gain access to an STU.

[9] For analogue pay-TV on the Telstra cable it might make sense to set the existing Foxtel standard as the industry standard.
[10] There is an obvious analogy here with a credit card. A Visa card can be issued by numerous financial service providers but the cards provided by these issuers are all mutually compatible.

5 Short-term and medium term problems

In the short term, simply decreeing an open standard and allowing retail competition in the provision of STUs is unlikely to have a significant effect. The reasons for this are simple. First, with regards to analogue STUs, given the likely short time remaining for the delivery of analogue pay-TV services, it will not be worthwhile for other retail suppliers to enter the market. Foxtel has a current monopoly over the relevant analogue STUs and this is unlikely to be broken even if competition is allowed due to the short future of the market.

Secondly, when Foxtel begins to provide digital services, it will provide a digital STU to all its current customers. In the short to medium term, customers are likely to just continue using that Foxtel-provided STU. Retail competition will take time to develop and customers will need to get used to the idea that they can purchase or rent an STU from someone other than Foxtel.

As noted above, retail STU competition can only develop if there is an industry standard for smart cards and the conditional access system. In the absence of such a standard, Foxtel can eliminate retail STU competition by not allowing non-Foxtel STUs to use compatible IT. For retail competition to develop, Foxtel cannot be allowed to control and manipulate the relevant industry standard.

Unless Foxtel’s behaviour is carefully monitored, Foxtel will be able to eliminate any incipient retail competition in STUs. The easiest way that this can occur is if Foxtel refuses to provide its services to any customer who does not have a Foxtel STU. In other words, if Foxtel can still tie its basic service to the use of a Foxtel STU then this will make any retail competition in STUs marginal and, possibly, unviable.

Even if Foxtel allows customers to use a different STU to access Foxtel services (i.e. eliminates tying) and an industry standard for IT is developed, Foxtel can still undermine retail STU competition by bundling basic service and STUs. For example, suppose the competitive price of an STU is $5 per month and Foxtel sells its basic service *with or without a Foxtel STU* at $45 per month. Then a customer who wishes to purchase Foxtel but also wishes to provide their own STU faces a $5 per month penalty when they use their own STU. They pay $45 per month to access Foxtel using a Foxtel STU and $50 per month to access Foxtel using their own STU.

This example simply represents one type of anti-competitive bundling that Foxtel could use in the short-to-medium term to undermine retail competition in STUs. More subtle forms of bundling, such as providing a discounted package of programming and STU services (e.g. basic service, tier channels and STU services at a discount to the individual product purchases) or providing (backdated) declining STU tariffs that reward ‘loyalty’ to the use of a Foxtel STU, could also be used by Foxtel to undermine incipient retail STU competition.

In summary, in the short-term for analogue STUs and in the medium term for digital STUs, there is unlikely to be significant retail competition in the provision of STUs even if the ACCC requires that Foxtel no longer tie its basic service to the use of a Foxtel STU. Given that Foxtel has artificially created a retail STU monopoly, this monopoly cannot be eliminated in the short-to-medium term.

6 Solutions

In this section, we consider two alternative ways that the Commission could promote the development of retail STU competition in the short to medium term to remove the Foxtel STU bottleneck.

Both solutions require that Foxtel ‘unbundle’ its STU from the provision of its basic programming service. The solutions differ according to whether this unbundling is made transparent to consumers through the options available to consumers or whether it occurs through a wholesale access regime.

It is also preferable over the long term that an industry standard is developed for smartcards, the conditional access system and related IT. It may be sensible to introduce this industry standard at the same time as digital pay-TV services are first offered through the Telstra cable. An appropriate government or industry body could develop this standard. Alternatively, a requirement for the Foxtel/Optus/Telstra deal to proceed might be that Foxtel develop the standard and make it publicly available. If this latter approach is used, on-going control of the standard must be removed from Foxtel to avoid potential anti-competitive manipulation in the future.

Unbundling at the consumer level.

This approach to unbundling involves three steps. First the Commission needs to determine a ‘proxy’ competitive price for access to a Foxtel STU. This should be based on the current replacement cost of an STU. The proxy competitive price can be expressed as a monthly fixed charge.

Second, the Commission should require that Foxtel will (a) allow customers to access Foxtel’s basic services or other Foxtel programming using a relevant STU whether or not that STU is supplied by Foxtel; (b) allow customers who use a Foxtel-provided STU to receive non-Foxtel programming without a requirement to take Foxtel’s programming; (c) that where Foxtel provides a consumer with an STU, Foxtel will explicitly charge that consumer for the STU; and (d) that if the consumer chooses not to use a Foxtel-provided STU but to use a relevant compatible STU then that consumer will face no financial penalty from Foxtel and will no longer pay the Foxtel explicit STU charge. To guarantee that Foxtel does not manipulate the monthly STU charge to harm consumers who use alternative STUs, the monthly charge for a Foxtel STU will be capped at the proxy monthly competitive price of an STU determined by the ACCC.

Third, under this solution, consumers are directly paying for Foxtel’s STUs (and can avoid this charge by choosing an alternative retail supplier of STU services). In such a situation, Foxtel must not be allowed to ‘double charge’ for STU and related services. There should be no wholesale access charge for any alternative channels where the consumer (who is already paying for the STU) chooses to view those alternative channels using the Foxtel provided STU. Similarly, if the customer chooses not to use a Foxtel provided STU then Foxtel has no right to charge any ‘STU access fee’ to alternative channel providers.

To see how this solution might work in practice, suppose that the Commission determines that the current replacement cost of an STU is equivalent to a $10 per month charge. The Commission sets this as the cap on the Foxtel STU price. A consumer who uses a Foxtel STU will receive a monthly bill from Foxtel and the STU charge will represent a separate line-item on the bill. The Foxtel monthly STU charge can be no more than $10 per month but it may be less. If the customer decides to use an STU from an alternative retail provider then Foxtel is not allowed to refuse to supply pay-TV services to that consumer (including the provision of the smart card). Such a customer would receive the same monthly bill except that the bill would not include the line item for the monthly STU charge. Alternatively, if the customer decides to continue to use the Foxtel STU but only to subscribe to non-Foxtel programmes, then that customer would still receive a monthly bill from Foxtel, but this would only be for the monthly STU charge.[11] In each case Foxtel does not receive any STU payments except those payments made directly by customers using Foxtel STUs.

This solution has considerable economic merit. It removes the distortion created by the tying of STUs and Foxtel's basic service. It prevents anti-competitive bundling by Foxtel and allows the retail STU market to develop. Finally, it makes explicit the retail transaction for STU services between the customer and Foxtel. This transparent transaction allows the customer to choose the best supplier of retail STU services. It does not artificially create a wholesale access charge that can be used to hide the retail STU price. Under this transparent pricing solution, there is no wholesale STU access charge.

Further, this solution is simple to implement. The most difficult part is the determination of a proxy competitive STU price by the Commission. However, this price should be based on the replacement cost of the relevant STU and the relevant information should be fairly accessible for the Commission. The customer will face a small change to the Foxtel bill. This bill will have an explicit monthly STU charge that is separate from any programming charges. The customer should be made aware that they can avoid this charge if they provide their own compatible STU.

Unbundling at the wholesale level

An alternative solution would involve a wholesale access regime for the Foxtel STUs. While the STUs are a retail product, the price of the STUs may be incorporated into wholesale prices. If the Commission decided to use a wholesale

[11] Note that this solution includes a requirement that Foxtel must supply an STU together with the relevant smart card to a customer even though that customer does not purchase any Foxtel channels. Foxtel would be allowed to charge that customer for the STU at its standard rate (up to the price cap). The Commission might also allow Foxtel to add a regulated billing charge for these customers given the relatively small monthly transactions. This requirement is necessary while retail STU competition develops but in the longer term, once an industry IT standard is adopted and as retail competition develops, this 'requirement to supply' could be removed.

access regime to avoid the anti-competitive effects of Foxtel’s tying of basic service and STUs then it needs to follow four steps.

As before, the first step requires the Commission to determine a maximum price that can be charged for access to a Foxtel STU. This wholesale access charge should be based on the current replacement cost of an STU as it is representing a proxy for the competitive price of an STU while retail STU competition develops. The wholesale access charge may be determined as a fixed per customer per month charge to be shared between the relevant pay-TV suppliers for a particular customer. For example, the STU charge might be shared on the basis of revenue.

Secondly, the actual access price charged by Foxtel to alternative channel providers should also be explicitly billed to retail customers for Foxtel’s own channels on a monthly basis and the customer must be able to avoid paying this charge if the customer accesses Foxtel’s pay TV services using a non-Foxtel STU. In other words, Foxtel’s ‘share’ of the wholesale STU charge must be explicitly charged to customers who buy Foxtel channels and who use a Foxtel STU and it must be clear to customers that they will not need to pay this ‘share’ of the STU charge if they provide their own STU. This is similar to the second step of the ‘retail level’ solution discussed above.

Thirdly, customers must be able to choose their programme providers without a requirement to change STU. In particular, if a customer using a Foxtel STU decides to no longer purchase Foxtel channels then the customer must be able to retain the STU in order to purchase other providers’ channels. These alternative providers will be required to share the full cost of the Foxtel STU for the relevant customer so that Foxtel is fully compensated for the STU according to the replacement cost.

Fourthly, it is desirable, over the longer term, that the market for STUs be opened to competition (including an industry standard for relevant IT) so that customers can, if they choose, purchase or lease an appropriate STU from a company other than Foxtel and use this STU (with appropriate security measures) to receive Foxtel’s services. The price such a customer would pay Foxtel is the same price as any other customer except that they would not pay the Foxtel share of the wholesale STU charge.

This second approach has a similar effect to retail-level charging but turns the STU charge into a wholesale access fee. It requires that Foxtel charge itself on the same basis as it charges other channel providers. Also, it allows for the long-term development of a competitive retail STU market. This second approach has the benefit that it automatically allows for unbundling of Foxtel content and the provision of a Foxtel STU. Foxtel can provide an STU to a customer even if that customer purchases no Foxtel channels. Foxtel is fully compensated for that STU in this situation through its wholesale charges and has no commercial relationship with the customer. In my opinion, however, this second approach has the disadvantage that it creates less clarity than direct customer charging. However, it is based on a more traditional ‘access pricing’ approach.[12]

What if retail competition in STUs does not develop?

The two solutions presented in this section pave the way to retail STU competition. But it is possible that such competition will be slow to develop. The solutions presented above involve ACCC oversight (including a maximum STU price for Foxtel based on current replacement cost) and will create benefits for the pay-TV market immediately.

If the Commission sets the proxy STU price correctly then the economic benefits illustrated above by the comparison of figure two and figure one are realized. Customers will no longer be tied to Foxtel’s content in order to use a STU and effective competition in pay-TV services can develop. In other words, a consumer can purchase Foxtel’s programmes (and/or a competitor’s programmes) without the requirement to use a Foxtel-supplied STU. Further, a customer can use a Foxtel-supplied STU to purchase programmes from alternative suppliers regardless of what programming services, if any, they purchase from Foxtel. In each case Foxtel is compensated fully for the STU by a ‘proxy’ competitive price based on the current replacement cost of an STU. Undistorted pay-TV competition is able to develop even if there is not full retail STU competition. The ability of Foxtel to raise its profits by tying and ‘free riding’ off alternative pay-TV suppliers is eliminated. The allocative inefficiencies noted above are removed and overall pay-TV is more competitive and more people will be able to enjoy pay-TV services.

Thus, while the above solutions provide a way forward towards a competitive retail STU market, they also involve regulatory procedures to remove the distortions

[12] More details on the second approach are given in King, S. (2002) “Access pricing in pay-TV: a

created by the artificial Foxtel STU bottleneck. The benefits do not depend on the success of eventual retail STU competition.

7 Conclusion

In conclusion, there are clear competitive concerns with the current undertakings being considered by the ACCC. Because the undertaking continue the existing Foxtel practice of tying STUs and basic service, they are likely to result in a diminution and distortion of Pay-TV competition. Under the undertakings, consumers will be harmed by the effective requirement to purchase Foxtel's basic service in order to purchase non-Foxtel channels. This will lead to allocative inefficiencies in the pay-TV market.

In the long term the distortions created by Foxtel's tying can be removed by simply eliminating the tying and any anti-competitive bundling and pricing by Foxtel. It is also desirable, over the long term, for an industry standard for smartcards and other related IT to be developed. In my opinion, the Commission should be aiming towards a short-term process that will lead to long-term sustainable retail competition in STUs.

In the short to medium term stronger measures will be required to facilitate the transition to increased competition. I present two alternative approaches to transition above. These solutions both require unbundling and explicit STU pricing by Foxtel. The solutions differ according to whether Foxtel is compensated for its STUs through an explicit retail charge to customers or through a wholesale access charge. The former approach creates considerable transparency that will help develop retail STU competition. The latter approach requires that Foxtel treat itself like any other access seeker and removes any short-term barrier to competition as a customer can easily use a Foxtel STU even if that customer purchases no Foxtel channels.

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