Analysis of the Competition Effects of the Proposed Sky-Vodafone Merger

Report to Spark

August 2016

Acronyms and Abbreviations

EPG	Electronic Programme Guide
FTA	Free-to-air
IPTV	Internet protocol television
OTT	Over-the-top
RSPs	Retail Service Providers
UFB	Ultrafast Broadband

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Executive Summary

Castalia has been commissioned by Spark to review the competition effects of the proposed Sky-Vodafone merger in New Zealand.

Telecommunications and entertainments markets are complex and multifaceted. However, this complexity can be reduced to two essential components: content and delivery channels.

- There are numerous forms of content, from television channels to specific events, to games and social contacts via emails, social media, and so on
- There are numerous delivery channels: fixed-line and wireless broadband, mobile broadband, fixed line and mobile telephony, satellites, and cables.

There appears to be strong evidence that technological change is driving convergence between the delivery channels: increasingly, there is less and less distinction between how bits of digital data can be moved.

By contrast, there is no similar convergence in the markets for content: some forms of content are unique both in terms of their production requirements and in terms of their appeal to the public. We refer to this as premium content. In this paper, we develop and test the hypothesis that:

- First, control over such premium content is only partially contestable and in practice is highly durable;
- Second, that the value of such control to the owner is maximised not by charging monopoly prices for the content itself, but rather by reducing competition and extracting economic rents from the provision of bundled goods and services that would otherwise be provided competitively; and
- Third, that vertical integration between the ownership of premium content and telecommunications services (including mobile broadband) will create new opportunities for bundling, thus substantially lessening competition in markets that are currently not affected by the existing control over premium content.

In the past, vertical integration between the ownership of content and delivery channels may have been unavoidable to some extent. For instance, Sky had to build its satellite network in order to deliver its full suite of pay TV offers. More generally, each form of content had its own delivery channel: pay TV relied on satellite (and in some locations, cable) delivery, terrestrial TV required broadcasting services, internet relied on fixed line communications, while fixed lines and mobile competed for voice communications.

In the world of specialised delivery channels, with limited or no competition between them for the overall body of content, vertical integration might have made little difference. This is because control of the satellite delivery channel was only of relevance in exercising the existing control over premium content that was to be delivered via satellite.

Vertical integration between premium content and delivery channels takes on an entirely different meaning in a world where everything is digitised and can be delivered via multiple technologies and multiple retail offerings. In this world, control of premium content can directly affect competition in the markets for delivery channels. Of course, we are not yet in this world: for example, over-the-top (OTT) delivery of content to mobile devices is not yet a perfect substitute for viewing the same content on a TV set via a satellite network. However, as we show in this report, the anti-competitive effects of the proposed Sky-

Vodafone merger are likely to be immediate, and will likely get worse as technology fully converges.

Considerable policy effort has gone into creating a carefully structured vertically unbundled model for the markets for delivery channels prior to the ultrafast broadband (UFB) rollout. Under this model, the ownership of monopoly fixed line infrastructure is separated from the retailing of services over that infrastructure, while competitive wireless and mobile infrastructure can be vertically integrated with retailing in telecommunications. The retail market for telecommunications services is both highly competitive and drives outcomes across multiple technological platforms.

In recent years, telecommunications retailers have also sought to vertically integrate into the content markets. In New Zealand, examples include Spark's Lightbox product. In Australia, Optus offers European Premier League to its customers. In addition, retail service providers (RSPs) are able to resell Sky's wholesale offering as part of its product bundle. While RSPs have complained that Sky wholesale prices effectively apply a margin squeeze, Vodafone currently offers a triple play bundle (voice, broadband and pay TV).

However, expansion by some retailers into content did not have a material effect on retail competition: the content was either not unique to each retailer or was of relatively minor significance in driving consumer choice (that is, had only minority appeal), or RSP/Sky bundles have not been priced in a way that materially changed consumer behaviour (likely due to Sky's wholesale prices to RSPs). Critically, Sky content was always available to consumers as a stand-alone offering.

The proposed Sky-Vodafone merger is a game changer: for the first time, a telecommunications retailer and provider of a competitive infrastructure platform will own unique content with significant capacity to influence consumer choice.

Our analysis leads us to conclude that:

- Premium sports content represents a bottleneck service, which enables the owner to earn monopoly rents, but it is typically sold as a notional "loss-leader" within a (profitable) bundle. Owners of premium sports content typically bundle it with other sport, other content, and with delivery platforms to extract monopoly rent: in order to access premium sports content, users pay a significant margin for non-premium content and for the use (at a significant margin) of the platform on which the content is available (where the platform is owned by the premium sport rights holder).
- The Sky-Vodafone merger will enable the bundling effect to be extended into the broadband markets (both fixed and mobile). The likely effect will be that in order to access premium content via broadband platforms (at reasonable prices), users will be locked into a bundle that includes the Vodafone platform, and will pay a margin for the use of this platform compared to the outcome without the merger (where there would be content competition between platforms). This will lead to substantial lessening of competition in the New Zealand fixed and mobile broadband markets.

1 Introduction

Sky and Vodafone have sought clearance from the Commerce Commission for a merger between the two entities. As part of this process, the Commerce Commission has published a Statement of Preliminary Issues related to the proposed merger and submission have been sought by 12 August, 2016.[1]

Castalia has been commissioned by Spark to review the competition effects of the proposed Sky-Vodafone merger in New Zealand.

In order to analyse the competition effects of the proposed merger, this report sets out what we see as logical propositions relating to the merger, and the facts that must hold for our propositions to be true. We set out a series of hypotheses, which can be empirically tested to confirm or disprove our assessment. We present the available evidence. Where the required evidence necessitates access to commercial or confidential information, we suggest the information that the Commission should seek.

The remaining sections of this report apply this format to each of the propositions we examine:

- Premium sports is unique content with monopoly characteristics (Section 2)
- Bundling is the inevitable outcomes of the business model around premium sport (Section 3)
- Control over the bottleneck depends on ownership of a bundle of premium and other sports rights (section 4)
- Vertical integration will sustain and promote further monopolisation of content (Section 5)
- Sky-Vodafone will have an incentive and ability to deny wholesale access to premium content on non-discriminatory terms (Section 6)
- The merger will reduce consumers' ability to switch (Section 7)
- The merger will increase barrier to entry (Section 8)
- Claimed merger benefits will require foreclosing competition (Section 9)

Section 10 then draws together our conclusions on the competition effects of the proposed merger.

1 See: http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/clearances/clearances-register/detail/952

2 Premium Sports is Unique Content with Monopoly Characteristics

Vast amounts of video and television content are available to consumers at near zero marginal cost via multiple delivery channels. These range from free television channels to downloadable video content. Production and distribution of such content does not confer any market power. Other content has premium characteristics in the sense that some consumers highly value such content and are willing to pay for it. However, its appeal is still sufficiently limited that control over such content provides no market power that can be leveraged to affect competition. For example, series, such as Game of Thrones, fall into that category. The fact that such content is available through competing providers (for instance, both Sky and Netflix) itself indicates that it is not a bottleneck service.

The purpose of this section is to consider whether there is some premium content, however, with such uniquely widespread appeal, that control over it enables the owner to behave as a monopolist.

2.1 Hypothesis

Our hypothesis is that real time coverage enabling linear viewing of key "national sports", such as rugby and cricket, represents a unique form of content with universal pull. Access to this content has the same economic characteristics as access to monopoly infrastructure.

2.2 Available Evidence

Consumer surveys in various markets indicate that premium sports content has the widest appeal and that consumers want it in real time.[2] In New Zealand, **[ ] SPKCI** of Sky customers—or around **[ ] SPKCI** of New Zealand households—claimed to subscribe to the sports package in April 2016.[3]

A key feature of the New Zealand pay TV market is that key "national sports" are only available for linear viewing as part of a bundle with more basic content. Sky Sport is not sold separately as a subscription package, except via the OTT FanPass at $55.99 per month.

Product pricing in the New Zealand pay TV market suggests that subscribers primarily take on the basic Sky subscription <u>in order</u> to access premium sports. This is because without sports, most of the elements that make up Sky basic would be available from other providers at significantly lower prices. For example, Netflix NZ is $9.99 - $15.99 per month. Freeview advertises itself as offering "95 percent of all top shows" without a subscription charge. By contrast, Sky basic—which offers broadly the same type of channels and content as the other two services is $49.90 per month.

This suggests that Sky basic is essentially valued as the gateway to Sky Sport (bundled with Sky Sport it is $79.90 month.)

Premium sports typically refer to a relatively limited range of sports. **[ ] SPKCI** Lightbox's actual market experience showed that a "niche sports" package was in fact not capable of competing with the package based around the national sports of Rugby Union, Cricket and Rugby League. For instance, **[ ] SPKCI**. Further Sky's behaviour of adding pop-up channels leverages its capacity, acting as a further barrier to competition from the owners of niche content.

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2 For example, see Kantar Media report prepared for OfCom "Linear vs non-linear viewing: A qualitative investigation exploring viewers' behaviour and attitude towards using different TV platforms and service providers"

3 Source: Spark:[ ] **SPKCI**.

In fact, we believe that Lightbox's market experience is a crucial piece of evidence showing that "national sports" represent a unique form of content. Interest in "niche sports" appears to be a complement rather than a substitute for interest in premium "national sports".

2.3 Conclusion from Available Evidence

The available market evidence suggests that ownership of premium sports content—centred around the New Zealand "national sports" is akin to a bottleneck facility. Consumer behaviour shows that there are no viable substitutes for such content. Market evidence shows that control over this content enables the owner to exercise unilateral pricing power.

In fact, as we discuss in the following section, the fact that Sky Sport is only available as part of a bundle of content is itself proof of the existence of market power. Only a firm with significant market power would be able to enforce a bundle when separate demand exists for the components of that bundle.

The production characteristics of premium sports further enhance their monopoly characteristics. We understand that high quality outside sports broadcasting requires costly specialist equipment. Sky owns the major production company. Economies of scale required to achieve high level of utilisation of this costly equipment suggest that outside sports broadcasting may in fact be a further barrier to entry in the small New Zealand market.

3 Bundling is the Inevitable Outcome of the Business Model Around Premium Sports

The fact that the ownership of premium sports content confers market power is a necessary, but not sufficient condition for being concerned about the effects of vertical integration between the ownership of content and telecommunication services. Sky already has an existing monopoly in premium sports. The Commerce Act does not prevent an existing monopolist from enjoying the fruits of that monopoly as long as it does not lessen competition in other markets.

In theory, one could construct a logical case that the owner of monopoly content should have no incentive to reduce competition in downstream markets:

- Since there is monopoly at only one level along the value chain, a monopolist has the ability to extract the entire economic rent by setting a monopoly price for the relevant service
- Since the value of content depends on the number of subscribers it attracts or retains, the content owner should have no incentive to reduce demand by allowing market power in the downstream markets. The owner of the upstream monopoly has an incentive to avoid the problem known as "double marginalisation", caused by the successive vertical layers of market power. Successive market power leads to lower profits for the upstream monopolist, even if it is vertically integrated. The upstream monopolist would seek to charge the highest possible margin on their marginal cost consistent with its monopoly position. This reduces demand somewhat, but in a way that maximises profits. In turn, a retailer with horizontal market power would also seek to charge the highest possible margin on their marginal cost—and their marginal cost is set by the upstream charge. Again, this would further reduce demand, but in a way that is profit maximising to the retailer. However, this additional margin charged by the retailer would lead to lower demand for the upstream monopolist's output. Hence, the upstream monopolist makes lower profit when the downstream retailers also have market power. Moreover, since both the upstream and downstream firms price at mark-up over their marginal cost, consumers suffer from the deadweight loss twice, but the vertically integrated monopolist cannot earn more monopoly rent than it would have without the downstream market power.

Given the above arguments, concern about the competition effects of Sky-Vodafone merger cannot rest solely on the fact that in New Zealand premium sports content represents a bottleneck. Such concern also requires that:

- There are limits on the ability of the vertically integrated owner to extract monopoly rents through the pricing of the upstream content;
- There is an incentive on the vertically integrated owner to reduce competition in the downstream markets, even if it lowers demand for its upstream product.

3.1 The Economics of Bundling

In our view, the usual arguments about the incentive to avoid double marginalisation do not apply with respect to premium sports content because the economic value of such content is maximised through product bundling. Outside of the occasional unique event (such as a major boxing match viewed on pay-per-view basis), most premium sports content is used to lock viewers into paying more for parts of the bundle which (i) compete directly with other offerings (for example, Freeview, Netflix, Lightbox), and (ii) would on their own have substantially lower market price (for example, Sky Basic compared to Netflix.)

Why do premium sports rights holders pursue this business model rather than trying to extract profit directly from the bottleneck service? Stigler[4] develops a general proposition that (i) if consumers' reservation prices for components are generally negatively correlated and (ii) marginal costs of production are low, a monopolist will always increase profits through bundling.

Table 3.1 provides a numerical example, based on the example developed in Stigler's seminal paper. Table 3.1 shows the reservation prices that customers would be willing to pay for the components of the bundle and for the bundle as a whole (while by definition bundles of complements should be super-additive, for simplicity we assume simple additivity).

Table 3.1: Numerical Example: Reservation Prices

	Basic TV	Sport	Total Content	Broadband	Total package
Customer 1	$5	$50	$55	$35	$90
Customer 2	$25	$40	$65	$45	$110
Customer 3	$40	$10	$50	$45	$95

Source: Approach adopted from Stigler (1963)

In the above example, if Basic TV and Sports components were to be sold separately, the profit maximising price for Sports would be $40. Two units would be sold at that price, for a total revenue of $80. The profit maximising price for Basic TV would be $25. Two units would be sold at that price for a total revenue of $50. Overall, the seller of the two components would receive $130.

However, by bundling the two products together, the seller would be able to set the price of $50 for the bundle. At this price, it would sell 3 units of bundles, for a total revenue of $150.

In fact, this example shows not only that it is profit maximising not to try to extract all monopoly rent from the single component of the bundle. It shows that if most consumers have high reservation prices for that component, but some do not, then it would be profit maximising to do exactly what Sky does:

- Offer the monopoly component at prices which are below average cost (that is, use the bottleneck monopoly as a loss leader), but only as an add on to the competitive component of the bundle;
- Allow customers to buy the competitive component of the bundle on its own, but only at a very high price.

This approach enables maximum price discrimination. It means that some customers who do not value premium sports content, but have high preference for the basic TV package, would still indirectly pay the monopoly rent on the premium sports content.

[4] Stigler, George (1963), "United States vs. Loews' Inc.: A Note on Block-Booking," Supreme Court Review, 152-157.

The above example shows that adding a further competitive component to the bundle further embeds this approach. A competitive price for broadband on its own would be $35. Three units would be sold at this price, for a total revenue of $105. Selling the three components independently would net $235.

A monopolist would sell the triple play bundle for $90. Three units would be sold at that price, for a total revenue of $270.

The optimal strategy for the monopolist would be to set the prices for the competitive components of the bundle high ($40 for Basic TV and $45 for broadband in the above example), but to set the price for the highly desired monopoly component low (say $5 in the above example). This way, the total price for the bundle would extract maximum consumer rent, while individual component prices would allow price discrimination.

The numeric example illustrates the general point that both in New Zealand and internationally, there is no evidence of sports rights holders trying to extract value by setting maximum prices for the sports content on a stand-alone basis. In general:

- Bundling content together allows content owners to prevent month-to-month volatility (whereby subscribers could cancel their subscription once their favourite show has finished a season);
- Premium sports content is the key content for such a substantial proportion of consumers, that:
  - Bundling premium sports content with other content allows selling of advertising over a wider range of content than just premium sport. This revenue stream is in addition to the subscription revenues for that package;
  - Bundling premium sports content with a delivery platform or device creates stickiness to a particular delivery platform, or device, or drives uptake of that platform/device; and
  - Bundling allows providers to manipulate consumer preferences: by making sports a relatively inexpensive add on to the relatively expensive basic bundle suppliers change the shape of the demand curve (see pricing example above).

Lightbox experience shows that content rights to a specific sport (such as English Premier League) is not sufficient by itself to win sufficient subscribers to be commercially viable. Bundling and notional "loss leading" represents a carefully erected barrier to competition that locks in market power. With highly desirable premium sports available at a notionally low price, consumers are induced to see “niche sports” as being complementary products rather than competitive substitutes.

3.2 Conclusion from Available Evidence

The existing business model of premium sports content being sold to consumers as a bundle, and being bundled with other (non-premium sports) content, platforms, and services is likely to be persistent post-merger. At present, Sky has the option of charging full monopoly price for the premium sports content and making it available on a stand-alone basis. Apart from the FanPass product, Sky’s pricing conduct clearly shows that this is not the profit-maximising strategy.

The same factors that make bundling and notional “loss leading” profit maximising today would apply after the merger. In fact, Vodafone’s pricing strategies for its triple play bundle provide an indication of the likely approach post-merger. In theory, Vodafone does not need to carry Sky’s wholesale pricing (based on retail minus) into its retail offering. It could restructure its pricing and terms and conditions so that it extracted the monopoly rent from the monopoly content (offering Sky Sport at full monopoly price), while setting the prices for other components at competitive levels.

We have reviewed Vodafone offers for each month of 2015 and 2016.[5] We found that in fact Vodafone gradually expanded the notional "loss leading" strategy. In 2015, during one month out of twelve Vodafone offered free Sky Sports for a year as inducement to sign to a triple play bundle for 12 months. By 2016, this offer was available in every month of the year. This is also discussed in Spark's submission.

The likely persistence of the bundling strategy suggests that a merged Sky-Vodafone:

- Is unlikely to be able to extract the full monopoly rent from the price for the monopoly component. Given the revealed characteristics of consumer demand and the low marginal price, component pricing is unlikely to be profit maximising. Moreover, as we discuss in the next section, unbundling premium sports from other content is likely to create conditions for further unbundling of each individual sport. This would reduce market power and make it more difficult to defend the monopoly condition;
- Would have the incentive to use its market power in relation to sports content to reduce competition in downstream markets.

[5] We undertook a timed search of cached website content for the first day of every month.

4 Control Over the Bottleneck Depends on Ownership of a Bundle of Premium and Other Sports Rights

In this section, we consider the role of bundling not only in extracting the monopoly rent from consumers, but also in perpetuating the control over content.

4.1 Hypothesis

Our hypothesis is that bundling and notional "loss leading" represents a carefully erected barrier to competition for premium sport bundles in order to lock-in market power and continue to extract producer surplus.

4.2 Available Evidence

In theory, any RSP could bid for premium sports content. Sports bodies, such as New Zealand Rugby, have every incentive to maximise competition for the right to show their sport. Hence, Sky's monopoly over the premium sports content does not derive from any exclusive access to sports bodies (although owning the major outside broadcasting services company in New Zealand may be a factor).

Rather, to defend its market power, Sky needs to be in a position to outbid all rivals for the premium sports content.

The evidence suggests that for now, TV (including digital TV) is the preferred mode for watching sports. However, OTT and internet protocol television (IPTV) services are becoming more acceptable and more of a substitute for traditional TV. At present, Sky is able to outbid other content seekers because of its position as the dominant pay-TV operator in New Zealand (with a substantial subscriber base), and owner of a free-to-air (FTA) channel. The position is supported by Sky's ownership of the only satellite TV platform and Skybox roll-out, which has traditionally been the primary route to receiving high quality paid content transmission, consumer on-demand viewing (recording and playback) and Electronic Programme Guide (EPG) services.

Sky can outbid all other bidders for almost all premium sports content, such that no other compelling premium sports bundle can be put together outside of Sky. This is because Sky has a substantial subscriber revenue base, can build in advertising revenue from subscriber and FTA channel advertisements, and can provide guarantee of FTA as well as pay-TV coverage.

The only way that RSPs could outbid Sky to achieve a sufficient bundle of premium sports content is if they had guaranteed revenues from a sufficient subscriber base, but the only way they can grow their subscriber base is by having access to a sufficient bundle of premium sports content (the "vicious circle").

In addition, as Figure 4.1 shows, the timing of content right renewal is staggered. This means that at any time when the right for one premium sport comes up for renewal, Sky will be the owner of other premium sport right. Since evidence suggests that the bundle is complementary, Sky would likely be in a position to always outbid its rivals.

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[ ] SPKCI

4.3 Further Evidence Required

In preparing this report, we did not have access to information about the conduct of bidding for premium content and Sky's bidding strategies. To understand the role of bundling in preserving control over the bottleneck premium content, our suggestion is that the Commerce Commission consider investigating:

- The relationship between the revenues earned from the Sky Sport and FanPass products and the costs of acquiring and providing sports content. The extent of "loss leading" would be a good indicator of the role of bundling in enabling Sky to outbid its rivals.
- The role of advertising versus subscriber revenue. The greater the reliance on subscriber revenue, the more important the product bundling strategy would be in setting the content bidding strategy.
- The efficient component pricing for each premium sport channel. What would competitive prices look like in the absence of bundling?
- Previous content bids and Sky business plans for those bids.

5 Vertical Integration Will Sustain and Promote Further Monopolisation of Content

Our analysis so far shows that product bundling, which reduces competition for non-monopoly components, is the profit-maximising way to use the market power that comes from control of premium sports content. In turn, such bundling sustains and promotes Sky's ability to keep control over premium sports content.

In this section, we consider whether Sky-Vodafone vertical integration would further enhance the merged entity's ability to monopolise content.

5.1 Hypothesis

There are significant first-mover advantages in owning a content bundle. It is already difficult for competitors to bid key content away from Sky. Vertical integration will make this materially harder, sustaining Sky's on-going sports content monopoly.

Vertical integration can strengthen first-mover advantages if there are feedback effects. This would include if a monopoly on content enables the vertically integrated service provider to reduce competition downstream (and hence increase margins), while higher margins downstream enable this service provider to outbid others for content.

5.2 Market Analysis

Without the merger, it is likely that the first-mover advantage (supported by the "vicious circle" described in Section 4.2 and in Spark's submission) could be disrupted. As consumers move away from consuming premium sports content on the satellite platform, and are increasingly willing to use OTT and IPTV platforms, Sky's monopoly over the most common and popular distribution platform will cease.

In the counterfactual, Sky will, therefore, become a vertically unbundled monopolist. It will need to enter into transmission, resale, or distribution arrangements with RSPs to offer bundles with different delivery platforms to access the growing proportion of consumers that prefer non-satellite platforms. Sky will likely struggle to sustain the existing full bundle with its own basic content and delivery platform.

As a vertically unbundled monopolist, Sky will likely have an incentive to make content available to all RSPs to deliver its content across multiple platforms and devices. This will meet the growing demand for alternative platforms as ultrafast broadband (UFB) uptake increases and other digital and spectrum based options are made available to consumers. In this setting, the value of premium sports content as the monopoly component that holds a product bundle together and enables price discrimination would decline. In essence, over time, the notional "loss leading" strategy would become less sustainable and premium sports content would need to recover its costs directly. In this setting, the first-mover advantage would become less significant. Any RSP would be able to bid for premium sports content on essentially the same basis as the incumbent.

By contrast, the proposed merger would likely provide an opportunity to lock-in Sky's existing first-mover advantage, previously provided through the bundling of content and the pay-TV platform. A Sky-Vodafone merged entity would likely reinforce its control over the bottleneck content as it would:

- Have Sky's satellite platform
- Have Sky's FTA platform
- Have Sky's subscriber revenue base

- Have Vodafone's broadband and mobile platforms, and significant market share in each of those markets
- Have Vodafone's spectrum holdings and cable network in Wellington and Christchurch
- Be able to bundle premium sports content with its broadband and other retail products, with Vodafone's significant market share making foreclosure of other RSP's platforms viable and profitable.

It appears unlikely that anyone would ever be able to create sufficient value out of premium sports content to outbid this combined position.

5.3 Further Evidence

Consumer survey evidence broadly indicates that the ownership of content would allow Sky-Vodafone to increase its market share in the downstream markets. We have been able to review **[ ]**[6] **SPKCI**

A merged Sky-Vodafone would likely be able to tweak its combined offering to lock-in a significant proportion of the **[ ] SPKCI** of Spark customers who currently have Sky. For example, as shown above, Sky-Vodafone would be able to deepen the notional "loss leading" strategy within its bundle. For instance, one approach could be to increase the price of Sky Basic as a stand-alone product, while decreasing the notional prices of Sky Sport and broadband as part of a bundle. This would reduce the benefit to consumers of having Sky as an independent product, while making the overall triple play bundle more attractive without actually reducing the overall price that customers pay. In fact, significant growth in Sky-Vodafone market share achieved through such lock-in could provide the merged entity with the unilateral power to increase prices.

To understand the effects of the merger on the ability to maintain market power in relation to content, and in turn, the value of such an advantage for extracting monopoly rents from consumers, it would be important to investigate how different bundling strategies would affect consumer behaviour. The Commerce Commission could consider investigating Sky's and Vodafone's marketing and pricing plans with and without the merger.

[6] The application for clearance at section 4.2 (c) describes ability to make "better offers" as a benefit of the merger. If "better offers" are not replicable due to monopoly control over content, then such ability would actually reduce competition.

6 Sky-Vodafone Will Have an Incentive and Ability to Deny Wholesale Access to Premium Content on Non-Discriminatory Terms

Overall, our analysis suggests that a merged Sky-Vodafone will have an incentive to discriminate in how it makes premium sports content available to the customers of its combined product bundle, compared to the customers who wish to purchase some components from other RSPs. For the same reason, a merged Sky-Vodafone would be unlikely to offer wholesale access to premium sports content on non-discriminatory terms to other RSPs.

We understand that Vodafone at present is the only RSP that re-sells Sky, and that other RSPs, including Spark, have complained that the wholesale prices for Sky products (based on a retail minus approach) do not provide sufficient margin to make re-selling viable. However, it is important that Sky content is available to all RSPs on the same wholesale basis.

This is precisely the kind of behaviour one would expect from a vertically unbundled monopolist. Since Sky has its own product distribution network, it has no incentive to leave any margin on the table for the downstream producers, but equally no incentive to discriminate between them. As a vertically unbundled monopolist, Sky would have every incentive to avoid double marginalisation.

As a vertically integrated monopolist, Sky-Vodafone incentives would change. As we discussed above, it would have a greater ability to price discriminate and capture consumer surplus by not capturing all monopoly rent at one level.

This would create a challenge for the merged entity. We speculate that Sky-Vodafone would be unlikely simply to deny its wholesale content to other RSPs. Such a move could invite regulatory intervention. Rather, Sky-Vodafone would need to set its wholesale prices at such a level that other RSPs would find it difficult to offer competitive bundles in the downstream markets.

A notional "loss leading" strategy would make it difficult to achieve this effect through retail-minus pricing. For example, if the optimum retail pricing strategy to extract consumer surplus is to set a low price for Sky Sport, but only as part of a bundle with over-priced broadband, Sky-Vodafone would not wish to offer Sky Sport at a wholesale price derived from this "loss leading" retail price.

Since a key benefit of the merger is to preserve the bundling and price discrimination strategy at the retail level, it would appear that both price and non-price discrimination at the wholesale level need to be part of that strategy. A number of discriminatory strategies may be possible:

- Sky-Vodafone could post wholesale prices that are not based on actual retail minus. For example, it could establish a set of "rack rates" that would provide notional retail prices from which wholesale charges would be calculated, but which would be different to the retail prices it actually charges (or to the wholesale prices used for internal accounting)
- Sky-Vodafone could set high nominal retail prices, but offset them through free offers, such as free Sky Sport or exemption from data caps for OTT content. It would then derive retail minus from the nominal retail prices

- It could offer satellite packages for resale but restrict OTT services, such as FanPass, to its own broadband subscribers.

Overall, it is worth re-capping that it is only under very restrictive conditions that a vertically integrated monopolist will have no incentive to discriminate against downstream service providers, namely where:

- It can capture all monopoly rent at one level
- Its downstream operation operates in a market in which only normal returns are possible.

Neither of these conditions holds in the present case. In particular, by inducing Sky customers who are currently not with Vodafone to switch to the bundles offered by the merged Sky-Vodafone, the merged entity could increase its market share in the downstream markets to the levels where it would be able to exercise unilateral price setting power.

7 The Merger Will Reduce Consumers' Ability to Switch

Customer churn is one of the key costs for RSPs and reduction in churn is the Holy Grail of marketing. In general, measures available to RSPs to reduce churn, such as improvements in service quality, responsiveness to customers and offering attractive prices are pro-competitive. While customer switching is an important part of competition between RSPs, customer churn is not good in itself. Indeed, an increase in customer churn could lead to higher overall costs, to the detriment of consumers.

At the same time, increased customer stickiness could lead to lower competition. In markets for retail services, such as electricity, banking or telecommunications, competitive offers are primarily focused on new customers. Service providers have an incentive not to pass the benefits of competitive offers to inactive and sticky customers. In general, in such markets we would expect to see the average price paid by existing customers somewhat above the price being offered to new customers. The gap between the new customer offers and the average prices would tend to decline as churn grows and increase as churn declines.

While it is impossible to identify an optimal level of churn, it is possible to distinguish between reasons for increase in customer stickiness. In general, reduction in churn due to improved quality or price of the offers would be pro-competitive[7]. Reduction in churn due to deliberate measures to reduce consumers' ability to switch would be anti-competitive.

7.1 Hypothesis

Our hypothesis is that vertical integration could profitably be used to reduce consumers' ability to:

- Switch providers.
- Access alternative content.[8]

7.2 Analysis

To test this hypothesis, we need to identify and test potential price and non-price means by which a merged entity may increase customer stickiness in a way that is materially different to pro-competitive measures, such as investment in branding.

The available market evidence suggests that bundling content with the telecommunications retail services enables longer lock-in of customers. For example, our review of Vodafone triple play offerings over the past 18 months shows examples of a further 12 months of contractual lock-in for Vodafone services on the back of Sky content (such as get 12 months Sky basic contract and free Sky sports with a 24 month Vodafone contract). At present, the benefits of such contract offers are, in principle, available to all RSPs (while Spark and other RSPs have not chosen to match the Vodafone triple play model at current wholesale prices, the options is, at least in principle, available to them).

[7] **[ ] SPKCI**

[8] This tests the vertical effects raised by the Commission in its Statement of Preliminary Issues. See: http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/clearances/clearances-register/detail/952

We have already discussed the incentive to use product bundling to increase lock-in under vertical integration. However, a number of other tools could be available to the vertically integrated Sky-Vodafone to make it harder for customers to switch:

- Modifying Sky set-top devices to be easily integrated with Vodafone broadband services, but making integration with other broadband platforms technically more difficult (thus offering an inferior customer experience).
- Discriminating against alternative content providers by including differential data pricing and data speed advantages for own content.
- Making OTT access to Sky content only available to Vodafone broadband and telecommunications subscribers.

It is likely that other techniques to reduce customers' willingness to switch would emerge over time. We wish to emphasise two observations:

- First, such techniques would only be available to the vertically integrated entity.
- Second, none of these lock-in techniques would be possible without taking advantage of the market power created through control over premium sports content. Without premium sports content, broadband consumers who did not wish to use set top devices that favoured Vodafone or who wanted non-discriminatory delivery of OTT content would be able to switch to alternative providers, including constructing their own product bundles. However, with the market power conferred by control over premium sports content, Sky-Vodafone would be able to prevent customers who value such content from switching.

8 The Merger Will Increase Barriers to Entry

The Sky-Vodafone application for clearance refers to 80+ telecommunications providers. Indeed, significant competition exists and is made possible by the vertical unbundling of the sector. RSPs are able to offer a broad range of services through a mix of their own investment and re-selling of both fixed-line and mobile services. Market entrants are also able to focus on their particular product, with customers buying different components from different suppliers.

An increase in product bundling as a result of the proposed merger would likely make new entry into the sector difficult because:

- An increase in customer stickiness will reduce the potential field for new entrants.
- Entry by suppliers of individual components would be deterred if pricing by Sky-Vodafone is set on the basis of product bundles, with notional pricing of individual components likely distorting price signals. As the incentive for bundling strengthens, new entrants and other RSPs would similarly have to try to offer comparable bundles.
- The trend towards competition with a vertically integrated supplier may reduce the opportunity for independent RSPs to construct full service bundles.

We note that the clearance application picks up on the Commission's previous finding that IPTV was the most likely source of new entry into pay-TV, and that achieving scale and partnerships with RSPs were two of the four conditions of entry. With market pricing distorted by pricing of bundles, an IPTV entrant may find it difficult to find a market niche for a stand-alone wholesale product. In effect, in a market space defined by vertically integrated bundles, vertical integration between IPTV provider and a RSP may become a pre-requisite for entry.

While such an integrated entry may be occasionally possible, in reality the proposed merger may limit the ability for other potential IPTV providers to achieve scale.

To re-cap:

- As discussed before, vertical integration between Sky and Vodafone will reduce the incentive to provide wholesale services on a non-discriminatory basis.
- Reduced opportunity to access premium content on a wholesale basis is likely to make entry more difficult by requiring new entrants to achieve sufficient scale and vertical integration to compete.
- The incentive to use notional "loss leading" and other distortionary price signals to extract the greatest amount of consumer surplus from the overall product bundle will in turn distort price signals with respect to individual components. This will likely deter entry by suppliers of such components.

Our discussion earlier in the report showed that it would be difficult for a competitor to break through Sky-Vodafone control of premium content.

9 Claimed Merger Benefits Will Require Foreclosing Competition

We have reviewed the material prepared by Sky and Vodafone for their respective shareholders. This material estimates revenue increases of $435 million as a result of the merger[9].

9.1 Hypothesis

Our hypothesis is that it would be impossible to achieve these estimated revenue increases without substantially lessening competition. A related hypothesis is that it would be impossible to create superior service bundles that would lead to increased revenue without denying third parties non-discriminatory access to wholesale products.[10]

9.2 Analysis

A possible way to disprove the first hypothesis is to see if we can identify potential mechanisms through which the merger would produce an increase in revenue without anticompetitive conduct (or without further anti-competitive conduct[11]). To be of importance for the proposed merger, these mechanisms must be specifically derived from vertical integration as otherwise the benefits would also be available under the counterfactual.

In principle, we can see two potential pro-competitive mechanisms that would be consistent with an increase in revenue under the merger factual:

- There are cost reductions that can be uniquely achieved through vertical integration and that cannot be passed into wholesale offerings to other RSPs. In other words, there are savings that would only be available to Sky-Vodafone, and which would lead to sustained price reductions by Sky-Vodafone <u>relative</u> to other RSPs.[12]
- An increase in consumer loyalty and reduction in incentive to switch supplier is due to genuine improvements in quality that are only possible due to vertical integration.

In our view, neither of these mechanisms are plausible explanations for revenue increases in the present case. First, the Explanatory Memorandum measures cost reduction separately from the revenue benefits. For those cost reductions to be a benefit of the merger to the shareholders, the expectation must be that they would not be passed into lower prices to benefit consumers. There is only way for both cost reduction and revenue uplift to be captured by the shareholders without assuming anti-competitive effects. This is for Vodafone-Sky to face such high own-price elasticity that despite a decrease in price, as a result of cost cuts, the increase in volume of sales would lead to an increase in revenue.

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[9] The "Explanatory Memorandum Relating to the Merger of the Businesses of Sky and Vodafone NZ" estimates revenue synergies of $435 million. Also, see: http://www.stuff.co.nz/business/industries/81033953/Sky-TV-Vodafone-merger-response-to-fundamental-deterioration-says-adviser

[10] This tests the conglomerate effects raised by the Commission in its Statement of Preliminary Issues. See: http://www.comcom.govt.nz/business-competition/mergers-and-acquisitions/clearances/clearances-register/detail/952

[11] Since Vodafone provides re-transmission services to Sky, commercial arrangements between Sky and Vodafone are likely to differ from potential commercial arrangements with other RSPs even in the absence of the merger. Potentially, any vertical agreement between Vodafone and Sky could have anti-competitive effects depending on its terms.

[12] The "Explanatory Memorandum Relating to the Merger of the Businesses of Sky and Vodafone NZ" estimates $415 million of cost/capital expenditure savings (net of migration costs).

The revenue increase would need to be sufficiently high both to capture the cost cuts for the shareholders and to bring in additional revenue.

However, if RSPs or Sky already face such high own-price elasticity, those revenue benefits would have already been captured. In other words, for this logic to hold, Sky-Vodafone needs to expect that it would face higher price elasticity post-merger than Sky and Vodafone do separately. This could happen if consumers respond to pricing of triple play bundles differently than to the pricing of separate products. While this is a plausible proposition, Vodafone already offers triple play bundles. Hence, it is difficult to see how it would be able to further exploit different price elasticity for those bundles following the merger without lowering competition from other RSPs. In fact, the most likely explanation for a possible increase in own-price elasticity post-merger would be if competing RSPs are prevented from responding to Vodafone-Sky bundled offers on the same basis. This would only be possible if Sky-Vodafone's wholesale offering is non-replicable and discriminatory.

The second possibility to capture revenue benefits without lowering competition would be if consumers are no more inhibited by the merger from changing provider than under the counterfactual, but have a reduced incentive to switch post-merger. Moreover, the reduction in the incentive to churn away from Sky-Vodafone must be uniquely related to the merger. For example, allowing access to SKY on mobile devices with no data fees would not constitute a pro-competitive mechanism of this kind, as this is available under the counterfactual. The reduction in churn must also come as a result of an improvement in the service offering that is not at the expense of excluding competitors.

We are unable to identify improved service characteristics that would result from the merger and would only be available to Sky-Vodafone customers in the absence of any anti-competitive discrimination. For example, the merger may result in better integration of Sky content with the technical requirements of OTT platforms. However, if Sky-Vodafone provide wholesale access on non-discriminatory basis, the same service improvements would be available to all RSPs. Hence, they would be unlikely to lead to significant revenue increases for Sky-Vodafone.

In principle, superior access to information about both Sky and Vodafone customers could provide additional benefit in constructing service offerings that would not be available otherwise. However, such combined information is already available to Vodafone through its triple play re-selling. Additional revenue benefits would rely on being able to use information about customers that is currently only available to Sky in a discriminatory way with respect to other RSPs to lock-in customers who currently purchase Sky and telecommunications services separately.

9.3 Conclusion on Merger Revenue Benefits

While we find it plausible that the proposed merger could reduce costs through synergies, we find it implausible that it could lead to higher revenue compared to the counterfactual without a detrimental effect on competition. The proposed merger may indeed lead to more rapid convergence between the delivery channels, and improved service offerings to consumers who wish to access content via non-traditional devices. However, in the absence of discrimination, such technological improvements would be available to all RSPs via wholesaling. While additional wholesale and retail revenues may be possible from investment in enabling broadcast content to be available on-line, such revenues would be available both with and without the merger. In any case, such technological developments are highly competitive and would be unlikely to provide abnormal benefits to shareholders.

10 Conclusion on Competition Effects

Our analysis indicates that the current Sky business model relies on extracting consumer surplus through the use of product bundling. The ability to bundle is derived from the market power conferred by control over premium sports content. Sky previously also enjoyed exclusive control over the pay-TV satellite delivery platform: still the most popular technical platform for accessing TV content. However, with the emergence of services such as Freeview, Sky's ability to bundle and price discriminate rests solely on monopoly content. Bundling and retail price discrimination, in turn, provide a solid basis from which Sky is able to defend its control over premium sports content.

We conclude that the proposed merger is likely to provide a basis to sustain and enhance such discriminatory business model. Specifically, we conclude that:

In the counterfactual

- There is a strong probability that Sky would offer competitive wholesale content packages to RSPs to access the growing proportion of the market that prefer to access content via OTT / IPTV platforms rather than satellite platforms.
- As RSPs are able to grow their own premium content subscription base through their wholesale offerings, they will increasingly be able to look to bid for premium sports content directly to differentiate their content package from Sky and other RSPs. This will create competition in the rights acquisition markets and content differentiation competition in the fixed and mobile broadband markets. Over time, the pressure for unbundling will mean that: (i) control over premium sports content will provide less ability to lower competition, and (ii) it will become harder for Sky to retain its lock-in of the premium content. This will mean that the counterfactual is substantially more competitive than the factual (see below).

In the factual

- Sky-Vodafone will seek to expand the bundling effect. While the risk of regulatory intervention will encourage it to continue to notionally "offer" a re-sale product, it can, for example, increase the retail price of its Sky product but offset it within a Sky-Vodafone bundle.
- Sky-Vodafone will likely bundle its own internet-based delivery with its premium content: that is Sky-Vodafone may not make resale available, or at least not on competitive terms, to other RSPs.
- There will be a lessening of competition in the fixed and mobile broadband markets vis-a-vis the counterfactual as:
  - There will not be the development of content competition between RSPs – Sky-Vodafone will retain/win market share without needing to innovate / lower prices;
  - Other RSPs, in particular smaller RSPs, such as Vocus and 2Degrees, will lose market share to the attractive bundled offers of Sky-Vodafone, and Sky-Vodafone will increase consumer stickiness, thereby harming their ability to compete in the fixed and mobile broadband markets.

In this report, we have identified the conditions under which the proposed merger would not be anti-competitive. We find that none of these conditions hold. Hence, the proposed merger is likely to lead to a substantial lessening of competition.

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