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Economic Analysis of Sky-Vodafone Proposal

Prepared for

2degrees and TVNZ

economics | research | forecasting | public policy

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Executive Summary

This report contains an economic analysis of the proposed acquisition of Sky TV by Vodafone. It represents the independent expert views of the author and relies on independent examination of a wide range of data and information sources cited below.

Both of the parties to the transaction are facing commercial issues in their retail markets, however Sky TV is in the more challenging position. After many years of continually increasing subscriber numbers, Sky is now losing customers and its performance is being severely criticised by commercial analysts. Rapid improvements in broadcast-quality infrastructure have exacerbated this problem as it lowers the barriers to over-the-top (OTT) distribution of video content. Sky needs to find a new source of growth.

Vodafone is also losing market share and facing similar challenges to other telecommunications retail service providers (RSPs) in maintaining revenue growth. Digital communications and OTT services such as Skype continue to undermine traditional sources of revenue and RSPs are increasingly being reduced to commodity suppliers of data transmission.

It is widely recognised that bundling pay TV content with telecommunications services offers some respite from these challenges. Despite rapid infrastructure improvements, such bundling is not a strong feature of New Zealand markets yet. Sky TV does offer resale of its content to RSPs but of 80 – 100 RSPs only Vodafone has taken up this offer.

Sky TV has a monopoly position which will continue for several years into the future in respect of several forms of premium content. The applicants describe premium content as "*a key input into any pay TV service*" and we agree with that assessment. Our analysis concludes that the reason all but one of many RSPs are not offering Sky's full suite of content is that they cannot afford to do so on the terms offered.

The applicants nevertheless predict revenue synergies of $435m over an unspecified period of time. Based on the relative size of the customer bases of Vodafone and Sky TV we conclude that most of this is expected to come from up-selling of Sky TV to carefully targeted Vodafone customers. We infer from the absence of successful up-selling by RSPs to date that the up-selling expected under the proposed transaction can only be stimulated by a lower input price that will be offered to Vodafone.

Many other RSPs would be capable of achieving similar rates of up-selling if they were offered the same terms as those Vodafone would receive post-transaction. Thus, Sky could achieve larger revenue synergies than predicted from this transaction by enthusiastically adopting a wholesaling model alongside its existing business.

For these and other reasons explained below, we consider that this wholesaling strategy is the most likely course of action for Sky TV in the event that the transaction does not proceed. Relative to this scenario, the proposed transaction is substantially less competitive because only Vodafone will have access to preferential pricing of the "key input" needed to create an attractive retail bundle of telecommunications and broadcast content.

Even if the status quo is used as the counterfactual, the proposed transaction still involves a substantial lessening of competition in telecommunications markets, for the same reason.

1 Introduction

1. A merger has been proposed by Sky Network Television Limited ('Sky') and Vodafone New Zealand Limited ('Vodafone'). The proposed transaction would involve Sky acquiring Vodafone from its current owner Vodafone Europe BV, which would itself acquire a controlling stake in Sky. The merged entity would have strong positions in telecommunications and pay TV markets in New Zealand. A clearance application has been lodged with the Commerce Commission, which has issued a statement of preliminary issues ('SOPI').

2. This report is an independent expert economic analysis of the competitive effects of the merger. It was commissioned by a broadcaster and a telecommunications company, but the analysis and views contained here are those of the author.

3. We begin by reviewing the commercial and policy background relevant to assessing the transaction, in section 2. This is relevant to understanding the commercial motives of the applicants and to describing the counterfactual scenario that would occur if the transaction did not proceed.

4. Relevant markets are then defined in section 3, having regard to the platform nature of broadcasting and telecommunications businesses. Following conventional practice, our market definition is intended to help focus the balance of the analysis on areas of potential competitive concern.

5. In section 4 we consider the incentives and ability of the parties to undertake certain conduct, with and without the transaction. This analysis draws on the counterfactual scenario defined in section 2, on other relevant contextual facts, and on the economic analysis reported in section 3.

6. Finally, in section 5 we summarise the likely impacts of the transaction on the competitive process in the relevant markets.

2 Context

7. To understand the potential effects of the proposal on competition it is helpful to begin with a review of the relevant context. This section addresses several important topics under the following headings.

   a. We begin with an **overview** which summarises the current competitive landscape, including consideration of how this has been shaped by the recent technological and developments. The overview section distils several commercial and policy matters and discusses their economic relevance to the proposed transaction

   b. The current position of **the parties** is then considered along with challenges to their ongoing growth and their prospects for surmounting those challenges.

   c. This analysis leads to a summary of the main options available to the firms. The proposed transaction is one option and we also define the most likely **counterfactual** option for each firm.

2.1 Overview

8. The proposed transaction affects the television and telecommunications industries in New Zealand. These sectors have several similar characteristics.

   a. Technological intensity. Both adopt and rely heavily on innovation in the technology for communicating information. In both cases the shift from analogue to digital transmission of information has created new commercial opportunities.

   b. At least two different business models. In television, pay television competes for viewers against free-to-air ('FTA') business models supported by advertising. In telecommunications there are many distinct models including high level distinctions between mobile and fixed-line communications.

   c. Risk of monopoly power. Until recently this was a major problem in fixed-line telecommunications. Monopoly concerns can also arise in the television sector in respect of certain premium content as discussed further below.

9. Convergence between television and telecommunications is often discussed and has some relevance to this matter. The core services of content distribution and telecommunications nevertheless remain distinct. Content distribution involves one-way transmission of content, from the broadcaster to the viewer, even if the viewer may have requested the content such as in the subscriber video on demand ('SVOD') model. Telecommunications is inherently two-way: the basic service is interactive communication between two or more individuals.

10. Since many individuals have demand for both basic services, and it is now technologically possible to use a common infrastructure for delivering them, there is a strong trend in retail markets towards bundling of products. In particular, telecommunications retail service providers ('RSPs') have begun offering triple-play and quad-play bundles. A typical quad-play bundle includes mobile and fixed-line voice calls, broadband internet service, and a television or SVOD component.

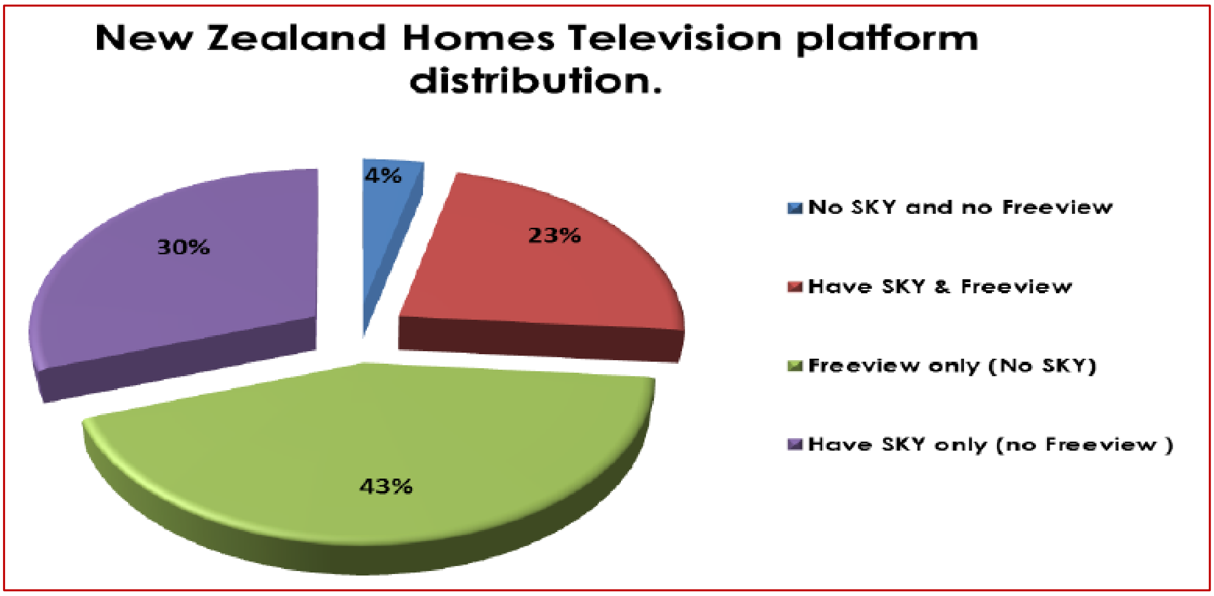
11. Convergence therefore shows up on both sides of these markets: common delivery infrastructure reduces the supply-side difference; while retail bundling does the same on the demand side. We now consider each of these in more detail and then discuss content.

2.1.1 Delivery Infrastructure

12. Television has traditionally been delivered by either terrestrial fixed wireless networks or by satellite. The original transmission network for FTA television in New Zealand is now owned by Kordia. Users require simple aerials on their premises to receive these transmissions and either a set-top box or a modern TV that includes this technology is also required. There are two networks with wide penetration in New Zealand. FreeView is now in approximately 67% of New Zealand households. Sky operates a pay TV network and serves around 53% of New Zealand households.

13. There is some overlap in platform distribution with around 23% of households having both a Sky and a FreeView service, as shown in Figure 1.

Figure 1: Television Platform Distribution in New Zealand (Source: FreeView Presentation, Hbb TV Symposium, London, December 2015)



14. In mobile telecommunications, digital wireless technology is used to connect handsets to cell sites with predominantly fibre-optic transmission between cell sites and the network switches. These digital technologies have continued to advance and they are already capable of supporting reasonable broadband quality.

15. Fixed line telecommunications is undergoing a major transition from a copper-based access and feeder network to one with fibre-optic cables reaching direct to customer premises. Stimulated by government capital, these networks have been under construction for five years and connection numbers are increasing rapidly. They are scheduled to reach 80% of the population with final uptake levels of around 80% of those premises passed.

16. The fibre-optic network supports excellent broadcast quality transmission and has been deliberately structured on a structurally separated open access model to avoid the monopolisation problems associated with having a network monopolist selling services to its competitive rivals. Even in locations not yet ready for fibre, technological innovation is allowing the copper network to deliver broadcast quality video, and again, structural separation has eliminated competitive concerns with monopoly power.

17. Importantly, the new fibre-optic network (and new technology on the legacy copper network) makes it possible for a pay TV operator such as Sky TV to deliver content over-the-top ('OTT') without bearing the transmission cost to viewers, while retaining the ability to charge for its service. While this offers Sky a valuable cost-reduction opportunity, it also lowers the barrier to entry for other pay TV operators, including over-the-top ('OTT') firms such as Netflix. Netflix does not pay for the distribution of its content to New Zealand homes. Thus, the financial advisors to Sky's shareholders note that:[1]

> *"The increasing availability of high speed broadband internet and the entry into the New Zealand market of Netflix in March 2015 has resulted in a fundamental deterioration in Sky TV's strategic position"*

18. It should be noted that it is not just fixed-line broadband infrastructure that is improving rapidly in New Zealand. The vast majority of New Zealanders (at least 90%) have access to 4G wireless broadband which is easily capable of streaming high definition video. New Zealand was recently found to have the best 4G data speeds in the world at an average of 36Mb per second.[2]

19. In summary, the rapid development of mobile and fixed-line broadband capability is enabling television distribution using internet protocols (IPTV) which is under-cutting the strategic advantage Sky has enjoyed in respect of pay TV.

2.1.2 Service Bundling

20. There is a substantial literature on the economics of bundling which reveals various motivations for, and effects of the practice. Armstrong and Vickers (2010) examine bundling through the more general lens of non-linear pricing and show that bundling can either benefit or harm consumers.[3] Generally speaking, firms offer bundles for the purpose of increasing profits, but this can also benefit consumers when it expands the market.

21. The commercial attraction of bundling content with telecommunications is well documented internationally[4] and is also apparent in the New Zealand market, where all three mobile network

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[1] Grant Samuel and Associates, Independent Adviser's Report and Appraisal Report in relation to the Proposed Acquisition of Vodafone New Zealand Limited, June 2016, section 10.2, p.96.

[2] http://www.stuff.co.nz/technology/digital-living/72546604/NZ-has-the-fastest-4G-speeds-in-the-world

[3] Armstrong, M. and J. Vickers, 2010, "Competitive Non-linear Pricing and Bundling", The Review of Economic Studies, Vol. 77, No. 1 (January 2010), pp. 30-60.

[4] See for example Bughin, J. and P. Mendonca, 2007, "Convergence and Triple Play Bundling: an Empirical Assessment for European Telecommunications", Communications & Strategies, Vol. 68, pp.121-138.

operators have offered content bundles. Spark offers Lightbox[5], Vodafone resells Sky[6], and 2Degrees resells Sky's NEON service[7].

22. These offers are likely to enhance competition in telecommunications markets **provided that each network has the opportunity to acquire adequate content for their bundles.**

23. It appears from the application that Sky is willing to supply its content to any RSP on a resale basis, though only Vodafone is currently doing so. We understand that the full suite of content is the only offer Sky makes available. But either way, this is a surprising outcome in a market with close to 100 RSPs. The most obvious explanation would be that there is insufficient margin available to RSPs, which is consistent with anecdotal evidence suggesting a reseller margin of around $5/month.

24. Outside of a few regulated sectors, there are no constraints on the level of a firm's pricing in New Zealand, including for pricing to resellers. Competitive concerns would however arise if Sky was found to have market power over certain compelling or essential content and it sought to use that market power in ways that favoured one RSP over others.

2.1.3 Exclusive Content Rights

25. Buyers of content recognise several different types, with premium content being the most valuable. Premium content includes certain live sports events and the first release of movies and major television series. Viewer preferences ultimately dictate the value of content. Thus, while live international rugby games played by the All Blacks are premium content in New Zealand, it may not be in, say Iceland. While global OTT broadcasters such as Netflix might over time end up as a series challenger to Sky TV, the importance of live sport, as detailed in the TVNZ submission, and Sky TV's current control of premium live sport rights make it very unlikely that this will occur during the relevant time period (i.e. over the next two to three years).

26. Some countries use regulation to ensure that certain content remains available on FTA platforms rather than being "siphoned off" to pay TV. Systems of this type are in place in Australia and the UK, but not in New Zealand. The Ministry for Culture and Heritage has recently consulted on content regulation but in doing so it excluded consideration of anti-siphoning regulation.[8]

27. Sky TV has for some years been able to acquire most of New Zealand's premium sporting content. Sky's materially higher revenues are likely to contribute to this outcome (see section 2.2) and control over this content is instrumental in Sky's ability to attract and retain subscribers. Moreover, Sky can and does use its FTA channel (Prime) to distribute delayed broadcasts of such content, thereby also securing most of the available advertising revenue. We understand that Sky has exclusive rights to New Zealand rugby until 202a and to the Olympic games until 2024.

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[5] https://www.spark.co.nz/discover/lightbox/

[6] http://www.vodafone.co.nz/tv/sky-with-broadband/

[7] https://www.2degreesmobile.co.nz/perks/offers/neonchromecast/

[8] Ministry for Culture and Heritage, "Content Regulation in a Converged World: Discussion Document", 25 August 2015.

28. Content owners distinguish between rights for broadcast on pay TV and FTA platforms. In New Zealand, following Sky's acquisition of the Prime FTA platform, some premium content providers have been persuaded to sell both sets of rights jointly, as described in the TVNZ submission. This practice is to Sky's benefit as the only broadcaster with both types of platform. By contrast, any FTA broadcaster faced with a requirement to purchase both pay TV and FTA rights would find it difficult to recoup their outlay on the pay TV rights since Sky would be a monopsonist in that situation.

2.2 The Parties

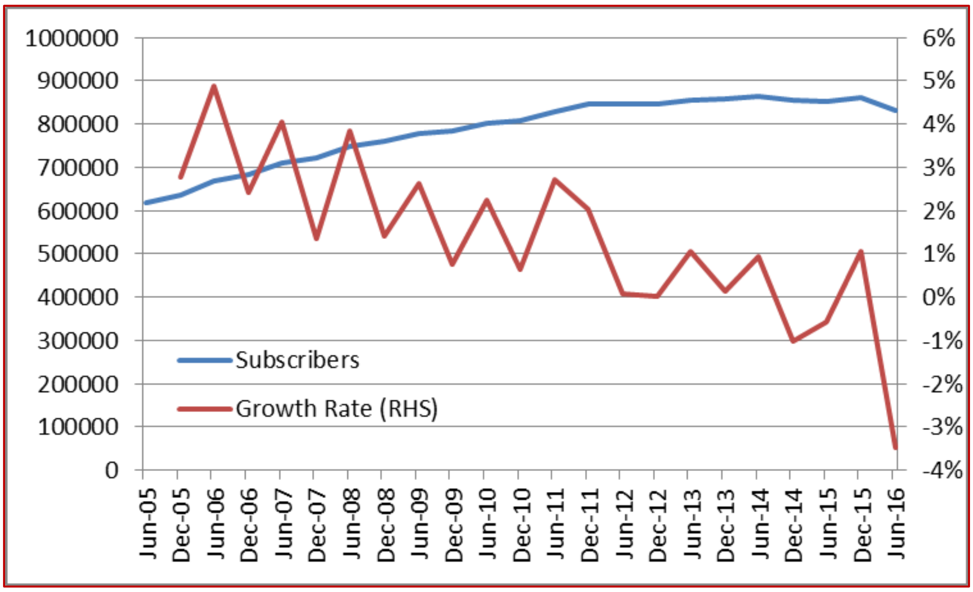
29. In this section we review the commercial and competitive positions of Sky TV and Vodafone as background to help understand the proposed transaction and the likely counterfactual.

2.2.1 Sky TV

30. Sky is a successful pay TV operator that has an extensive network of satellite receiving dishes on premises throughout New Zealand. It has achieved substantial growth in subscriber numbers and revenue over the past decade but subscriptions have plateaued in recent years and now appear to be falling. Using half-yearly data from Sky's annual and interim reports, we have tracked subscriber numbers and their growth rates over the last decade. These data show that Sky's subscriber numbers actually fell for the first time in the half-year periods to December 2014 and June 2015.

31. Moreover, the NBR reports Sky has having recently warned that it will have lost a net 30,000 subscribers in the half-year to June 2016 (the annual report that is expected to confirm this is not yet available). This represents an unprecedented half-year fall in subscriber numbers of 3.5%.[9] Figure 2 shows this information graphically.

Figure 2: Sky TV's Subscribers and Growth Rates, Half Yearly



[9] Chris Keall, Good news and bad news for Sky TV in Netflix' horror result, NBR, 22 July 2016.

32. Investors also recognise that Sky's business model is facing serious challenges. This is clear from a review of the firm's share price over the last two years (Figure 3) and from a range of commentary from analysts.

Figure 3: Sky TV's Share Price (Source: NZX)

33. For example, after the latest subscriber loss was announced in May 2016, Arie Dekker from First NZ Capital was reported as dismissing Sky's response as follows:[10]

> *"We do not think that short events like Olympics and the Lions tour can stop **structural decline occurring in core pay TV sub numbers"** (emphasis added).*

34. Forecasting ongoing declines in EBITDA, Adrian Allbon from Craigs Investment Partners also commented on the prospect of Sky seeking further growth by acquisition as follows:

> *"I don't think Sky should do anything with the business burning under its feet".*

35. The above evidence strongly suggests that Sky's *growth* prospects are now weaker than they have been for some time. However in financial terms it remains by far the strongest broadcaster in New Zealand with revenues more than double that of TVNZ. Moreover, Sky already has a large subscriber base and premium content rights locked in for several years ahead including

> *"Exclusive premium content and long term rights with Disney, Discovery, HBO, SANZAR Rugby, NZ Cricket and Netball NZ."*[11]

36. In response to the challenge from OTT providers, Sky relies on its existing strengths and argues that it can remain profitable even if it earns less from each customer. In particular, Sky says it

> *"can get away with lower revenue per SVOD customer because its profit margin is higher. There is lower cost of acquisition with no expensive decoder or installer required, and Sky already owns online rights to most of its content – so effectively it can provide Neon (and the sports-orientated Fanpass) for free."*[12]

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[10] Jenny Ruth, Sky TV's grim prospects have analysts slashing forecasts, NBR, 15 May 2016.

[11] Sky TV Annual Report, June 2015

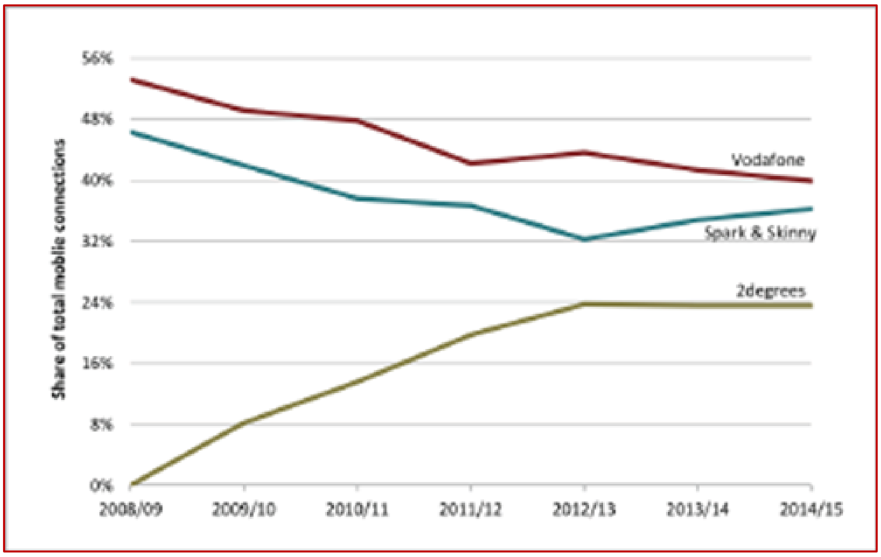
[12] Chris Keall, Good news and bad news for Sky TV in Netflix' horror result, NBR, 22 July 2016.

37. This strategy appears to be defensive and time-limited, which underlines the challenge Sky faces to its business model. Sky clearly needs to find new sources of growth. It is reasonable to assume that Sky believes the proposed transaction to offer the best prospect for such growth.

2.2.2 Vodafone

38. Vodafone NZ is a successful full-service telecommunications provider. Its main physical assets are a nation-wide mobile network using 4G technology and a fixed-line hybrid fibre-coaxial ('HFC') network serving Wellington, the Kapiti coast and Christchurch. Vodafone became the largest mobile network by subscriber numbers in 2002-03 and has retained this position, though its market share has been eroding steadily over time as shown in Figure 4. Vodafone also owns backhaul infrastructure throughout New Zealand which it acquired through its purchase of TelstraClear.

Figure 4: Mobile Network Market Share of Subscribers (Source: Commerce Commission)



39. All telecommunications RSPs are facing challenges to their traditional revenue models as digital technology has enabled OTT operators such as Skype to undermine their pre-existing price structures.

2.3 Counterfactual

40. It is apparent from section 2.2.1 that Sky is under pressure to find a new source of growth. The applicants believe that the proposed transaction offers one such opportunity, and it is presumably their preferred choice. However in the light of Sky's strategic challenges it seems likely that other courses of action will also have been considered and compared. We presume that Sky will have given the Commission access to its comparative analysis but this material is redacted from the public application. The Grant Samuel report is similarly non-informative as the following quote shows.

> *"It is possible to construct a variety of hypothetical but plausible outcomes for the long term future of a standalone Sky TV. The range of outcomes is potentially very wide. Shareholders in a standalone Sky TV would be exposed to numerous risks, some of which over time could potentially threaten the viability of the business. In Grant Samuel's view the strategic benefits of the Proposed Transaction are*

such that Sky TV shareholders will clearly be better off if the Proposed Transaction is implemented than if they continue as shareholders in a standalone Sky TV." (Grant Samuel Report, p.105)

41. In considering the possible and likely counterfactual scenarios it is important to note the material deferment of financial benefits expected by the applicants. The Grant Samuel report (which relies heavily on analysis conducted by the applicants) emphasises the long-term nature of the strategy behind the proposed transaction including through the following quotes.

"It is expected that the synergy benefits will only commence to be realised after FY17, with the bulk of the benefits only arising after some years" (Grant Samuel Report, p.90)

"In the short term the cost synergies will be modest" (Grant Samuel Report, p.94)

"In the shorter term, the positive effect may be more modest, reflecting the longer dated timing of many of the synergies" (Grant Samuel Report, discussing Sky's share price, p.95)

42. While the benefits are deferred, there are expected to be significant upfront "integration costs" of around $80m. When considering a reasonable counterfactual scenario, we therefore cannot exclude options that include similar levels of initial investment and similar deferral of benefits.

43. The most obvious alternative opportunity for Sky is to develop a wholesale business. This would use Sky's current holdings of premium content and while Sky would earn less from every wholesale viewer, there would be many more viewers. It would therefore involve trading off margin for volume. We presume that the redacted analysis Sky has given the Commission includes this option and now present our own analysis of this scenario.

44. In order to develop a counterfactual analysis that is readily comparable with the figures reported by Grant Samuel and the applicants, we start by adopting the same assumptions in respect of

   a. The time period over which synergies are valued; and

   b. The discount rate applied to future costs and revenues.

45. We also adopt, for the purpose of defining a counterfactual, the applicants view that "*pay TV offerings do not drive substantial changes in broadband share*" (application at ¶11.13).[13] While it is surprising that the applicants do not expect Vodafone to gain extra customers through the transaction, the *revenue* synergies they expect must instead arise from securing more revenue from each customer on average. That is plausible to the extent that Vodafone's customers can be "upsold" some of Sky's content, for example by marketing the "*fully integrated bundled quad play and multi-play services*" discussed in the Grant Samuel Report (at p.90).

46. It is apparent that this upselling process must involve the Sky division of the proposed new group offering the telco division wholesale access to content on terms that are both attractive to the group as a whole and attractive to *extra* end-users: Vodafone customers who currently do not subscribe to Sky (or who can be persuaded to buy more valuable content). The key point is that,

[13] Note however that this assumption is relaxed in section 4.1 below which reaches the same conclusion that wholesaling is the likely counterfactual.

since the applicants do not predict material changes expected in Vodafone's market share, the extra revenue must arise purely from a change in the structure of prices for broadcast and telecommunications services.

47. It follows that further revenue synergies would be available if Sky was to offer the same re-designed terms to other telecommunications providers. Vodafone has around 40% of the mobile subscribers in New Zealand, so on the applicants' assumptions it should be possible to create 2.5 times the revenue synergies by offering the same wholesale terms to all telecommunications providers.

48. This wholesaling scenario is the likely reasonable counterfactual if it would improve Sky's financial and strategic positions in the absence of the proposed transaction (i.e. relative to the status quo). The figures in Table 1 suggest that wholesaling would be a financially attractive counterfactual strategy for Sky.

Table 1: Synergies Relative To Status Quo: Factual and Counterfactual ($m NPV)

	Transaction	Counterfactual
Cost Savings	415	
Extra Revenue	435	1088
Integration Costs	-80	
Total	770	1088

49. Revenue synergies would be much larger because the wholesale offer would be extended to Vodafone's rivals who serve 60% of the market collectively. Cost synergies would not occur, but neither would integration costs. It is important to note however that these synergies accrue to the full set of companies involved. Sky's share of the counterfactual revenue synergies would be materially lower than $1.09bn because it would need to share this gain with telecommunications firms. Nevertheless, any positive share of the extra $1.09bn would be better for Sky than the status quo. We can therefore conclude that, on the applicants' own analysis, wholesaling content to all (or most) telecommunications providers is a financially attractive alternative for Sky and therefore is the likely counterfactual.

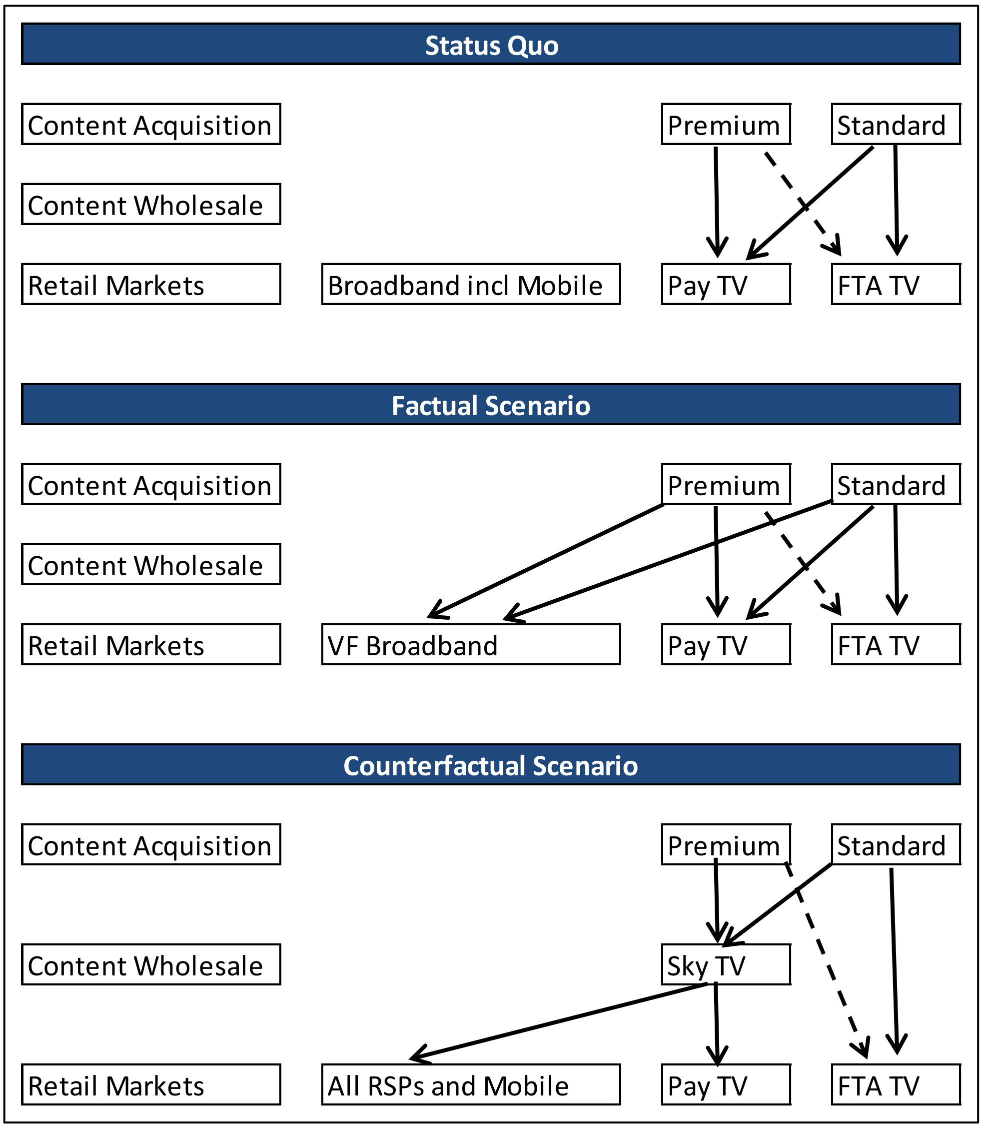
50. Wholesaling would also address the strategic challenges that Sky faces by effectively recruiting a competitive layer of RSPs, each of whom would gain some benefit from selling Sky's content to their own customers.

3 Market Definition

51. It is well established that the purpose of market definition is to assist in exposing the underlying competitive issues. As the High Court has noted "*the market is an instrumental concept designed to clarify the sources and potential effects of market power*".[14] It is therefore necessary to begin this section by describing what problems might arise.

52. There are two potential concerns. First, if the transaction proceeds, is it possible or likely that Sky TV's control of premium content will be used to substantially lessen competition in any retail telecommunications markets? Second, is the likely counterfactual scenario in which Sky TV becomes an enthusiastic wholesaler of content likely to lead to substantially more competitive retail markets than would arise under the transaction?

Figure 5: Overview of Potential Markets, Firms and Trading Relations



[14] Telecom Corporation New Zealand Ltd v Commerce Commission, (1991), 4 TCLR, 473 at 500

53. The diagram in Figure 5 outlines potential markets, some of the relevant firms and trading relationships. It divides markets into separate vertical (functional) layers, the existence of which is tested below. As an initial hypothesis, content markets are split into premium and standard categories.

54. Under the status quo, Sky controls most of the premium content, though (as indicated by the dashed arrow) some is also acquired by FTA broadcasters. Under the factual scenario, the diagram illustrates that Vodafone's broadband business will have sole or preferential access to all of Sky TV's content. Under the counterfactual the wholesale market is stimulated and a much larger number of RSPs and mobile operators gain access to the full set of content.

55. In the balance of this section we discuss the definition of upstream markets, and then examine the existence of candidate markets at each of the upstream functional levels shown in Figure 5.

56. This section is mainly focussed on upstream markets because they are potentially relevant but are not examined in any detail in the application. For the avoidance of doubt, we agree with the applicants that there is a national retail market for the residential provision of fixed-line broadband services, and a national market for the retail provision of Pay TV services. We will refer to these markets in sections 4 and 0.

3.1 Upstream Markets

57. The first question to address is whether upstream markets exist for content acquisition and content wholesaling. The motivation for this question can be inferred from the following comments in the judgement of Emmett J in the 2011 Metcash case in Australia.[15] Metcash was also a merger case and an appeal failed to overturn the trial judgement quoted below.

> *"…care must be taken to ensure that different functional levels are not combined into a single product market in cases where hypothetical monopolists at separate functional levels could each profitably impose a relevant increase in price. If they could do so, combining the functional levels into a single relevant market may violate the principle of identifying the smallest market under the hypothetical monopolist test"*

58. The main challenge in defining functionally separated markets is to ensure that they can indeed be separately monopolised. There are broadly two reasons why an upstream market might not exist:

    a. Technical, such as when it is physically impossible to trade a product at a certain level in the chain of production (e.g. molten iron ore); and

    b. Economic, when the economies achieved through vertical integration are so strong that there is no downstream demand by vertically separated firms.

59. These questions are examined below in respect of each of the candidate function layers shown in Figure 5. However it is also worth noting that the absence of trade does not disprove the existence of an upstream market. This fact is best illustrated by the well-known Queensland Wire

[15] ACCC v Metcash Trading Limited [2011] FCA 967 (25 August 2011) at para 157.

case,[16] which involved a refusal to supply a product (Y-bar) at an intermediate stage of production. In that case, there had never been trading of Y-bar, but the court found that an upstream market nevertheless did exist. There would have been trading in that market *but for* the conduct at issue (refusal to supply).

3.2 Content Acquisition

60. Most broadcasters are vertically integrated for some of their content. For example, NZ on Air supplies contestable funding for the creation of local content by broadcasters, usually in collaboration with stand-alone production firms. News bulletins and other specialised content is also generally produced in-house by broadcasters. Some over-the-top ('OTT') broadcasters also create their own content, such as the House of Cards series produced by Netflix.

61. Despite this in-house production, there is little doubt that a market or markets exist for the acquisition of content from its creators. Trade is clearly feasible and it occurs regularly.

62. Broadcasters supply a selection of content to viewers but total demand by viewers for content varies by the type of content. In content acquisition, these retail market differences in value mean that broadcasters attach greater value to some content than others.

3.2.1 Premium Content

63. The application (at ¶4.5) describes premium content as "*a key input for any TV service*". Premium content includes live international sports broadcasts, newly released movies and first-run major television series. The limited substitutability and value differences between this content and all other standard content are such that premium content markets are generally considered as distinct.

64. Moreover, different forms of premium content are not readily substitutable. For example, few viewers would consider House of Cards to be an acceptable substitute for live coverage of the Olympic games. In addition, within the set of premium content, live international sports broadcasts have two features that are unique:

   a. Immediacy is highly valued, even compared to short (e.g. 1 hour) delays in broadcast timing; and

   b. An element of national identity is embodied in the sports performance and therefore also in its broadcast.

65. Evidence for the first of these features can be seen from the current tension between media companies over coverage of the Olympic games. Sky TV has recently sought an injunction against the Stuff website over the usage of video clips.[17]

66. For these reasons, we consider that there is a distinct market for the acquisition of broadcast rights to live international sport. This market operates periodically and rights holders generally use some form of auction process to allocate the rights to the highest bidder. This is therefore not

[16] Queensland Wire Industries Pty Ltd v Broken Hill Co Ltd (1989) 167 CLR 177

[17] Campbell Gibson, Fairfax 'undermining' Sky TV with Olympics highlight clips, NBR, 10 August 2016

a market in which all demand is satisfied at a single market clearing price. Nor is it one in which the sellers practice price discrimination, for example by setting prices in proportion to the "reach" of the broadcaster. Rather this is a "winner-takes-all" market.

67. As discussed in paragraphs 27 and 28 above, Sky TV is the established winner in respect of sports which are important to New Zealand viewers including rugby and the Olympic games rights for the next several years. In respect of these forms of premium content, Sky TV is therefore a monopoly supplier, even though its tenure as monopolist will become contestable for rights beyond 2021 in the case of rugby and somewhat later in respect of the Olympics.

3.3 Content Wholesaling

68. As noted by the applicants (at ¶6.6), the Commerce Commission has previously defined a wholesale market for the provision of pay TV services. The existing trading relationship between Sky TV and Vodafone that involves the sale and purchase of content is further evidence that wholesale trade is technically and economically feasible. We therefore consider that a wholesale market for pay TV services does exist.

69. It might be that this wholesale market could be further divided along content lines, as we found in respect of the content acquisition markets in section 3.2.1 above. At a minimum, this wholesale market would need to encompass premium content, including live international sports, in order to elicit demand from RSPs. This is because the sole motivation for an RSP in acquiring content in this wholesale market is to provide its own TV service and, as the applicants have noted, premium content is "*a key input to any TV service*".

70. Beyond noting that premium content must be available for the existence of a wholesale market, nothing in our analysis below relies on any particular delineation of markets along product (i.e. content) lines.

4 Incentives and Ability

71. We now examine the incentives and constraints acting on relevant firms if the proposed transaction proceeds and under the counterfactual scenarios. The nature of the competitive concerns described in paragraph 52 above much of this section is focussed on the likely position of Sky TV. However in some cases we also need to consider incentives and constraints from the perspective of Vodafone and the other RSPs.

4.1 Counterfactual Scenario

72. If the proposed transaction does not proceed, Sky TV has two main choices. It could simply continue its traditional business model or build a wholesaling business alongside it.

73. There may also be a third possibility, which is to start an ISP business from scratch. However this appears more costly and risky than either of the other alternatives given the already crowded ISP market with 80 – 100 suppliers. This view is supported by the following recent commentary on the plans of Fairfax to enter the ISP market from scratch.[18]

> *Brendan Ritchie, chief executive of business-focused broadband provider DTS, says it's impossible to make money from the residential broadband market. Spark boss Simon Moutter says most providers are losing money on it.*
>
> *Peter Wise, New Zealand country manager for market researcher IDC, earlier told NBR that the broadband market is becoming more and more about scale – and only three companies have it: Spark with just under 50% of the market, Vodafone around 30% and Vocus (including CallPlus Orcon, Slingshot and Flip) around 15%.*

74. We therefore focus on the comparison, from Sky TV's perspective, between continuing with business-as-usual and adding a wholesaling business.

75. Continuation of the current business model may be attractive to Sky's management. The firm has enjoyed a very strong market position for more than a decade and major strategic change is by definition challenging. Sound corporate governance should however ensure that effective constraints are placed on any personal incentives on management for what Sir John Hicks called "a quiet life".[19] It is therefore reasonable to assume that a new source of growth will need to be found.

76. The combined group expects to earn significant extra revenue ($435m over some unspecified period) through cross-selling. Since Vodafone has far more subscribers that Sky, and Sky has materially larger revenues per subscriber we can infer that this cross-selling primarily involves up-selling Sky services to Vodafone subscribers.

77. In both of the affected industries (pay TV and telecommunications) the cost of acquiring new customers is sufficiently high that firms closely monitor, and try to limit, customer churn (i.e. the

[18] Chris Keall, Fairfax going into the ISP business makes no sense, NBR, 10 August 2016.

[19] John Hicks, Annual survey of economic theory: the theory of monopoly, Econometrica, 3, pp. 1-20.

loss of customers). Customer acquisition costs are likely to be lower for the combined group than for Sky alone. This is because:

a. Vodafone will have many customers that do not currently subscribe to Sky;

b. Vodafone has a direct existing relationship with its customers; and

c. Vodafone can segment its customers by revenue.

78. Thus, instead of Sky cold-calling people or using non-targetted advertising to recruit new customers, it can use Vodafone's information and existing relationships to direct target potential new customers.

79. None of these attributes are unique to Vodafone however. Spark and 2degrees could provide exactly the same benefits, as could Vocus, TrustPower and other RSPs. In effect, wholesaling involves the out-sourcing of customer acquisition, customer service and billing. Moreover, since the RSPs are already competing against each other, by embracing a wholesaling model Sky could expect to benefit from the market expanding effects of competition.

80. It will be obvious that, while there is a strong prospect of more pay TV revenue associated with the proposed transaction, and a lower customer acquisition cost compared to the status quo,[20] there will nevertheless be costs in achieving these extra sales. If the transaction proceeds, the Sky TV division will need to pay those costs, in the form of an allowance to the Vodafone division.

81. Moreover, it can be safely inferred that the applicants intend for this allowance, in the form of a margin between wholesale and retail prices for pay TV services, to be larger than those offered to all RSPs under the status-quo. If the extra sales of Sky TV services could be achieved using the terms currently offered to RSPs they would already have been achieved.

82. If the transaction does not proceed, the wholesaling model will therefore be a very natural alternative. By simply increasing the margins it allows to RSPs, Sky TV can recruit a layer of competing service providers that will expand its business in the same fashion as it expects to enjoy from the proposed transaction. It is clear from the evidence that RSPs, with the sole exception of Vodafone, currently find the terms offered by Sky TV unattractive. In order to provide adequate incentives for RSPs to participate, the allowed margin could be increased, and content unbundled, to the point where RSPs expect to be able to cover the cost of up-selling customers, and providing ongoing service and billing functions. This would enable RSPs to compete with each other in the retail market with differentiated offerings.

83. We note in passing that the applicants draw a different inference from the almost total current lack of wholesale trading between Sky TV and RSPs. They argue (at ¶11.4 – 11.5) that this shows that Sky does not provide "*a key input*" to RSPs. This view cannot be reconciled with the widely accepted view that triple- and quad-play offerings by RSPs are highly desired and with the applicants' view (at ¶4.5) that premium content is "*a key input*" into any pay TV service. It is also

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[20] It is not clear from the application whether this reduction in customer acquisition cost is accounted for as a "cost synergy" or netted off from the "revenue synergy" figure.

contradicted by the analysis above which shows that the applicants intend to gain extra revenue by offering a larger margin to the Vodafone division if the transaction proceeds.

4.2 Factual Scenario

84. The proposed transaction would horizontally extend the retail market reach of Sky TV's existing vertically integrated pay TV business. In section 4.1 we discussed the potential for the post-transaction firm to increase the size of Sky's existing pay TV business by targeted up-selling to Vodafone's existing customers and found that doing so would require an increase in the existing margin that Sky TV offers to RSPs. The question addressed here is whether the post-transaction firm would have an incentive to extend these more generous wholesale terms to all other RSPs.

85. This question can be considered from strategic and economic perspectives, which are inter-related. Strategically, Sky has to date not been a willing supplier of content to third parties. We showed in section 4.1 that the margins Sky has offered to RSPs have, with the sole exception of Vodafone, been insufficient to motivate them to purchase the inputs needed to create the triple- or quad-play bundles that are widely feature heavily in retail competition between telecommunications RSPs. Moreover, Sky TV must already know, from observing the lack of uptake, that these margins are insufficient. It is difficult to see why or how the proposed integration with Vodafone would give Sky TV incentives to change that strategy.

86. On the contrary, from its recent experiences, Sky TV now knows with certainty the terms of a wholesale offer that will be unacceptable to RSPs without provoking litigation or regulatory intervention. It could therefore be confident that, by continuing to offer those same unattractive terms to other RSPs, only its Vodafone division will have access to its premium content. Since, as the applicants acknowledge, premium content is "*a key input into any pay TV service*", this would ensure that its Vodafone division will be the only telecommunications RSP with the ability to offer an attractive quad-play bundle.

4.2.1 Vodafone Perspective

87. The transaction is structured such that Vodafone is effectively acquiring Sky TV,[21] so it is also relevant to consider Vodafone's incentives. Vodafone has been losing market share in the mobile market (see Figure 4 above) and, though its ownership, knows that an attractive quad-play service offers an opportunity to address this problem. Quad-play customers will by definition be relatively high-revenue customers, so an attractive quad-play offer would also strengthen Vodafone's position in this market segment.

88. It is entirely rational for Vodafone to seek ways of growing its market share and average revenue per customer, and it would be imprudent of Vodafone's managers to enter into this transaction without an expectation that would occur.

89. There are two sources of growth for Vodafone in this transaction. One is incremental margin from selling Sky TV's content to its existing customers. The other is attracting extra customers by being able to offer bundles that its rivals cannot possibly match due to differences in the price of the "*key input*". Thus, Vodafone has incentives to ensure that the existing, unattractive, offers by

[21] "*On completion of the proposed transaction Vodafone Group will own 51% of the Combined Group*", Grant Samuel Report, page 1.

Sky TV to RSPs remain in place, while it negotiates a more attractive input price in return for providing Sky TV's shareholders with a new source of growth. As the controlling entity in the proposed new firm, Vodafone also has the ability to ensure that this occurs.

5 Effects of Proposed Transaction on Competition

90. Our conclusion from the above analysis is that the proposed transaction is highly likely to substantially lessen competition in the retail markets for fixed and mobile telecommunications services in New Zealand. This conclusion applies whether one compares the proposed transaction with the status quo, or with the most likely counterfactual in which Sky becomes an enthusiastic wholesaler.

91. The mechanism by which competition will be lessened is leverage of Sky TV's monopoly control over premium content, such premium sport (including live international rugby and the Olympic games), into an exclusive arrangement with Vodafone. It is accepted that Sky's monopoly is time limited, but it endures for at least the next several years which is the relevant time frame for analysis. It is also accepted that the exclusive arrangement with Vodafone will probably sit alongside a continuation of Sky TV's existing offers of resale supply to RSPs, but these offers are demonstrably unattractive and economic analysis demonstrates that Vodafone will receive preferential pricing.

92. The competitive effect will be that Vodafone will have the ability to offer triple- and quad-play bundles that are materially more attractive than any other RSP can commercially afford. This will decisively skew competition in the retail telecommunications markets in Vodafone's favour.