MODELLING THE PROFITABILITY OF A SUBSTANTIAL INCREASE IN VIRGIN MEDIA'S PREMIUM SUBSCRIBERS

1. INTRODUCTION

1.1 The purpose of this memorandum is to address, on behalf of Virgin Media, the argument made by Sky that Ofcom's proposed wholesale must offer ("WMO") remedy would grant a "windfall" benefit to Virgin Media in the form of substantial price cuts. This argument is advanced on the basis that the WMO remedy derives Sky's wholesale prices for its premium channels by deducting costs relating to DTT transmission from Sky's retail prices to ensure that such costs can be recovered by a hypothetical DTT competitor, whereas Virgin Media's cable platform does not incur such DTT costs.

1.2 [XX] Secondly, far from simply transferring margin from Sky to Virgin Media, lower wholesale prices will facilitate competition in the sale of premium sports and movie channels by allowing Virgin Media to implement a range of actions and strategies that will lead to very material consumer benefits in the form of greater choice, greater innovation and lower prices. As intended by Ofcom, it will therefore be consumers that benefit from the lower prices proposed by Ofcom.

1.3 Quite apart from these important observations, Sky's argument is wholly divorced from any assessment of the costs incurred by Virgin Media in retailing packages including Sky's premium channels or of the wholesale prices that Virgin Media would need to recover those costs and still compete with Sky. In order to consider this issue, this memorandum assesses the magnitude of the reduction in Sky's wholesale prices for its core premium movies and sports content which would be necessary for a progressive expansion of Virgin Media's premium pay TV business to be profitable in the sense of delivering sufficient cash flows over time to generate a zero net present value ("NPV"). The model used is structured so as to adjust the weighted average wholesale price for Sky's premium channels (which is expressed as a percentage discount off Sky's current rate card), so as to generate a zero NPV within a multi-year model comparable to that used by Ofcom to calculate its proposed range of wholesale prices. In addition, this memorandum assesses the overall profile of cash flows that would be associated with that zero NPV.

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1. [XX]
2. [XX]
3. [XX]
4. To calculate NPV, the model needs to consider how the cash flows of the business after year 10 are treated. The conservative approach adopted is that after year 10 cash flows continue to increase at 2 per cent per annum in perpetuity, and that the business will have a terminal value at the end of year 10 of the value of this growing perpetuity. NPV is calculated as the sum of the discounted cash flows over 10 years and the discounted terminal value, with the model assuming that all annual costs and revenues are incurred on 30 June each year. The XNPV formula in Excel is used to calculate NPV.
1.4 This memorandum is divided into a number of parts:

(a) Section 2 sets out the various assumptions which have been used to derive the results, including the factual basis for these assumptions (with the model being summarised at Annex 1);

(b) Section 3 sets out the model’s results, including the sensitivity analysis carried out; and

(c) Section 4 briefly sets out the conclusions which should be drawn.

1.5 The key result from the model is that, based on Virgin Media’s costs and revenues, and adopting a range of conservative assumptions, Virgin Media could only achieve a zero NPV for a material expansion of its premium pay TV business if Sky’s current weighted average wholesale prices for its premium channels were to be reduced by \([\times]\) per cent. \([\times]\) It is clear, therefore, that there is no justification for any conclusion that Virgin Media would achieve a windfall benefit under the WMO remedy, contrary to Sky’s arguments.

2. UNDERLYING ASSUMPTIONS

Introduction

2.1 Since the key proposition being put forward by Sky is that Virgin Media would be able to derive a “windfall” benefit under the WMO remedy, it would seem appropriate to assess this issue by reference to Virgin Media’s actual cable TV business’ costs and revenues, and taking into account the growth in subscribers which Virgin Media considers would be achievable in more competitive conditions (which is equivalent to that proposed in Ofcom’s “large DTT entrant” scenario).

Opening premium subscribers

2.2 Virgin Media had \([\times]\) subscribers taking 1 or more Sky premium channels as at September 2009.

New premium channel subscribers

2.3 Virgin Media’s modelling assumes that it grows from a starting point of \([\times]\) premium subscribers to a premium subscriber base of approximately \([\times]\) million by year 10. This assumption was based on \([\times]\)

2.4 \([\times]\)^5

Churn rate

2.5 The rate at which premium subscribers are lost (i.e. the “churn rate”) by Virgin Media is assumed to be \([\times]\) per cent per annum over the next 10 years \([\times]\). Apart from reflecting general competitive and market conditions, it should be noted that Virgin Media’s churn rate is impacted by \([\times]\)

2.6 However, whilst the WMO remedy should make it more viable for Virgin Media to win new premium subscribers, it would be expected that Virgin Media’s churn rate would be \([\times]\)

2.7 \([\times]\)^6

Average premium subscribers

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^5 New subscribers include both wholly new customers taking premium channels, and also existing subscribers to Virgin Media who only take basic channels and who then upgrade their subscription to include premium channels.

^6 \([\times]\)
2.8 This is simply calculated as half of the total number of opening and closing subscribers.

**Subscription revenue (premium and basic channels)**

2.9 Subscription revenue is weighted average monthly subscription revenue, excluding applicable sales tax [*×*]

2.10 [*×*]

2.11 The base case applied in Virgin Media's modelling assumes that:

(a) Virgin Media would set its average retail prices for Sky’s premium channels at [*×*] less than Sky’s current average retail prices'. As indicated in previous submissions, Virgin Media would expect [*×*]

(i) Sky’s strong and long-established brand image and reputation; and

(ii) the lower willingness to pay (i.e. high price elasticity of demand) of those customers who do not currently take a Sky premium subscription.

Virgin Media considers that this level of discounting is a conservative assumption (i.e. it overstates the profitability of Virgin Media's TV business), with Virgin Media's price discounting likely to be significantly greater as regards lower priced packages.

Sensitivity analysis is set out in section 3 based on no discounting off Sky's retail prices (as assumed by Ofcom) and higher levels of discounting of [*×*] off Sky's retail prices;

(b) the mix of premium packages sold reflects the mix of premium packages sold by Virgin Media as at August 2009. This is a conservative assumption as [*×*]

**Premium packages chosen by Virgin Media's premium subscribers as at August 2009**

[*×*]

(c) some decline in basic revenues as new customers join the subscriber base and existing subscribers are lost. The sales mix of basic channel packages sold to new premium channel subscribers is assumed to reflect the mix of basic packages sold to new TV subscribers by Virgin Media from June – September 2009 [*×*]. This is considered to be a conservative assumption because, [*×*]

**Weighted average expected customer mix for new subscribers and existing subscribers which upgrade their TV package (June – September 2009)**

[*×*]

2.12 It is also assumed that Sky's and thus Virgin Media's retail prices increase by [*×*] per cent per annum from year [*×*] onwards. As set out below, it is also assumed that Sky wholesale prices for its premium channels increase at [*×*] per cent per annum from year [*×*] onwards. Since wholesale costs are less than retail prices, this is a conservative assumption as [*×*].

**Basic content costs**

2.13 Basic content costs are based on Virgin Media's current cost forecast for 2009. [*×*]

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2.14 Basic content unit costs are assumed to increase at \([\times]\) per cent per annum from year \([\times]\) onwards. This is a conservative assumption as \([\times]\).

**Subscriber acquisition cost**

2.15 Subscriber acquisition cost ("SAC") is calculated as a weighed average of new per subscriber SAC of \([\times]\) and a SAC of \([\times]\) for upgrading an existing basic subscriber (net of the new installation charges applicable only for wholly new customers). SAC is assumed to increase at \([\times]\) per cent per annum from year \([\times]\) onwards. These SAC levels are based on Virgin Media’s current SAC cost forecast for 2009 (SAC includes no allocated fixed costs). \([\times]\).

2.16 Basing SAC on Virgin Media’s current rates is a conservative assumption as \([\times]\). Section 3 also considers the sensitivity of assuming a \([\times]\) SAC of £253.00 as assumed by Ofcom.

2.17 \([\times]\)

**Subscriber management services**

2.18 Subscriber management services ("SMS") costs are Virgin Media’s current 2009 forecast for on-going operating expenditure costs of \([\times]\) per subscriber per month, with these costs assumed to increase by \([\times]\) per cent per month from year \([\times]\) onwards (SMS costs include no allocated fixed costs). \([\times]\)

**Weighted average cost of capital**

2.19 Virgin Media’s annual earnings before interest, tax, depreciation and amortisation ("EBITDA") are discounted at Virgin Media’s pre-tax weighted average costs of capital ("WACC") of \([\times]\) per cent (adjusting for volatility in recent years) as submitted to Ofcom\(^9\). Securing financing \([\times]\) is likely to be more expensive in the current climate than assumed.

**Investment in innovation**

2.20 \([\times]\)

**Fixed costs**

2.21 \([\times]\)\(^11\)

2.22 \([\times]\)

3. THE MODEL AND SENSITIVITY ANALYSIS

3.1 Virgin Media’s analysis yields three results:

(a) the reduction in Sky’s premium channels’ wholesale prices which are necessary to yield a zero NPV;

(b) the profile of the cash flows that Virgin Media would derive under a zero NPV scenario; and

\(^{9}\) \([\times]\)

\(^{10}\) \([\times]\)

\(^{11}\) \([\times]\)
(c) the sensitivity of the reduction in Sky’s premium channels wholesale prices which are necessary to yield a zero NPV and the impact on cash flows of changes in a number of assumptions.

3.2 Whilst the focus of this memorandum is whether Virgin Media might make a windfall benefit on the basis of the prices proposed by Ofcom, the context of this matter is also relevant. [X]

The reduction in Sky’s premium channels’ wholesale prices which are necessary to yield a zero NPV

3.3 A key result from the model is that, based on Virgin Media’s costs and revenues, Virgin Media could only achieve a zero NPV for a material expansion of its premium pay TV business if Sky’s current weighted average wholesale prices for its premium channels were to be reduced by [X] per cent.

3.4 [X]

3.5 [X]  

The profile of cash flows that would be realised under a zero NPV scenario

3.6 [X]

Sensitivity analysis

3.7 [X]

3.8 [X]

3.9 [X]

3.10 [X]

3.11 [X]

3.12 [X]

3.13 [X]

3.14 [X]

4. CONCLUSIONS

4.1 In light of the above, two highly robust conclusions can be drawn:

(a) first, it is clear that there is no justification for any conclusion that Virgin Media would achieve a windfall benefit under the WMO remedy, contrary to Sky’s arguments;

(b) second, the modelling set out in this memorandum supports Virgin Media’s previous submissions that Sky’s regulated wholesale prices should be at the lower end of those contemplated in the various scenarios on which Ofcom has consulted. This is essential in order to engender the best prospects for the development of sustainable competition to Sky.

12 [X]

13 [X]
4.2 These conclusions are highly robust as Virgin Media's modelling has been based on actual data and has adopted an array of conservative assumptions, which all have the additive effect of increasing Virgin Media's profitability and thus depressing the reduction required in Sky's wholesale prices in order to achieve a zero NPV. The key conservative assumptions in the base case may be summarised as follows:

[Table]