BT/VULA

The appropriate economic treatment of BT Sport in VULA margin regulation – further submission

Neil Dryden, Lau Nilausen and Jorge Padilla

7 November 2014

NON-CONFIDENTIAL VERSION

A. Introduction

1. We have prepared this further submission on the appropriate treatment of BT Sport ("BTS") in Ofcom's proposed VULA margin regulation at the request of BT.[1]

2. BT has asked us to address a number of issues arising from a meeting with Ofcom on 20 October 2014.[2]

3. In particular, BT has asked us to address the following issues:

   - Conceptual differences between the value-based approach and the standard margin squeeze approach (Section B).
   - *Prima facie* evidence that the value of BTS to final consumers is less than the costs of providing it (Section C).
   - Practical implementation of a value-based test, including the assessment of minimum efficient scale ("MES") and value (Section D).

4. At the meeting, Ofcom suggested that a distinction may be drawn between an *ex post* competition assessment of margin squeeze with a focus on effects and an *ex ante* approach which might focus on cost recovery. Taken together with our previous submission, we believe this submission shows that a cost-based approach is conceptually inappropriate and has the potential to cause consumer harm, whereas a value-based approach is appropriate and implementable in the context of *ex ante* regulation.

---

1 BT submitted our previous submission, "The appropriate economic treatment of BT Sport in VULA margin regulation" ("First Submission"), on 5 September 2014.

2 See slides "BT – Ofcom meeting: VULA margin", 20 October 2014.

B. Conceptual differences between the value-based approach and the standard margin squeeze approach

5. BT's offer of BTS for free to its broadband ("BB")[3] subscribers could be considered akin to offering a voucher. However, competitors' ability to replicate the effect of such a voucher will depend on its perceived value by final consumers rather than its costs.

6. BT's offer may be expected to drive some additional BB subscribers to BT. It will do so to a greater extent as (i) the greater is the number of final consumers who attribute some value to the 'voucher' and (ii) the higher are the valuations those consumers place on the 'voucher'.

7. Whether BT's offer could lead to anticompetitive foreclosure (including marginalisation) of rival SFBB suppliers, where absent the 'voucher' there would be no such foreclosure, depends only on the value of the 'voucher' to final consumers and not on its costs of supply.

8. Moreover, there are strong theoretical and empirical indications that there is likely to be a substantial divergence between cost and value in the present case (see Section C below).

9. Given the above, in our previous submission we outlined an approach to incorporating BTS within the margin squeeze framework taking account of its value to final consumers rather than the costs of providing it.

10. The purpose of this section is to address several conceptual issues raised in relation to the basic proposition that it is appropriate to adopt a value-based approach.

Divergence of value-based approach from standard margin squeeze framework

11. A standard approach to assessing margin squeeze, *ex ante* as well as *ex post*, is based on the notional entity profitability test ("NEPT"). The notional entity is based on the downstream division of the firm that is dominant in the upstream market.

12. The notional entity is assumed to have costs and revenues equal to those of the dominant company's downstream division and to pay a price for the key input equal to that charged by the dominant company to downstream rivals.

13. In the standard case, all of the costs incurred by the dominant company's downstream division are required to provide the downstream product.

14. In the present case, however, BT is effectively providing a voucher alongside the downstream product of BB (including SFBB). This adds a 'layer of differentiation' to what would otherwise be a more homogenous product.

15. BT's downstream rivals do not need to provide BTS to compete with BT in the supply of BB (including SFBB). Rather, in so far as they need to compete for consumers who place some value on BTS, they only need to offer a price cut equal to consumers' valuation of BTS or offer greater value in some other way, e.g. through expending additional costs on other differentiators that add more value than that offered by BTS.

---

[3] BB includes standard broadband ("BB") and super-fast broadband ("SFBB").

16. It is therefore the facts of the case rather than the proposed test that differ from the standard margin squeeze paradigm and the proposed value-based test is a response to the different problem faced.

17. As Dr. Andrea Coscelli has noted, an "Implicit assumption in margin squeeze tests is that incumbent and entrant retail products are homogeneous" and "If retail products are differentiated, [it is] unclear what is meant by an EEO or REO and product differentiation must be taken into account".[4]

18. Moreover, as explained in Section C below, there is clear *prima facie* evidence that costs are not a good proxy of value in the present case such that a rigid application of the standard approach (i.e. using costs) in a non-standard situation would be capable of producing serious errors and causing consumer harm.

19. The potential argument that BT's downstream rivals in SFBB should have headroom equal to BT's costs of BTS on an equally efficient operator ("EEO") basis (i.e. on the basis that they should have a margin that would allow them to fund the same expenditure on their own 'differentiators' as BT) does not have merit.

20. Ownership of the licence to exploit sports rights for a given time period cannot be acquired by both BT and its rivals at the same time. Even if VULA margin regulation provided BT's rivals with a margin including the cost of BTS, those rivals could not directly replicate BT's product offering. There is therefore no inherent reason to believe that the cost that BT's competitors may need to incur to respond to BT's offer mirrors the cost that BT incurs to provide BTS.

21. Moreover, as Ofcom has itself recognised, the market for core premium sports channels ("CPSCs"), which BT seeks to enter, is subject to serious competition problems. This may have a significant impact on the rights costs that BT needs to incur. Therefore, as BT's bidding costs are inherently unlikely to represent long run equilibrium levels, using these rights costs in the VULA margin test would import a competition problem from the CPSC market into VULA margin regulation.

22. Given the above, we consider that the rejection of a value-based approach on the grounds that the standard margin squeeze test is based on costs would miss the point of the particular features of the present problem that distinguish it from the standard situation. The distinction between cost and value is driven by the differentiated nature of the product offerings in question. It is therefore applicable both in *ex ante* and *ex post* contexts.

---

4 Dr. Andrea Coscelli, "Margin squeeze and predatory prices by multiproduct firms", The Hague, 3 April 2008, slide 21.

C. *Prima facie* evidence that value is less than costs

23. If the costs of BTS and value of BTS to final consumers are the same, the debate about whether to use a cost-based approach versus a value-based approach is an empty one. On the other hand, if costs are significantly higher than value, the choice is real and the use of costs rather than value has the potential to cause significant consumer harm.[5]

24. In this section we briefly address the *prima facie* evidence that costs could be, or in fact are, substantially in excess of value over the time frame of the proposed VULA margin regulation assessment period.

25. We understand that BT is making a separate submission related to its investment in sports rights, reconciling the evidence that costs are in excess of value with BT's business rationale for its investment in BTS.

Features of the market for content rights

26. There are a number of features of the market for content rights suggesting the potential for costs to be above value. We state these briefly only here,[6] but they include that the inputs for BTS (sports rights) are acquired in content auctions characterised by the risk of the winner's curse (exacerbated by non-contingent bidding) and by a dominant downstream firm (Sky) that has incentives to overbid for rights to maintain its dominant position.

27. Furthermore, while the inputs are not necessary to compete in the supply of SFBB they are necessary to compete in the supply of CPSCs. However, breaking in to the CPSC market has a time profile that is unrelated to that for competing to supply SFBB. Thus, it may make sense to incur losses in the acquisition of sports rights because of the real option value of potentially being able to break into the CPSC market in the future. For this reason costs may exceed value in the short-run, and also in the long-run if the real option cannot ultimately be exercised profitably.

Empirical evidence

28. There is clear empirical evidence that the short-term costs of the rights acquired by BT exceed their value to final consumers. Ofcom estimates net costs of BTS of around [CONFIDENTIAL].[7] Below we compare this to measures of the value that users place on BTS.

---

5 We do not repeat the points on consumer harm in this submission. See First Submission, paragraphs 113 to 120.

6 See First Submission, paragraphs 103-104, for more detail.

7 BT Group plc's response to Ofcom's Consultation of 19 June 2014, 5 September 2014, paragraph 8.105

Take-up

29. Take-up provides evidence on consumers' revealed preference for BTS. At the time of our First Submission, the most recent data showed that [CONFIDENTIAL]% of BT's subscribers have not taken up BTS and their valuation of BTS is therefore zero or negligible. [CONFIDENTIAL] of BT's BB users, or about [CONFIDENTIAl]% of all BB subscribers in the market, hence took up BTS.[8]

30. In addition, we understand that [CONFIDENTIAL].

31. As at the end of September this year, the percentage of BT's users which had not taken up the offer of free BTS had [CONFIDENTIAL]. This is a [CONFIDENTIAL].

32. Further, at the time of our First Submission, BT estimated that at most [CONFIDENTIAL], also were on the DSAT platform. Therefore, at most [CONFIDENTIAL] of BTS users value Sky Sports channels enough to subscribe to them.[9] As at the end of September, the percentage of BT BTS users that also were on the DSAT platform was unchanged. This suggests only a limited share of BTS users is likely to place a high value on sport.

Ipsos MORI survey

33. Figure 1 in our First Submission presented an illustrative representation of BT's BB customers' valuation of BTS. Survey evidence presented by TTG provides evidence on the shape of this curve.[10]

34. Specifically, as supporting documentation for its consultation response, TTG presented a user survey performed by Ipsos MORI.[11] In this survey, Ipsos MORI asked BTS users the following question:[12]

---

8 First Submission, paragraph 55(a).

9 First Submission, paragraph 56.

10 TTG, "Fixed Access Market Reviews: Approach to the VULA margin; TalkTalk responses to further issues", October 2014, paragraph 1.19 to 1.22. TTG subsequently pointed out methodological limitations that may limit the reliability of the Ipsos MORI study. We note that whereas the issues raised by TTG may affect the accuracy of the stated willingness to pay, the magnitude of such inaccuracies are unlikely to affect our conclusions below. First, Ipsos MORI's finding that a significant proportion of BT BB users were not willing to pay for BTS is unaffected by the methodological concerns raised by TTG in its latest submission. Second, the gap between Ofcom's estimates of BTS's net costs is a significant multiple of the average valuation for BTS estimated by Ipsos Mori. This material difference may be mitigated but not significantly reduced using a more robust survey methodology. Moreover, what we set out below is a methodology rather than an attempt at estimating the exact numerical value of any adjustment. Our use of the Ipsos MORI study is therefore primarily for illustrative purposes.

11 TTG, Fixed Access Market Reviews: Approach to the VULA margin, TalkTalk response, paragraph 4.45 ("TTG Response").

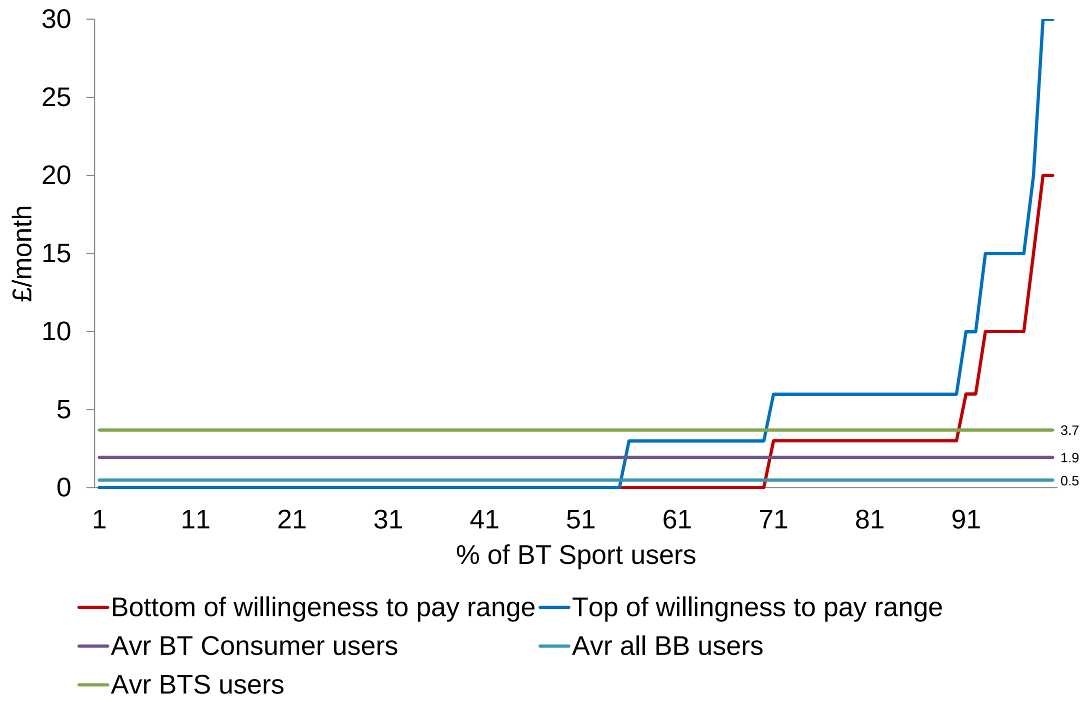
12 TTG, Fixed Access Market Reviews: Approach to the VULA margin, TalkTalk response, Annex - Ipsos MORI Survey data.

If BT decided to start charging for BT Sport TV, how much extra would you be willing to pay each month to continue to have access to BT Sport TV, rather than getting it for free as you do now?

35. The most aggregated view of willingness to pay presented by Ipsos MORI assesses users who "Access BT Sport TV via multiple devices".[13]

36. A plot of the valuation curve is set out in Figure 1 below. The stepped blue line shows the upper bound of the willingness to pay for BTS of the surveyed customers. The stepped red line shows the lower bound of the willingness to pay for BTS of the surveyed customers. Our understanding of the survey is that it only includes only BT BB users.

Figure 1 Ipsos MORI survey of user willingness to pay for BTS



Source: TTG Response, Annex – Ipsos MORI Survey data, sheet 0022; Compass Lexecon analysis.

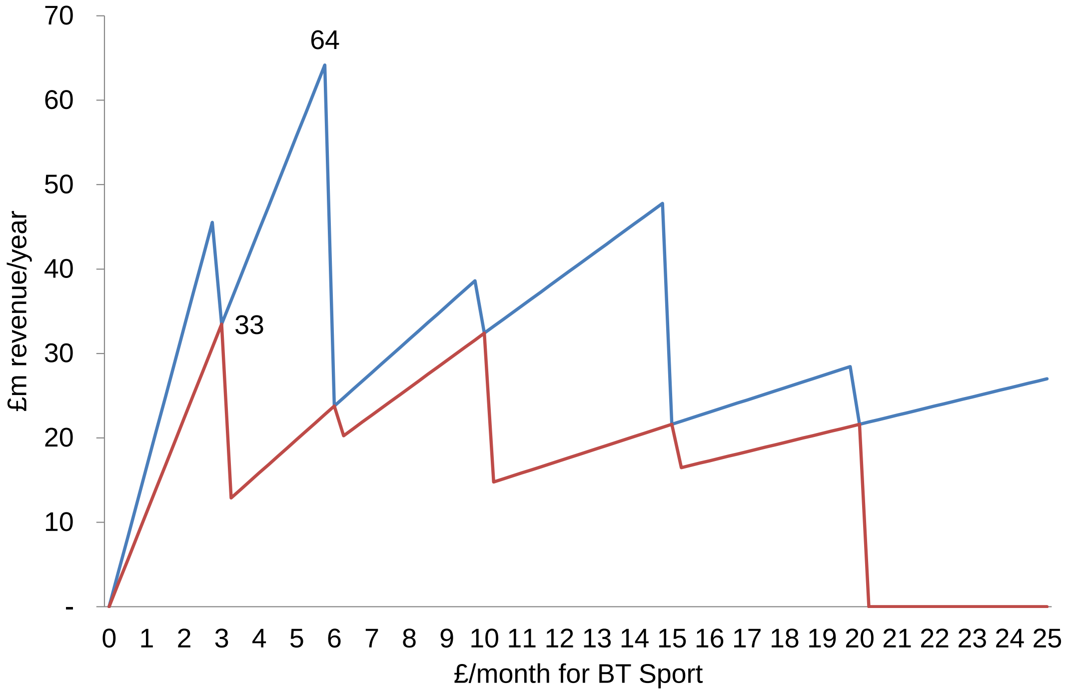
13 This is a subset of the surveyed users who have "Access to BT Sport TV". The users who have "Access to BT Sport TV" but who do not "Access BT Sport TV via multiple devices" appears to be those which indicated that they either "Don't know" which access mode they use or that their access mode was "None of the above" listed by Ipsos MORI.

37. Figure 1 above also shows the average valuation of BTS based when spread over BTS users, all BT Consumer users, and all BB users, as at the end of July 2014.[14]

38. The average valuation is between £2.0 and £3.7 across BTS users, between £1.0 and £1.9 across all BT Consumer users, and between £0.3 and £0.5 across all BB users.

39. The Ipsos MORI data can also be used to estimate revenue that BT may be foregoing by not charging for BTS. For example, a price of £2/month may attract the 46% of users who have expressed a non-zero valuation of BTS in the survey whereas a price of £5/month would attract the 31% of users who have expressed a willingness to pay more than £3/month.[15] Such an analysis is illustrated in Figure 2 below. The red line shows BT's revenue at different price levels assuming the lower bound valuations from the survey, while the blue line shows BT's revenue at different price levels assuming the upper bound valuations from the survey.

Figure 2 Illustrative analysis of implied annual revenue potential from BTS



Note: Compass Lexecon analysis based on maximum willingness to pay as per Figure 1, assumed 3.0m BTS users, and excluding any potential effects that a positive price may have on average customer life.

---

14 The average valuations have been calculated assuming that users value BTS at the top of the willingness to pay ranges considered by Ipsos MORI and that the percentage of users falling into each willingness to pay category applies to BT's current BTS users. This provides a total value placed on BTS. The total value is then divided either by the number of BTS, BT BB, or total BB users. For presentational ease we have only shown the averages based on the high (upper bound) valuations. Ofcom should have regard to the range. See paragraph 38.

15 Based on the high valuation estimate and reading from the right hand side of Figure 1 above.

40. The analysis in Figure 2 suggests a maximum revenue potential of between £33m and £64m each year based on charging a profit-maximising price derived from consumer willingness to pay at the bottom and the top of the price brackets set out by Ipsos MORI.

41. Accordingly, BT's *ex post* short-term willingness to pay for e.g. the FAPL rights should be no more than between £33m/year and £64m/year minus any other rights costs reflected in users' valuation of BTS and BT's costs to distribute the content rather than, in the case of FAPL, the £[CONFIDENTIAL]/year actually incurred.[16]

42. An indirect way to reflect users' valuation of BTS would therefore be to only include between £33m and £64m of BTS net cost per year in Ofcom's VULA margin calculation, but only provided this was necessary to allow BT's rivals to achieve MES.

Previous experience of Setanta and ESPN

43. As noted in the First Submission, in the FAPL auction, BT tried to displace Sky as the majority rights holder but obtained, at a higher price, rights which were broadly equivalent to those that Setanta and ESPN previously had. Setanta and ESPN were unable to commercialise successfully the rights that they obtained and it is therefore likely that the current costs of BTS exceed the current value to final consumers.[17] ESPN's and Setanta's annual revenues may therefore represent a benchmark for a cap on the extractable value from the FAPL rights and thereby of the maximum efficient rights costs.

Soaring rights values

44. In its presentation to Ofcom, BT set out data on the soaring cost of sports rights. While not itself proof of the divergence between costs and value (since rights could previously have been grossly undervalued) it is consistent with the current costs of BTS being substantially in excess of consumers' valuation of BTS.

45. It also suggests that margin regulation based on the costs of rights could result in a much more volatile VULA margin than if the margin took account of value (since it is implausible that consumers' valuation of sports rights is as volatile as the costs of acquiring the content). This in itself might be considered a further undesirable feature of the proposed form of cost-based regulation. In addition, the proposed form of cost-based regulation provides Sky with an additional incentive to inflate rights values: not only to defend its position of market power in CPSCs but also to soften competition from BT in the BB market by increasing the regulated margin and thus also soften BT's desire to bid as aggressively or at all in future content auctions.

---

16 This assumes no price discrimination. Under perfect price discrimination, the revenue potential increases to between £71m and £133m/year based on charging at the bottom and the top of the price brackets set out by Ipsos MORI. We discuss price discrimination in our First Submission, paragraphs 67 and 68.

17 First Submission, paragraph 103.

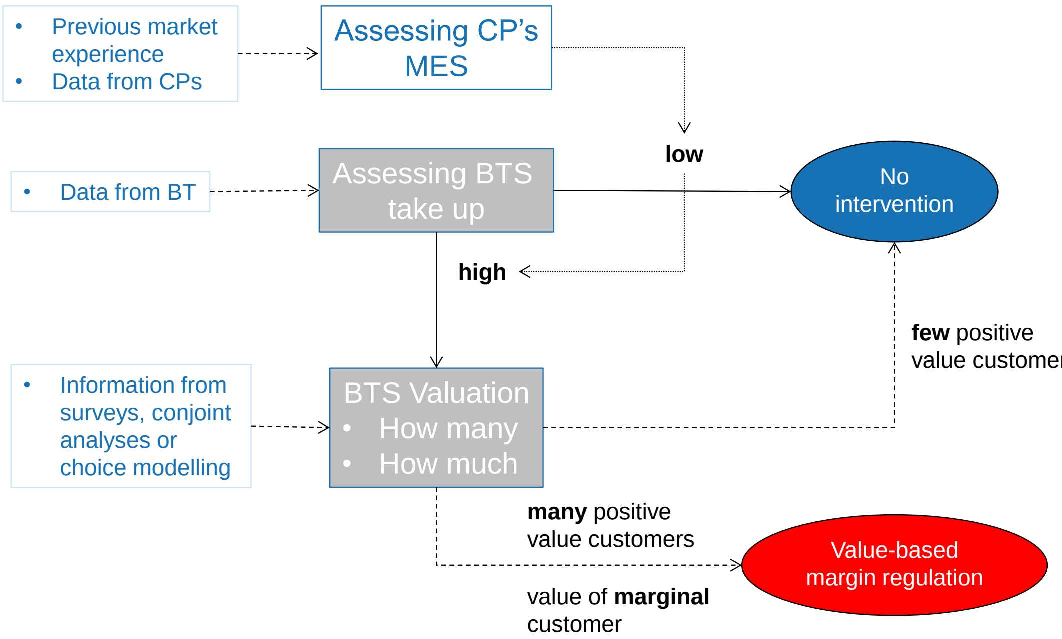
Conclusion

46. There is extensive evidence that the costs of BTS are substantially in excess of its value to consumers at least over the period of margin regulation proposed by Ofcom. Given this, cost is a bad proxy for value and has the potential to cause serious harm to consumers for the reasons set out in our First Submission.

D. Implementation of a value-based approach

47. In the meeting with Ofcom, we presented the following flow chart to provide an overview for the steps required for implementing a value-based test.

Figure 3 Steps required for implementing a value-based test



48. The flow chart illustrates the principles, set out in our First Submission, that provided MES is sufficiently low relative to the number of consumers who attribute no value to BTS, it may not be necessary to include any provision for BTS within the regulated headroom. If MES is shown to be high relative to the number of BB users with positive valuation for BTS, the methodology developed in our First Submission would allow Ofcom to calculate the margin required by BT's competitors to achieve MES.

49. Importantly, ensuring that BT's competitors achieve MES from, potentially, a subset of users will ensure that all users benefit from effectively competitive outcomes. This is because all viable operators (i.e. all competitors achieving MES) will be able to contest all users, including those with high valuations for BTS, if BT attempts to exploit the competitive advantage provided by BTS by setting a price differential in excess of the value attributed by those users to BTS. That is, provided that BT's competitors achieve MES, BT will not be able to set prices above the competitive norm for any part of the market, including for users with a high valuation for BTS.

50. In order to implement the flowchart, and to determine whether it is appropriate to include any provision for BTS is required, and if so, how much, Ofcom would need to come to a view in relation to rivals' MES, BTS take up and consumers' valuation of BTS. In what follows we describe how these factors could be assessed in practice. Our proposed methodology is conservative, since it likely over-estimates the MES and under-estimates the contestable market.

51. It over-estimates the MES because it equates the MES to the customer base of the smallest viable operator in the market. It under-estimates the contestable market because it fails to take into account that competitors such as Sky and TTG enjoy competitive advantages over BT which could be used to compete away BT's free content offer. In this respect, we believe our proposed approach constitutes an appropriate and administrable *ex ante* regulatory solution. It is practicable and is designed to eliminate the risk of false negative and yet it is, unlike the cost-based approach initially proposed by Ofcom, proportionate.

Assessing minimum efficient scale ("MES")

52. Ofcom has proposed one adjustment to BT's costs to determine the regulatory minimum VULA margin. Ofcom's proposed adjustment to the average customer life ("ACL") means that a rival with lower ACL and which was otherwise as efficient as BT could be profitable at BT's scale. Alternatively, it means that a rival of BT with the same ACL as BT which was otherwise as efficient as BT could be profitable despite being smaller than BT's scale.

53. Ofcom dismisses the need for a larger adjustment on the basis that "the three main competitors to BT already operate significant retail broadband businesses on which to build" and would not require any additional adjustment to "remain effective competitors".[18] In addition, Ofcom notes that reflecting the potentially higher costs applicable to "smaller CPs" would likely only lead to limited additional benefits given that "those smaller CPs would still face competitive pressures from the other three large CPs".[19] Ofcom hence bases its proposed regulation on the premise that it should allow CPs of a size comparable to the current top four operators to compete.

---

18 VULA Consultation, paragraph 3.84.

19 VULA Consultation, paragraph 3.86.

Scale of MES

54. By definition, MES represents the minimum scale at which an operator can compete profitably. The smallest profitable operator capable of imposing a competitive constraint in the market is therefore a potential benchmark for MES. MES may however be lower than the scale of such an operator as the operator also may be sufficiently profitable at less than its current scale.

55. TTG is the smallest of the four most significant broadband operators with about 4m BB users corresponding to approximately 20% of the users served by the four biggest operators. TTG's latest accounts show positive earnings and cash flows from operations.[20] This suggests that BT's rivals have been profitable at a smaller size than BT's current scale despite Ofcom's view that BT has the incentive and ability to engage in margin squeeze. This suggests a MES significantly lower than TTG's scale.

56. As noted above,[21] [CONFIDENTIAL] have taken up the offer to receive BTS for free. As indicated in Figure 1, less than half of these have a positive willingness to pay for BTS. That suggests that approximately [CONFIDENTIAL]% of BT's BB user base attribute zero or very low value to BTS.

57. There is no reason to believe that a higher proportion of users currently served by BT's competitors would place a positive value on BTS than the Ipsos MORI survey suggests is the case for BT's users. At least [CONFIDENTIAL]% of the market is therefore highly unlikely to be affected by the BTS offer. This leaves ample room for operators to reach a scale equivalent to a 20% market share even without offering any product feature or price discount in response to BTS.

Evidence

58. Ofcom can seek further evidence from BT's rivals on the issue of MES and the scope of the targeted market. This could include evidence on their marketing strategies. Provided rivals have strategies that only target a proportion of the addressable market, this provides an indication that they do not need to be able to contest the entire market to be viable.

59. Evidence in the public domain suggests Ofcom is likely to find that not all consumers require to be contestable. TTG's CEO, Dido Harding, has stated repeatedly that TTG's subscribers have limited interest in sport content:

- in May 2013, Harding stated:

---

20 TTG annual accounts for the financial year ending 31 March 2014, pages 46 and 50.

21 Paragraph 29.

> *"In terms of its impact on our business, fundamentally we're just not in the premium sports game … The reality is if you want premium sports you're not going to be a TalkTalk customer. We're not the right place for you to be and we're really relaxed about that … Our most frequently-watched on-demand content is Peppa Pig. That's our market, not people who want to spend a chunk of money on premium football matches".*

- in October 2013, Harding stated:

> *"We added more TV numbers in the last two quarters than Sky, BT and Virgin because we are targeting a new market of people who have not paid for TV before".*

- and in November 2013, Harding stated:

> *"Any family will tell you that's the key content, and that's what you see with our customers. Whereas our competitors are busy slugging it out at the premium end. You have to keep remembering there's a huge expanse of the country that isn't interested in football".*

60. More recently, in its 2014 Annual Report, TTG noted the existence of different strategies open to the key players on the UK broadband market:

> *"BT Retail and Virgin Media are positioned at the premium end of the market, with significantly higher price points. They focus on speed and reliability of broadband connection.*
>
> *BSkyB's focus is on cross selling broadband and voice to its pay TV base, providing discounts to customers who take all three products with them. BT Retail is also now competing with BSkyB on pay TV content rights, specifically sports.*
>
> *Within this context, TalkTalk is clearly positioned as the leading provider for customers seeking a best value and reliable voice, broadband and TV service. For TV in particular, we have a unique proposition for those homes who want flexible access to premium content without costly long term subscriptions. We believe this reputation for value for money puts TalkTalk in a strong position and will only improve further as we grow our TV and mobile bases."*

61. As shown by the quotes from TTG's chief executive and TTG's 2014 Annual Report, TTG continues to adopt a strategy which targets consumers who do not value BTS. TTG therefore has many consumers who would attribute nil or little value to BTS.

62. TTG's emphasis on other user segments than BT illustrates how access to BTS is not critical for BT's rivals' ability to compete. This is consistent with the fact that BT is not under any obligation to offer BTS to third parties. It also corroborates Ofcom's statement that all the main operators have their "own commercial/strategic advantages".[22] This in turn reflects that no operator can replicate all features of all its competitors' products and therefore competes on product differentiation as well as price.

63. The above method for establishing MES is likely to lead to a conservative (i.e. high) estimate. In relation to SFBB specifically, there are likely to be low incremental costs relative to the provision of SBB.[23] Compared to TTG, Sky and Virgin may also benefit from potential economies of scope with their pay TV businesses. When incremental fixed costs are low, economies of scale are quickly exhausted.

<u>Scale of the contestable market</u>

64. As stated by Ofcom, "BT faces a number of significantly sized competitors, each with its own commercial/strategic advantages".[24] Ofcom further notes that failure to take these "advantages into account would result in a minimum VULA margin that is larger than necessary".[25] In practice Ofcom has not taken these advantages into account.

65. This suggests that even if Ofcom did not allow for BTS in the regulated margin, consumers who place a valuation on BTS would still be contestable because rival CPs have their own "commercial/strategic advantages" in competing for these consumers.

<u>Conclusion</u>

66. To establish MES, Ofcom should therefore identify the smallest profitable operator as a conservative upper limit for MES. To achieve a more accurate view of MES, and minimise the risk of false positives, Ofcom may consider the following to adjust its initial MES estimate:

- Take into consideration economies of scope across products;
- Consider evidence of market segmentation such as marketing plans; and
- Consider any strategic advantages that rivals may enjoy.

Assessing take-up

67. Take-up is directly observable and does not present an implementation challenge. The take-up assessment may be sufficient to conclude whether any effect on competition is likely. Only if this analysis shows take-up at a level that may impact competition will an assessment of value be required.

---

22 VULA Consultation, paragraph 3.11, fourth bullet.

23 First Submission, paragraph 71.

24 VULA Consultation, paragraph 3.11, fourth bullet.

25 VULA Consultation, paragraph 6.25.

Assessing value

68. In our First Submission, we set out that the relevant value to include is the marginal valuation of the highest BTS valuation consumer that requires to be contestable for BT's rivals to be able to reach MES.[26]

69. In the previous sub-section we have discussed how Ofcom could reach a view on MES for these purposes. In this sub-section, we discuss how Ofcom could assess value.

Valuation curve for the market or for BT?

70. A preliminary issue is whether to estimate the value of BTS to all BB subscribers in the market or only for BT's BB subscriber base. A market based assessment would provide the most relevant view of how BTS may affect BT's competitors' ability to achieve MES.

71. An assessment based on BT's BB subscriber base may provide a sufficient approximation provided that BT's rivals can continue to retain any of their current consumers that place a positive valuation on BTS through those rivals' "own commercial/strategic advantages" and without sacrifice of margin. For example, suppose TTG currently has a consumer who would be willing to pay £2/month for BTS. If BTS was excluded from the regulated VULA margin and BT only allowed the minimum allowed margin, TTG may be able to retain this consumer (even absent switching costs) by offering the consumer £2/month or more of value through its own commercial/strategic advantages. BT's rivals' "own commercial/strategic advantages" can therefore either be explicitly accounted for in a broad market based assessment of willingness to pay or implicitly by basing the assessment only on BT's BB subscriber base.

Survey based approach

72. We consider that a survey-based approach provides a robust basis to estimate the value of BTS to final consumers (i.e. the value of the 'voucher'). It would in our view be a mistake to reject the use of surveys on the grounds of 'subjectivity'. Consumers' valuation of BTS is the conceptually correct variable of interest, and surveys are a robust method for eliciting those valuations.

73. Immediately below we comment on the widespread use of surveys in regulatory and contentious matters and we then comment on the approach to surveying in the present case.

<u>Use of surveys generally</u>

74. In the present matter, TTG itself has submitted survey-based evidence on consumers' valuation of BTS, so the usefulness of survey evidence does not appear to be in dispute with TTG.

---

26 First Submission, paragraphs 67 and 68.

75. Consumer surveys now have widespread application in UK competition policy. For example, surveys are now routinely used to estimate diversion ratios which are one of two key variables (alongside gross margins) used in the assessment of differentiated product mergers. The majority of these are phase 1 cases, for which the assessment period is 40 days and survey evidence is often provided and assessed within this time period.

76. Given the increased use of surveys, and their often decisive role in cases, the OFT and CC recently published good practice guidelines on the conduct of surveys.[27]

77. Ofcom will also be aware that [CONFIDENTIAL].[28]

78. Other precedents in which surveys were relied upon include the UK Government's consultation into the future of UK copyright law in 2011,[29] PPL's consultation to review the tariffs applied to the use of recorded music in specially featured entertainment in nightclubs and pubs,[30] in Australia in 2007 to estimate the appropriate level and structure of equitable remuneration payable under the Copyright Act's statutory licensing scheme,[31] the Copyright Tribunal's 2010 review of the remuneration for the use of sound recordings in fitness classes,[32] and Postcomm's assessment of the social value associated with the post office network in the UK.[33]

<u>Use of survey in the present case</u>

79. In the event that Ofcom required survey evidence, we would propose to adopt similar choice modelling methodology in the present case to that adopted in the Grant Back case.

80. Choice modelling techniques belong to the family of Stated Preference ("SP") methods that are used to obtain individuals' preferences for products or characteristics of products (such as, the subscription to BTS) using survey data. Choice modelling has become very popular in economic and marketing literature. In particular, this methodology has been widely used to aid decision making in the design of optimal pricing policies, valuation of intellectual property rights, estimation of demand for new services and definition of relevant markets.

---

27 Competition Commission and Office of Fair Trading, "Good practice in the design and presentation of consumer survey evidence in merger inquiries", March 2011.

28 See [CONFIDENTIAL]

29 See reference to the survey in: http://www.parliament.uk/documents/lords-committees/Secondary-Legislation-Scrutiny-Committee/UK_Music_SLSC.pdf

30 http://www.ppluk.com/I-Play-Music/Businesses/SFE-consultation/

31 Phonographic Performance Company of Australia Limited (ACN 000 680 704) under section 154(1) of the Copyright Act 1968 (Cth) (2007). Available at: http://www.copyrighttribunal.gov.au/decisions

32 Phonographic Performance Company of Austrlia Limited (ACN 000680 704) under section 154(1) of the Copyright Act 1968) (2010). Available at: http://www.copyrighttribunal.gov.au/decisions

33 NERA's report is available at:
http://www.nera.com/content/dam/nera/publications/archive1/PUB_Postcomm_Aug2009.pdf

81. Within the SP family there are a number of different techniques. In this case, we suggest using a technique known as Discrete Choice Experiment ("DCE"). The academic literature over recent years has largely converged around DCE as the methodology that most closely mirrors what people face in real life when choosing between products.[34] According to Louviere et al. (2010), among the different SP methods, DCEs are more general and consistent with economic demand theory.[35]

82. Choice modelling techniques require information on decisions made by consumers and the factors that can influence these decisions. This information is typically collected through surveys that simulate purchasing decisions made by individuals or companies. Purchasing decisions usually consist of a choice made from a finite set of alternatives. For example, in this particular case, each offering, defined by different attributes such as the provider of the BB package, the availability of BTS and other pay TV channels, and price, constitutes a different purchase alternative. Respondents are presented with a number of alternatives, each one described by a different combination of attributes, and are asked to choose their preferred alternative.

83. Using respondents' choices, it is possible to estimate a utility function of consumers preferences and thereby estimate consumers' willingness to pay for each attribute included in the alternatives. The willingness to pay is the amount of money that an individual is willing to pay in order to have an attribute. When estimating the utility function, a mixed logit model allows preferences to vary over decision-makers and so accounts for heterogeneity of respondents' preferences and allows segmentation of the market.

84. In this case the objective of the choice modelling would be to understand how much consumers are willing to pay for subscribing to BTS channel. We would suggest asking respondents whether they would subscribe to a particular BB package with, e.g. different TV alternative channels, including or excluding BTS.

85. Table 1 below shows and example of a choice exercise that could be used in this case. We would ask respondents something along the following lines: Please assume that you are interested in adding TV channels to your BB package, which of the following subscription packages would you choose?

---

34 For a detailed discussion on choice modelling and its application for estimating consumers' WTP see "Review of Stated Preference and Willingness to Pay Methods", Accent, April 2010. This study was prepared for the Competition Commission and it is available at: http://webarchive.nationalarchives.gov.uk/+/http:/www.competition-commission.org.uk/our_role/analysis/summary_and_report_combined.pdf.

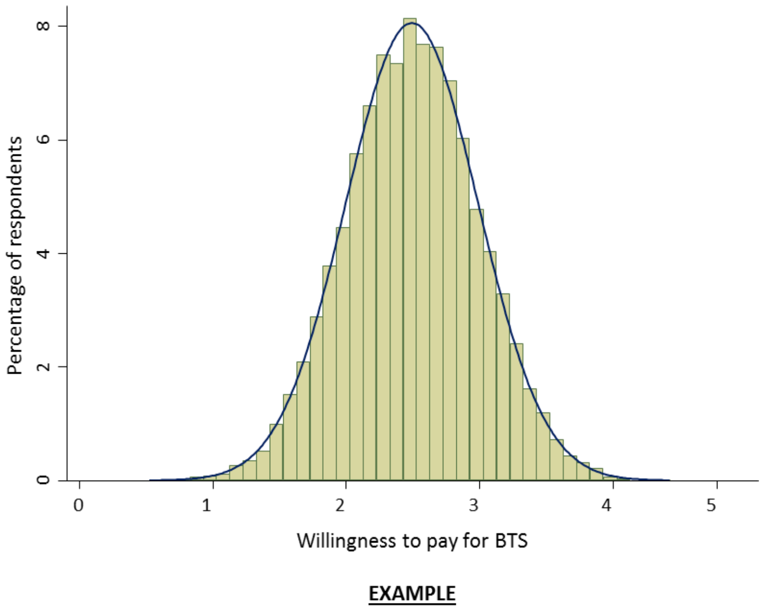
35 Louviere, J.J., T.N., Flynn and R.T. Carson (2010), Discrete choice experiments are not conjoint analysis, *Journal of Choice Modelling*, 3(3), pp 57-72.

Table 1: Example table

	Alternative 1	Alternative 2	Alternative 3	None of these
Provider	BT	Sky	BT	I would not choose any of these alternatives
Basic TV channels	Yes	Yes	No	
BTS	No	Yes	Yes	
Price per month	£20	£40	£30	

86. Using the results of several exercises as the one described above and applying mixed logit models we are able to estimate the distribution of the willingness to pay for BTS. Figure 4 below shows an example of the choice modelling output: the distribution of the willingness to pay for BTS.

Figure 4 Example of the distribution of the WTP for BTS



87. The suggested methodology allows us to estimate the willingness to pay for different sub-populations, such as, current BT's BB subscribers that already receive BTS for free, BB subscribes that do not receive BTS, etc. On this basis, Ofcom can set out the valuation curve as per Figure 1 in our First Submission.