



Fixed Access Market Reviews: Approach to the VULA margin

Statement

Annexes - Redacted
for publication [X]

Publication date: 19 March 2015

Contents

Annex		Page
1	BT's strategy in relation to sport	1
2	Legal Instrument	4
3	Guidance on assessment of the VULA margin	18
4	Spreading certain BT Sport costs over five years	29
5	Sources of evidence	31
6	Glossary	51

Annex 1

BT's strategy in relation to sport

Introduction

A1.1 This Annex summarises evidence on BT's motivation for investing in BT Sport. This shows that this investment was to support its broadband business and, in particular, to increase customer acquisition and retention on superfast broadband packages.

BT's submissions to Ofcom in relation to its investment in sports rights

A1.2 BT discussed its business case for bidding for the FAPL rights in 2012, stating that:

[redacted].¹

A1.3 BT explained that its business case:

[redacted].²

A1.4 Because of [redacted], BT recognised that:

[redacted].³

BT's investment in sports rights was linked to BT's broadband business

A1.5 In its November 2013 submission on the Superfast Broadband Competition Act Investigation, BT set out the commercial and strategic objectives underpinning its investment in BT Sport. It stated the same basis for its strategy as noted above, i.e., that "[redacted], and that [redacted].⁴ [redacted].⁵ [redacted].

A1.6 BT's commercial rationale is also shown in its internal documents prior to the FAPL auction. In May 2012, an internal presentation showed that BT considered that [redacted].⁶ BT stated that [redacted].⁷ This presentation predicted that the BT Sport proposition would [redacted].⁸ BT considered [redacted].⁹

¹ Paragraph 2, Annex 2, BT submission on the relevance of question 1-4 submitted in response to the s.135 notice of 10 November 2014 (amended 25 November 2014).

² Paragraph 4, Annex 2, Ibid.

³ Ibid.

⁴ Paragraph 6.6, *BT's November submission (confidential)*, 22 November 2013.

⁵ Paragraph 6.11, Ibid. See also also Slide 4, Annex 4.03c of BT response to questions 5 and 5 of the s.26 notice of 5 July 2013.

⁶ Page 12, Annex 4.03c, Ibid.

⁷ Page 3, Annex 4.03c, Ibid..

⁸ Page 5, Annex 4.03c, Ibid.

⁹ Page 5, Annex 4.03c, Ibid.

BT strategy for distribution of BT Sport is linked to BT's broadband business

A1.7 After the FAPL auction, BT decided to offer BT Sport for free to its broadband subscribers¹⁰, [redacted]. BT noted in its internal documents that [redacted].¹¹ Similarly, a subsequent presentation by BT to its Executive Steering Group (ESG) which sought approval for the recommended free pricing model for BT Sport shortly before the announcement in May 2013 referred to the commercial objectives and rationale of the pricing model as creating further incentives for customers to switch to BT broadband and driving broadband acquisition.¹² It stated that BT Sport will [redacted].¹³

A1.8 Pricing BT Sport in this way would mean that BT would obtain lower direct revenues from BT Sport [redacted]. However as BT explained in its submission, BT's aim remained to use BT Sport to obtain incremental broadband customers:

"As before, BT considered that BTS [BT Sport] could be used to improve broadband customer growth and retention,[redacted]."

BT's pricing strategy rested upon the greater value contribution per customer offering BTS [BT Sport] for free as a means of retaining and acquiring new BT broadband customers."¹⁴

A1.9 In choosing to offer BT Sport to all its broadband subscribers at no additional charge, BT receives lower revenue than it could otherwise make from selling direct channel subscriptions to the proportion of its broadband customers that would have been willing to pay a subscription fee for this service but are instead receiving it for 'free' with their BT broadband package. BT anticipated that the revenue sources available from distributing BT Sport for a lower fee to BT broadband customers than to non-BT broadband customers would be [redacted].¹⁵

A1.10 BT explained that it considers that this reduction in direct revenues is more than compensated by the additional margins it will earn on incremental broadband customers that it wins or retains as a result of offering BT Sport. BT stated in its November submission that, when it takes into account its margin on retail broadband, providing BT Sport for free to its broadband customers [redacted].¹⁶

A1.11 Similarly, BT Sport is not currently available to TalkTalk YouView customers, which means that BT receives lower direct revenue than it could have made by selling BT Sport to TalkTalk TV customers and other YouView viewers who do not subscribe to BT's TV and broadband package.

¹⁰ Page 4, Annex 1A.07, Ibid..

¹¹ Page 7, Annex 1A.02, Ibid.

¹² Page 4, Annex 9B.3, Ibid. [redacted].

¹³ Page 4, Annex 9B.3, Ibid.

¹⁴ Paragraphs 6.21-6.22, *BT's November submission (confidential)*, 22 November 2013. When comparing various distribution strategies following the FAPL auction results, BT noted the value of BT Sport as a tool to retain and attract customers to its telephony, broadband and pay TV businesses and secure direct billing relationships with those viewers (paragraph 6.23, Ibid.).

¹⁵ Page 6, Annex 1A.02, Ibid.

¹⁶ Paragraph 6.22, *BT's November submission (confidential)*, 22 November 2013, and Page 5, Annex 1A.02 of BT response to questions 4 and 5 of the s.26 notice of 5 July 2013.

BT Sport may have been developed to support BT's superfast broadband business in particular

- A1.12 BT's internal documents prepared before the FAPL auction suggest that BT's investment in BT Sport may have been connected to its fibre roll-out in particular.
- A1.13 In a presentation to BT's ESG, dated 23 May 2012, BT noted that [redacted].¹⁷
- A1.14 [redacted].¹⁸ It stated that [redacted].¹⁹ It expected that BT Sport [redacted].²⁰ BT also said that the BT Sport investment was [redacted].²¹ The same internal document also showed that [redacted].²²
- A1.15 In BT Sport's business case forecasts, BT estimated the superfast broadband/standard broadband split of the incremental broadband customers which it anticipated to gain as a direct result of the BT Sport offer. These projected that superfast broadband would account for [redacted] of these incremental customers. Based on BT's internal estimates at the launch of the channels, BT expected BT Sport to deliver over [redacted] incremental broadband customers by the end of 2015/16, [redacted] of which would be on superfast broadband.²³
- A1.16 In addition, BT's internal forecasts predicted that the future net growth in its broadband base [redacted].²⁴
- A1.17 [redacted] the way BT Sport is distributed over the BT TV platform are also consistent with a strategy of using BT Sport to encourage superfast broadband take-up. In BT's internal guides to its customer service agents, BT advises its customer service staff [redacted].²⁵ From January 2014 to May 2014, only those new BT TV customers that took superfast broadband were able to watch BT Sport on their television.²⁶
- A1.18 The current take-up of BT Sport is also consistent with a strategy by BT to use BT Sport to promote superfast broadband. The actual volumes of BT Sport show that BT's superfast broadband customers were more likely to sign up to BT Sport for free than BT's standard broadband customers. As at the end of September 2014, [redacted] per cent of BT's superfast broadband customers have subscribed to BT Sport, compared to [redacted] per cent of BT's standard broadband customers.²⁷

¹⁷ Page 12, Annex 4,03c, Ibid..

¹⁸ Page 12, Annex 4,03c, Ibid.

¹⁹ Page 3, Annex 4,03c, Ibid.

²⁰ Page 5, Annex 4,03c, Ibid..

²¹ Page 10, Annex 4,03c, Ibid.

²² Page 12, Annex 4,03c, Ibid.

²³ BT response to questions 21, 24 and 25 of the s.26 notice of 1 October 2013.

²⁴ BT response to question 14 of the s.26 notice of 20 August 2013.

²⁵ BT submitted a copy of BT Sport desk drop sheet for the Inbound Acquisition Teams, entitled [redacted] Similarly, BT submitted a copy of Sales Best Practice inbound call guide V2, in which customer service is advised to [redacted]. (BT response to question 3 of the s.26 notice of 21 June 2014.)

²⁶ BT standard broadband customers who obtain BT Sport via the Sky platform would still be able to receive BT Sport on their TV. In addition, since May 2014, standard broadband customers would be able to access BT Sport on BT TV via MOCO.

²⁷ BT response to question 1 of the s.135 notice of 21 October 2014.

Annex 2

Legal Instrument

NOTIFICATION UNDER SECTION 48(1) OF THE COMMUNICATIONS ACT 2003

Notification of the setting, and modification, of SMP services conditions in relation to BT under section 45 of the Communications Act 2003

Background

1. On 3 July 2013, OFCOM published a consultation document entitled “*Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 – Consultation on the proposed markets, market power determinations and market remedies*” (the “**FAMR Consultation**”)²⁸. Part I of Annex 11 to the FAMR Consultation set out the notification under sections 48A and 80A of the Act in which OFCOM proposed to:
 - identify certain markets;
 - make market power determinations; and
 - set SMP services conditions,(the “**FAMR Notification**”).
2. In relation to BT, OFCOM proposed in the FAMR Notification that BT has significant market power in, among others, the market for the supply of copper-loop based, cable-based and fibre-based wholesale local access at a fixed location in the United Kingdom excluding the Hull Area (the “**Relevant WLA market**”) over the period of the review undertaken in the FAMR Consultation.
3. As a result of the proposed market power determination in the market listed above, OFCOM proposed in the FAMR Notification to set a number of SMP services conditions and directions on BT in that market, including an obligation to supply network access in the specific form of Virtual Unbundled Local Access.
4. In order to address the risk of adverse effects arising from price distortion through BT imposing a price squeeze in relation to network access in the specific form of Virtual

²⁸ <http://stakeholders.ofcom.org.uk/consultations/fixed-access-market-reviews/>

Unbundled Local Access, OFCOM also proposed the imposition of an SMP services condition requiring BT to offer such access on fair and reasonable terms, conditions and charges. OFCOM proposed that this SMP services condition should be supported by guidance on how OFCOM would interpret this requirement in relation to the appropriate Virtual Unbundled Local Access margin.

5. The period within which representations could be made to OFCOM about its proposals in the FAMR Consultation ended on 25 September 2013.
6. On 16 January 2014, and following consideration of responses to the FAMR Consultation, OFCOM published a further consultation document entitled "*Fixed access market reviews: Further consultation on notification periods, compliance with requirements on the VULA margin, and approach to pricing for TRCs and SFIs*" (the "**January 2014 Consultation**")²⁹. Annex 7 of the January 2014 Consultation set out the notification under section 48A of the Act in which OFCOM set out for domestic consultation further revised proposals including a requirement on BT to provide information necessary to monitor its compliance with the proposed obligation referred to in paragraph 4 above in respect of the Virtual Unbundled Local Access margin.
7. OFCOM invited responses to the January 2014 Consultation by 17 February 2014.
8. Copies of both the FAMR Consultation and the January 2014 Consultation were also sent to the Secretary of State in accordance with sections 48(C)(1) and 81(1), where relevant, of the Act.
9. Following consideration of responses to the FAMR Consultation and January 2014 Consultation, OFCOM decided:
 - a. that it wished to proceed with most of the proposals set out in those consultations; and
 - b. to set out for domestic consultation revised proposals in order to address the risk referred to in paragraph 4 above.
10. The proposals referred to at paragraph 9a above included proposals of EU significance for the purposes of the Act. Therefore, after making such modifications of the proposals that appeared to OFCOM to be appropriate following domestic consultation, OFCOM sent on 19 May 2014 a copy of them, and of a draft statement

²⁹ <http://stakeholders.ofcom.org.uk/consultations/famr-2014/>

setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member state for EU consultation, in accordance with sections 48B(2) and 80B(2) of the Act (the “**May 2014 EU Consultation**”)³⁰.

11. In relation to the proposals referred to at paragraph 9b above, on 19 June 2014 OFCOM published a further consultation document entitled “*Fixed Access Market Reviews: Approach to the VULA margin*” (the “**June 2014 Consultation**”)³¹. Annex 5 of the June 2014 Consultation set out the notification under section 48A of the Act in which OFCOM set out for domestic consultation its revised proposal to, amongst other things, impose an SMP services condition requiring BT to maintain a minimum margin in respect of Virtual Unbundled Local Access and to provide information to OFCOM necessary to monitor its compliance with the obligation. OFCOM proposed that this SMP services condition should be supported by guidance on how OFCOM would interpret this requirement.
12. A copy of the June 2014 Consultation was also sent to the Secretary of State in accordance with section 48(C)(1) of the Act.
13. OFCOM invited responses to the June 2014 Consultation by 28 August 2014.
14. On 19 June 2014, OFCOM received comments from the European Commission on its proposals in the May 2014 EU Consultation. After making such modifications to its notification and the accompanying draft statement as it considered appropriate, OFCOM published on 26 June 2014 a document entitled “*Fixed access market reviews 2014: Statement*” (the “**2014 FAMR Statement**”)³². Part I of Annex 29 of the 2014 FAMR Statement set out OFCOM’s notification under sections 48(1) and 79(4) (the “**2014 FAMR Notification**”) of the Act which:
 - a. determined that, amongst others, BT has significant market power in the Relevant WLA market over the period of the review undertaken in the 2014 FAMR Statement; and

³⁰ <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/draftstatement/>

³¹ <http://stakeholders.ofcom.org.uk/consultations/VULA-margin/summary>

³² <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/>

- b. set a number of SMP services conditions and directions on BT in the Relevant WLA market as a result of its market power determination in that market, including an obligation to supply network access in the specific form of Virtual Unbundled Local Access and an obligation that such access be provided on fair and reasonable terms, conditions and charges.
15. A copy of the 2014 FAMR notification was also sent to the Secretary of State, the European Commission and BEREC in accordance with sections 48(C) and 81 of the Act.
16. OFCOM received several responses to its proposals set out in the June 2014 Consultation and it has considered every such representation. The Secretary of State has not notified OFCOM of any international obligation on the United Kingdom for the purposes of section 48A(6)(b) of the Act.
17. The proposals set out in the June 2014 Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making such modifications of the proposals that appeared to OFCOM to be appropriate following domestic consultation, OFCOM sent on 15 January 2015 a copy of its proposals, and a draft of the Statement accompanying this notification setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member state for EU consultation, in accordance with section 48B(2) of the Act.
18. OFCOM received comments from the European Commission on its proposals on 16 February 2015 and, having considered these comments, is giving effect to this proposal having made such modifications as it appears to OFCOM to be appropriate.

Determinations to set and modify SMP service conditions

19. OFCOM has determined to:
 - a. set for BT a new SMP services condition 14 (*Virtual Unbundled Local Access margin control*);
 - b. make certain modifications to SMP services condition 1 (*Network access on reasonable request*) imposed by the 2014 FAMR Notification; and
 - c. publish guidance which sets out how OFCOM intends to apply SMP services condition 14.

SMP services condition 14 (*Virtual Unbundled Local Access margin control*)

20. OFCOM hereby gives notice of its determination, in accordance with section 48(1) of the Act, in relation to the Relevant WLA market to set on BT the SMP services condition 14, which is set out in Schedule 1 to this notification, pursuant to its powers under sections 45, 87(9) and 88 of the Act.
21. OFCOM, in accordance with section 86(1)(b) of the Act, sets that SMP condition 14 by reference to the market power determination in relation to the services market identified in paragraph 21 of the 2014 FAMR Notification in relation to which OFCOM is satisfied that there has been no material change since that determination was made.
22. This condition will take effect from 1 April 2015.
23. The effect of, and the reasons for making, the determination set out at paragraph 20 above are set out in the Statement accompanying this notification.

Modifications to SMP services condition 1 (*Network access on reasonable request*)

24. OFCOM hereby gives notice of its determination, in accordance with section 48(1) of the Act and pursuant to its powers under sections 45, 87(5) and 87(9), to:
 - a. modify SMP services condition 1.3 set out in the 2014 FAMR Notification by replacing the words “Where any of conditions 6 or 7 apply (with the exception of Condition 7A.9)” with the words “Where any of conditions 6 or 7 apply (with the exception of Condition 7A.9) or in respect of the VULA Margin”.
 - b. insert the following new SMP services condition 1.8:
 - 1.8** In this condition 1:
 - i. “**VULA Margin**” means the difference between the charge levied by the Dominant Provider for Virtual Unbundled Local Access and the charge levied by the Retail Divisions for the supply of a VULA-Based Broadband Package; and
 - ii. “**Compliance Period**”, “**New Subscribers**”, “**Retail Divisions**” and “**VULA-Based Broadband Package**” shall have the meaning given to them in condition 14.

Consequently, the 2014 FAMR Notification should be read accordingly.

25. OFCOM, in accordance with sections 86(2) and 86(4)(a) of the Act, is satisfied that there has not been a material change in the services market identified in paragraph 21 of the 2014 FAMR Notification for the purposes of the corresponding market power determination by reference to which SMP services condition 1.3 was set.
26. This modification will take effect from 1 April 2015.
27. The effect of, and the reasons for making, the determinations set out above at paragraph 24 are set out in the Statement accompanying this notification.

Ofcom's duties and legal tests

28. OFCOM considers that the determinations set out in this notification comply with all applicable legal tests, including the requirements of sections 45 to 47, 86, 87 and 88 of the Act as appropriate and relevant to them.
29. In making the determinations referred to in this notification, OFCOM has:
 - a. considered and acted in accordance with its general duties set out in section 3 of the Act and the six Community requirements in section 4 of the Act;
 - b. taken due account of all applicable recommendations issued by the European Commission in accordance with section 4A of the Act; and
 - c. taken utmost account of any relevant opinion, recommendation, guidance advice or regulatory practice adopted by BEREC in accordance with Article 3(3) of Regulation (EC) No 1211/2009.
30. A copy of this notification has been sent to the Secretary of State, the European Commission and BEREC in accordance with section 48(C) of the Act.

Interpretation

31. For the purposes of interpreting this notification:
 - a. except insofar as the context otherwise requires, words or expressions shall (as applicable) have the meaning given to them below in paragraph 32, in the schedule to this notification, or in Part 2 of Schedule 1 to the 2014 FAMR Notification, and otherwise any word or expression shall have the same meaning as it has in the Act;

- b. headings and titles shall be disregarded;
- c. expressions cognate with those referred to in this notification shall be construed accordingly; and
- d. the Interpretation Act 1978 (c. 30) shall apply as if this notification were an Act of Parliament.

32. In this notification:

- a. **“2014 FAMR Notification”** means the notification described in paragraph 14 above;
- b. **“2014 FAMR Statement”** means the statement described in paragraph 14 above;
- c. **“Act”** means the Communications Act 2003 (c.21), as amended;
- d. **“BT”** means British Telecommunications plc, whose registered company number is 1800000 and any British Telecommunications plc subsidiary or holding company, or any subsidiary of that holding company, all as defined in section 1159 of the Companies Act 2006 (c.46);
- e. **“FAMR Consultation”** means the consultation described in paragraph 1 above;
- f. **“FAMR Notification”** means the notification described in paragraph 1 above;
- g. **“Hull Area”** means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 (c.12) to Kingston upon Hull City Council and Kingston Communications (Hull) plc;
- h. **“January 2014 Consultation”** means the consultation described in paragraph 6 above;
- i. **“June 2014 Consultation”** means the consultation described in paragraph 11 above;
- j. **“May 2014 EU Consultation”** means the consultation described in paragraph 10 above;

- k. "**OFCOM**" means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002 (c. 11);
- l. "**Relevant WLA market**" has the meaning attributed to it in paragraph 2 above; and
- m. "**United Kingdom**" has the meaning given to it in the Interpretation Act 1978 (c. 30).

33. Schedule 1 forms part of this notification.

Signed

A handwritten signature in blue ink that reads "D. Clarkson." The signature is written in a cursive style.

David Clarkson

Competition Policy Director

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

19 March 2015

Schedule 1: SMP services condition 14 - Virtual Unbundled Local Access margin control

Condition 14 – Virtual Unbundled Local Access margin control

- 14.1** This condition applies to Virtual Unbundled Local Access provided by the Retail Divisions. Unless OFCOM otherwise consents in writing, the Dominant Provider must set the charge for Virtual Unbundled Local Access provided by the Retail Divisions in accordance with conditions 1 and 2 so that a Minimum Margin is maintained.
- 14.2** For the purposes of this condition 14, a Minimum Margin is maintained if, during any Compliance Period:

$$P - (W + DC) \geq UC - UR$$

Where:

P is the total revenue generated by the Retail Divisions where such revenue is associated with the supply of VULA-Based Broadband Packages to New Subscribers relevant to the Compliance Period (excluding revenue referred to in UR) (the “**Base Revenue**”), as Projected Forward;

W is the total wholesale charges levied by Openreach for both Virtual Unbundled Local Access and Wholesale Analogue Line Rental for the purpose of the supply of VULA-Based Broadband Packages to New Subscribers by the Retail Divisions relevant to the Compliance Period (the “**Base Charges**”), as Projected Forward;

DC is the total long-run incremental costs (including the Relevant Bandwidth Costs) incurred by the Dominant Provider where such costs are associated with the supply of VULA-Based Broadband Packages to New Subscribers by the Retail Divisions relevant to the Compliance Period (excluding those costs and charges referred to in W and UC) plus an appropriate mark up for the recovery of common costs including an appropriate return on capital employed (the “**Base Costs**”), as Projected Forward;

UR is the total revenue generated by the Retail Divisions where such revenue is associated with the acquisition of New Subscribers to VULA-Based

Broadband Packages relevant to the Compliance Period; and

UC is the total long-run incremental costs incurred by the Retail Divisions where such costs are associated with the acquisition of New Subscribers to VULA-Based Broadband Packages relevant to the Compliance Period plus an appropriate mark up for the recovery of common costs including an appropriate return on capital employed.

For the purposes of this condition 14.2, any costs, charges or revenue referred to as being Projected Forward shall be calculated by:

- (a) dividing the Base Revenue, Base Charges or Base Costs (as applicable) by the number of calendar days in the relevant Compliance Period (resulting in the “**Daily Average**”);
- (b) multiplying the Daily Average by 30.4375 (resulting in the “**Monthly Average**”); and
- (c) then applying the following formula:

$$\sum_{t=0}^N \frac{M_t}{(1+i)^t}$$

Where:

t is a number from 0 to N for each of the N months;

i is the appropriate cost of capital (expressed as a monthly figure), as determined by OFCOM from time to time;

N is 60; and

M_t means the Monthly Average.

- 14.3** The Dominant Provider must record, maintain and supply to OFCOM in an electronic format (including in any such presentational form or arrangement (including as to the level of disaggregation) as OFCOM may direct from time to time), no later than one month after the end of each Relevant Period, the data necessary for OFCOM to monitor compliance of the Dominant Provider with condition 14.1 above in respect of Virtual Unbundled Local Access. This data must include:

- (a) Base Revenue;
- (b) Base Charges;
- (c) Base Costs;
- (d) UR;
- (e) UC; and
- (f) such other data as OFCOM may direct from time to time,

in respect of each Compliance Period the preceding Relevant Period and/or such other period as OFCOM may direct from time to time.

14.4 In this condition 14:

- (a) “**Base Charges**” has the meaning given to it in condition 14.2;
- (b) “**Base Costs**” has the meaning given to it in condition 14.2;
- (c) “**Base Revenue**” has the meaning given to it in condition 14.2;
- (d) “**Compliance Period**” means any period of one month over which OFCOM makes an assessment under this condition 14;
- (e) “**Daily Average**” has the meaning given to it in condition 14.2(a);
- (f) “**enterprise**” shall have the meaning given to it in the Enterprise Act 2002;
- (g) “**Enterprise Act 2002**” means the Enterprise Act 2002 (c.40), as amended;
- (h) “**Minimum Margin**” has the meaning given to it in condition 14.2;
- (i) “**Monthly Average**” has the meaning given to it in condition 14.2(b);
- (j) “**New Subscribers**” means those end-users that do not subscribe to a VULA-Based Broadband Package as at the commencement of the relevant Compliance Period;
- (k) “**Openreach**” means the access services division of the Dominant Provider established under section 5 of the undertakings given by the Dominant Provider to OFCOM in accordance with section 154 of the Enterprise Act

2002, accepted by OFCOM on 22 September 2005;

- (l) **"Plusnet"** means Plusnet Plc, whose registered company number is 03279013;
- (m) **"Projected Forward"** has the meaning given to it in condition 14.2;
- (n) **"Regulatory Financial Statement"** shall have the meaning given to it in condition 13A;
- (o) **"Relevant Bandwidth Costs"** means:
 - (i) where the latest available Regulatory Financial Statement relevant to the Compliance Period is the 2013/14 RFS, whichever is the higher of either the Dominant Provider's Unit Bandwidth Costs relevant to the Compliance Period or £9.20 per Mbit/s;
 - (ii) where the latest available Regulatory Financial Statement relevant to the Compliance Period is the 2014/15 RFS, whichever is the higher of either the Dominant Provider's Unit Bandwidth Costs relevant to the Compliance Period or £7.17 per Mbit/s; or
 - (iii) where the latest available Regulatory Financial Statement relevant to the Compliance Period is the 2015/16 RFS, whichever is the higher of either the Dominant Provider's Unit Bandwidth Costs relevant to the Compliance Period or £5.59 per Mbit/s;
- (p) **"Relevant Period"** means:
 - (i) the period between 1 April 2015 and 30 April 2015 (inclusive);
 - (ii) the period between 1 April 2015 and 30 September 2015; and
 - (iii) after the period referred to in (ii) above, the following periods of six months beginning either (as applicable) on:
 - a. 1 October and ending on 31 March; or
 - b. 1 April and ending on 30 September.
- (q) **"Retail Divisions"** means the enterprise of the Dominant Provider known as

'BT Consumer' (and which includes Plusnet) as at the date of the entry into force of this condition or such other enterprise or enterprises that may replace or succeed BT Consumer from time to time;

- (r) **"Unit Bandwidth Costs"** means the average cost of providing 1Mbit/s of capacity between the Local Serving Exchange and the internet relevant to the Compliance Period;
- (s) **"VULA-Based Broadband Package"** means any product, service or bundle of products or services (including, but not limited to, telephony (including fixed and mobile telephony) and television services (including content)) offered by the Dominant Provider during the relevant Compliance Period through its Retail Divisions to New Subscribers which include the provision of a broadband connection, where the Dominant Provider uses Virtual Unbundled Local Access in order to provide that broadband connection;
- (t) **"VULA-Based Broadband Packages"** means all products, services or bundles of products or services (including, but not limited to, telephony (including fixed and mobile telephony) and television services (including content)) offered by the Dominant Provider during the relevant Compliance Period through its Retail Divisions to New Subscribers which include the provision of a broadband connection, where the Dominant Provider uses Virtual Unbundled Local Access in order to provide that broadband connection;
- (u) **"2013/14 Financial Year"** means the period 1 April 2013 to 31 March 2014 (inclusive);
- (v) **"2013/14 RFS"** means the Regulatory Financial Statement prepared by the Dominant Provider in relation to the 2013/14 Financial Year;
- (w) **"2014/15 Financial Year"** means the period 1 April 2014 to 31 March 2015 (inclusive);
- (x) **"2014/15 RFS"** means the Regulatory Financial Statement prepared by the Dominant Provider in relation to the 2014/15 Financial Year;
- (y) **"2015/16 Financial Year"** means the period 1 April 2015 to 31 March 2016 (inclusive); and

- (z) **“2015/16 RFS”** means the Regulatory Financial Statement prepared by the Dominant Provider in relation to the 2015/16 Financial Year.

Annex 3

Guidance on assessment of the VULA margin

Introduction

- A3.1 This Annex sets out guidance on how we intend to undertake an assessment of whether BT is complying with SMP condition 14. This guidance reflects the approach we would take based on the information available to us at this time. However, we recognise that it may be appropriate to depart from this guidance if there is a material change in circumstances.
- A3.2 This guidance should be read alongside SMP condition 14.

Structure of this guidance

- A3.3 SMP condition 14 distinguishes between the following five categories of costs/revenues:
- ongoing revenues;
 - ongoing wholesale costs;
 - ongoing retail costs;
 - upfront costs; and
 - upfront revenues.
- A3.4 Each of these cost and revenue categories are discussed in turn in this guidance at paragraphs A3.14-A3.22 (ongoing revenue), A3.23-A3.24 (ongoing wholesale costs), A3.25-A3.61 (ongoing retail costs), A3.62-A3.71 (upfront costs) and A3.72-A3.73 (upfront revenues).
- A3.5 We first discuss at paragraphs A3.6-A3.13 our general approach to assessing compliance with SMP condition 14.

Overview of approach

- A3.6 Except where noted otherwise, we would assume that the VULA margin was consistent over the Average Customer Lifetime ('ACL').
- A3.7 When conducting an assessment, we would consider whether a material change in circumstances occurred in the months preceding or during the compliance period. If there was evidence that this was the case then we may depart from the guidance set out below.
- A3.8 When assessing BT's compliance with SMP condition 14 during a particular time period, we would seek to use historical data that is representative of the circumstances over the ACL.

- A3.9 In order to assess BT's fibre portfolio, we would calculate weighted average revenues and costs across individual bundles within BT's fibre portfolio. The weights used in the calculation would be the volumes of subscribers acquired on each product during the compliance period.
- A3.10 When carrying out an assessment of the VULA margin, we would simplify our modelling in order to focus on the most material factors. In particular we would:
- not specifically take fibre to the premises (FTTP) bundles into account when carrying out modelling; and
 - analyse Plusnet subscribers by using data on the costs and revenues for superfast broadband products supplied by the rest of BT Consumer, except where data on Plusnet's specific costs and revenues can be easily sourced using publicly available information or Plusnet's management accounts.
- A3.11 When assessing the VULA margin we would consider the prices that BT charges to new superfast broadband customers.
- A3.12 The VULA margin assessment would include the costs and revenues of any new services BT begins to bundle with superfast broadband during the market review period (e.g. mobile services).
- A3.13 We would use the pre-tax nominal weighted average cost of capital ('WACC') relevant to the BT Consumer business prevailing in the compliance period in order to project forward BT's ongoing costs and revenues.

Ongoing monthly revenues

- A3.14 Our guidance on how we would calculate the parameter "P" in SMP condition 14.2 is set out in the following subsection.

Monthly subscription revenues

- A3.15 Headline monthly subscription prices for the product tiers in the superfast broadband portfolio would be the prices applicable during the compliance period. We would make an adjustment to the headline monthly subscription prices to take into account loyalty / retention discounts which BT offers to certain customers. The level of the adjustments would be estimated by calculating the average percentage discount given on each product tier over the compliance period.

Line rental revenues

- A3.16 Line rental prices would be the line rental prices applicable during the compliance period. To take into account the different prices of standard line rental and annual line rental saver, the average line rental price would be estimated on the basis of the volumes of BT superfast broadband customers using each option over the compliance period.

Call revenues

A3.17 The call revenues earned from a superfast broadband customer would be sourced from BT's database³³ and would be based on the average revenues earned from superfast broadband customers over the previous six months. This would include revenues earned from package fees and out of package ('OOP') calls.

Out of package data usage revenues

A3.18 The OOP data usage revenues earned from a superfast broadband customer would be sourced from BT's system³⁴ and would use the average OOP data usage earned from superfast broadband customers over the previous six months.

Advertising revenues

A3.19 We would estimate the amount of advertising revenue earned from a superfast broadband customer by taking the amount recorded in the most recent annual Broadband management accounts and dividing by the average broadband customer base over the period the accounts cover and converting to a monthly figure.

TV revenues

A3.20 The headline monthly subscription prices for BT TV would be the prices applicable during the compliance period.

A3.21 We would estimate on-demand revenues by taking the total on-demand revenues reported in the most recent BT TV management accounts and dividing by the average number of TV subscriptions in the period covered by the accounts and converting to a monthly figure.

A3.22 We would adjust ongoing TV revenues downwards to account for those triple-play superfast broadband customers who cease taking BT TV before the 5-year superfast broadband ACL has concluded. We would reduce ongoing TV revenues by [X] per cent after the first [X] months of the ACL (i.e. assume that [X] per cent of triple-play customers continue to receive BT TV for the remaining [X] months of the ACL). We would revisit this figure in the event that more accurate evidence was available.

Ongoing monthly wholesale costs

A3.23 Our guidance on how we would calculate the parameter "W" in SMP condition 14.2 is set out in the following subsection.

A3.24 When assessing the VULA margin we would take the wholesale charges applicable during the compliance period (including volume discounts) published on the Openreach website.

³³ BT currently holds a database, known as [X], which collects the calling records of each of its customers' accounts and includes information on the pence per minute call charges and costs applicable in a given month (by call type, time of day and package).

³⁴ Currently known as [X].

Ongoing monthly retail costs

A3.25 Our guidance on how we would calculate the parameter “DC” in SMP condition 14.2 is set out in the following subsection.

Voice costs

A3.26 The call costs of serving a superfast broadband customer would be sourced from BT’s database³⁵ and would be based on the average calls made by superfast broadband customers over the previous six months. This would cover both in-package and OOP calls and would include product unit costs, payments to other licensed operators and the call costs will be based on the revenues for call types for which costs are not available in the BT’s database (e.g. 0844, 0870, premium rate and directory enquiry calls).

Network costs

A3.27 We would estimate network costs using the following approach:

$$\text{Network costs} = \text{Unit bandwidth cost} \times \text{Average capacity available to each end user}$$

A3.28 We would estimate BT’s unit bandwidth cost of supplying superfast broadband services on the basis of the WBC Bandwidth unit FAC in Market 3/Market B according to the regulatory financial system used to prepare the most recent annual RFS at the time of the assessment.

A3.29 Insofar as not already reflected in the RFS methodology, we would make a downward adjustment to accurately reflect the lower backhaul costs of superfast broadband services. The adjustment would be to remove the EAD element of the Eol unit charge in Market 3/B.

A3.30 Insofar as not already reflected in the RFS methodology, we would separately include the cost of MSILs and Cable Links used as transmission bearers. Transmission bearer costs would be calculated by multiplying the prices charged by BT Wholesale (for MSILs) and Openreach (for Cable Links) by the total number of links used to support broadband traffic.

A3.31 Insofar as not already reflected in the RFS methodology, we would separately include the cost of 21CN core transmission. We would calculate the amount of 21CN core transmission costs to include in the unit bandwidth cost by dividing the total FAC (including a return on mean capital employed) of the components that cover transmission on the 21CN core network (currently component CN906) by the total bandwidth volumes of the services that use 21CN core transmission.

A3.32 Insofar as not already reflected in the 2014/15 RFS methodology, we would include in the unit bandwidth cost an appropriate allocation of costs that had previously been allocated on a future benefits basis. We would also consider whether any equivalent adjustment should be made to BT’s 2013/14 RFS.

A3.33 If there are any future policy decisions affecting the calculation of BT’s unit bandwidth costs within its RFS, we would take these into account at the point from which any decisions are made.

³⁵ See footnote to paragraph A3.17.

- A3.34 We would use the average capacity available to each user for each product in the superfast broadband portfolio covering the same time period as the unit bandwidth cost data relates to.

Network rental overheads

- A3.35 To avoid the double-counting of selling, general and administration (SG&A) costs, we will not include a separate network rental overheads item in the VULA margin assessment.

Platform and portal fees

- A3.36 We would estimate the platform costs of serving a superfast broadband customer by allocating the amount recorded in the most recent annual Broadband management accounts in proportion to the total capacity used by customers on each superfast broadband product during the same period (and converting to a monthly figure).
- A3.37 We would estimate the portal fees of serving a superfast broadband customer by taking the amount recorded in the most recent annual Broadband management accounts and dividing by the average broadband customer base during the same period (and converting to a monthly figure).

Product feature costs

- A3.38 To calculate the cost of providing NetProtect Plus to superfast broadband customers, we would multiply licence charge [X] by the proportion of new superfast broadband customers who take up this product feature during the previous six months.
- A3.39 To calculate the cost of providing BT Cloud to superfast broadband customers, we would multiply the monthly licence fee by the proportion of new superfast broadband customers who take up this product feature during the previous six months.
- A3.40 While we include BT Wi-Fi in the VULA margin assessment, we would assume that the costs of the service are zero.
- A3.41 We would not include a separate item for SmartTalk costs.

Fibre development costs

- A3.42 To estimate the fibre development cost of acquiring a superfast broadband customer, we would take the development spend incurred before the launch of BT's superfast broadband products and divide by the total base of BT superfast broadband customers at the time of the assessment.

Ongoing SG&A costs

- A3.43 We would take each of the SG&A costs in Guidance Table 1 into account when assessing the VULA margin.

Guidance Table 1 – Ongoing SG&A costs

Cost item	Cost type	Description
Marketing – retention	Short-run variable	[X]
Customer services – ongoing	Short-run variable	[X]
Billing & bad debt	Short-run variable	[X]
Total Labour Cost – retention	Short-run variable	[X]
Total Labour Cost – management	Short-run variable	[X]
Development	Short-run variable	[X]
Marketing – non-campaign	Long-run variable/Fixed	[X]
Customer services – overheads	Long-run variable/Fixed	[X]
Accommodation	Long-run variable/Fixed	[X]
Other internal/external spend/recoveries	Long-run variable/Fixed	[X]
People related costs	Long-run variable/Fixed	[X]
IT spend	Long-run variable/Fixed	[X]
Marketing platform spend	Long-run variable/Fixed	[X]
TSO – direct, indirect and fixed	Long-run variable/Fixed	See explanation in paragraphs 6.168 to 6.200.
Miscellaneous costs	Long-run variable	

- A3.44 For short-run variable SG&A costs, we would use either the Customer or Product approaches depending on whether the cost item is principally driven by the number of customers being served or the number of products being sold.
- A3.45 For long-run variable or fixed and common SGA costs, we would use the Revenue approach to allocate costs to the superfast broadband portfolio.
- A3.46 Guidance Table 2 sets out the allocation approach we would apply to each ongoing SG&A cost item to allocate to the superfast broadband portfolio stack. Once we have calculated the appropriate allocation to the fibre portfolio, we would then calculate the ongoing monthly SG&A cost per superfast broadband customer by dividing the amount allocated by the average base of superfast broadband customers during the data period and converting this to a monthly figure.

Guidance Table 2: Allocation approaches applied to SG&A costs

SG&A cost category	Allocation method
Marketing – retention	Customer
Customer services - ongoing	BT breakdown
Billing & bad debt	Customer
Total Labour Cost – retention	Customer
Total Labour Cost - management	Product
Development	BT breakdown
Marketing – non-campaign	Revenue
Customer services - overheads	Revenue
Accommodation	Revenue
Other internal/external spend/recoveries	Revenue
People related costs	Revenue
IT spend	Revenue
Marketing platform spend	Revenue
Miscellaneous costs	Revenue
TSO – direct and indirect	Revenue
TSO Fixed	Revenue

Ongoing TV costs

- A3.47 We would estimate content and bandwidth costs of serving a triple-play superfast broadband customer by taking the amounts reported in the most recent BT TV management accounts for each BT TV package (Essentials package, Essentials Extra package) and dividing by the number of subscribers on each TV package during the period covered by the accounts. Average content and bandwidth costs per superfast broadband customer would be calculated by weighting on the basis of the number of customers acquired on each TV package in the compliance period.
- A3.48 We would estimate licences, customer premise equipment and fixed costs by taking the amounts reported in the most recent annual BT TV management accounts and dividing by the total TV subscribers during the period covered by the accounts.
- A3.49 We would adjust ongoing TV costs downwards to account for those triple-play superfast broadband customers who cease taking BT TV before the 5-year superfast broadband ACL has concluded. We would reduce ongoing TV costs by [x] per cent after the first [x] months of the ACL (i.e. assume that [x] per cent of triple-play customers continue to receive BT TV for the remaining [x] months of the ACL). We would revisit this figure in the event that more accurate evidence was available.

Treatment of BT Sport costs

Calculation of the net costs of BT Sport

- A3.50 We would use BT's actually incurred costs in the six months up to and including the compliance period as set out in its accounts for ongoing costs.
- A3.51 We would calculate BT's monthly costs for each sport right by converting its actual expenditure on each sports right into a constant monthly payment. We would do this by calculating the NPV of each sports rights contract over the entire contract

duration up until the next contract is available (based on each contract's start date) and convert this into an equivalent ongoing monthly cost equal to that NPV. We would use the pre-tax nominal WACC relevant to the BT Consumer business prevailing during the compliance period when carrying out this calculation.

- A3.52 We would then take an average of the monthly rights cost across the six months up to and including the compliance period.
- A3.53 We would include an additional [x]/month until March 2018 to reflect the initial launch costs of BT Sport. In the event that a more up to date estimate of the WACC is available, we would consider whether to update this figure.
- A3.54 We would likely adjust the total costs of BT Sport to smooth the UEFA launch costs in 2015/16. We would expect BT to provide suitable evidence on the level of these UEFA launch costs. We are unlikely to accept that the level of these costs is higher than [x] uplifted for CPI inflation since 2013/14.
- A3.55 We would likely spread the UEFA launch costs over five years by converting them into an equivalent ongoing monthly cost with a NPV equal to the cost incurred. In calculating that NPV we would likely assume that the discount rate is equal to the monthly pre-tax nominal WACC relevant to the BT Consumer business prevailing during the compliance period.
- A3.56 In assessing the direct revenues associated with BT Sport, we would take into account BT's monthly subscription revenues from residential subscribers and commercial premises as well as BT's monthly sublicensing revenues, advertising revenues and provisioning revenues.
- A3.57 We would use historical, audited data covering the six months up to and including the compliance period. We would assume that the direct revenues over the ACL are:
- at their level as at the end of that six months, where evidence shows that revenues were growing over those six months; and
 - at the historical average over those six months, where evidence shows that revenues were not growing over those six months.
- A3.58 In the absence of better information, we would smooth the provisioning revenues over a period of five years using the pre-tax nominal WACC relevant to the BT Consumer business prevailing in the compliance period. Would do this by converting them into constant ongoing monthly revenue with an equivalent NPV.

Allocating the net costs of BT Sport between to superfast broadband

- A3.59 When allocating the net costs of BT Sport to BT's superfast broadband portfolio, we would adopt the following two step approach.
- A3.60 First we would calculate the total number of BT residential broadband subscribers that (i) have an active BT Sport connection (i.e. they meet the requirements to watch these channels without taking further action); and (ii) pay a discounted price for BT Sport (relative to non-BT broadband subscribers) or receive it for 'free'. We would use whatever proportion of that total is accounted for by superfast broadband subscribers to determine the proportion of the net costs of BT Sport that are allocated to superfast broadband subscribers. Should BT change the terms under

which BT broadband customers can watch BT Sport in a way that we consider manipulates our measure of the take-up of BT Sport, we would reconsider our approach to calculating the proportion used to allocate the net costs of BT Sport.

A3.61 Second, we would calculate the net BT Sport cost per superfast broadband customer by dividing the net costs of BT Sport allocated to BT's superfast broadband portfolio by the total number of BT Consumer Infinity and Plusnet Fibre customers during the compliance period.

Upfront costs

A3.62 Our guidance on how we would calculate the parameter "UC" in SMP condition 14.2 is set out in the following subsection.

Connection costs

A3.63 We would take into account the costs of GEA Connection, GEA Managed Install, WLR Connection (or any future equivalents) and retail-level connection activities.

- GEA Connection charges and GEA Managed Install charges would be the charges applicable during the previous six months.
- To estimate the WLR Connection cost, we would firstly calculate the proportion of connections that incur Openreach charges based on the volumes of superfast broadband customers that were acquired from other operators in the previous six months. We would then calculate the average charge paid for these connections applicable during the previous six months on the basis of the split of acquired customers that required a new line and those that needed an existing line to be migrated using the data from BT's management information system.³⁶
- Retail-level activity costs would be estimated using the most recent data available from BT's regulatory financial reporting system.³⁷

SG&A costs (upfront acquisition)

A3.64 Guidance Table 3 sets out the upfront acquisition SG&A costs that we would take into account.

A3.65 For upfront acquisition SG&A costs, we would allocate on the basis of the number of superfast broadband customers acquired as a percentage of the total number of customers acquired by BT Consumer during the data period. For example, if a third of all BT Consumer customer acquisitions are for superfast broadband products, we would allocate a third of the total SG&A upfront acquisition costs to the superfast broadband portfolio cost stack. To calculate acquisition SG&A costs per superfast broadband customer, we would then divide this figure by the number of superfast broadband customers acquired during the data period.

³⁶ Currently known as [§<].

³⁷ [§<].

Guidance Table 3 –SG&A upfront acquisition costs

Cost item	Description
Marketing – acquisition	[REDACTED]
Affiliates / pay-per-click	[REDACTED]
Customer services - upfront	[REDACTED]

Sales costs

A3.66 We would source sales costs from BT's most recent system³⁸ which provides a breakdown of the various activities [REDACTED]. The sales costs to be allocated to the superfast broadband portfolio would be estimated by multiplying the proportion of staff time used to acquire superfast broadband customers by the total labour cost of such staff time. To calculate sales costs per superfast broadband customer acquired, we would then divide this figure by the number of superfast broadband customers acquired during the data period.

Voucher costs

A3.67 To calculate the cost of vouchers used for the purposes of acquiring a superfast broadband customer, we would take BT's spend on vouchers during the previous six months and divide this by the number of superfast broadband customers BT acquired during this period.

Discount costs

A3.68 We would treat several months' discount to the monthly subscription prices for newly acquired superfast broadband customers as an upfront cost by multiplying the amount of the discount by the number of months during which it applies. When assessing the VULA margin, we would use the discounts that applied to each product tier during the compliance period.

Router costs

A3.69 We would source the router cost related to the acquisition of a superfast broadband customer from the unit price as set out in the contract BT has agreed with its supplier. We would not include the cost of delivery of the router, as this would be covered by an equivalent postage and packaging charge received from new customers.

Event charges

A3.70 We would include the following event charges in the upfront acquisition cost stack.

- BT Expedites – a charge payable to Openreach to carry out the customer installation more quickly than is standard. We would calculate the BT Expedite cost of acquiring a superfast broadband customer by taking the spend on

³⁸ Currently known as [REDACTED].

expedites for superfast broadband products over the previous six months and divide this by the number of superfast broadband customers acquired during this period.

- BT Abortive Visits – a charge payable to Openreach when an engineer visit is unsuccessful due to not being able to access the customer’s property. We would calculate the BT Abortive Visits cost of acquiring a superfast broadband customer by multiplying the abortive visits charge by the percentage of superfast broadband customers acquired who had an abortive visit over the previous six months.
- Modify upstream order charges – a charge payable to Openreach to cancel, amend or modify a customer order. We would calculate the Modify upstream order charge cost of acquiring a superfast broadband customer by multiplying the modify order charge by the percentage of superfast broadband customers acquired who had an order cancelled or amended over the previous six months.
- SFI and TRC – charges payable to Openreach to cover the cost of engineers investigating and repairing faults on the Openreach network. We would calculate the average SFI and TRC costs incurred to serve a superfast broadband customer by (i) multiplying the total payments BT Consumer made to Openreach for these services during the previous six months by the percentage of BT Consumer lines that were taken by superfast broadband customers during this period; and (ii) dividing this figure by the average superfast broadband customer base over the previous six months and converting to a monthly figure.

Upfront TV costs

A3.71 We would take the following upfront TV costs into account when assessing the VULA margin.

- YouView box – superfast broadband customers who sign-up to BT TV are provided with a YouView set-top box at no extra charge. We would source the YouView box cost to be included in the superfast broadband portfolio cost stack from the contract BT has agreed with its supplier.
- Other connection costs – there are a number of connection costs BT incurs when connecting customers with its TV service, including [X]. We would estimate the other connection costs to include in the superfast broadband portfolio cost stack by taking the amount recorded in the most recent annual BT TV management accounts and dividing by the number of TV additions during the period covered by the accounts.

Upfront revenues

A3.72 Our guidance on how we would calculate the parameter ‘UR’ in SMP condition 14.2 is set out in the following subsection.

A3.73 We would use the connection revenues applicable during the compliance period.

Annex 4

Spreading certain BT Sport costs over five years

- A4.1 Adjusting the profile of cost recovery for BT Sport to reflect the future costs and revenues associated with BT Sport would rely on long term forecasts of how those costs and the revenues will change in future. As explained in Section 6, this has a number of drawbacks.
- A4.2 This Annex briefly discusses an alternative, simplified approach that avoids reliance on forecasts. However, as explained below, this alternative approach has undesirable features and is unlikely to be appropriate.
- A4.3 This alternative approach involves spreading the costs of assets, and particularly the costs of sports rights, evenly over a five-year period. Five years is the ACL that we will use in the VULA margin assessment. Under this simplified approach, the costs of key assets such as FAPL and UEFA rights would be spread over a longer period than the period used under Ofcom's current approach (the latter is based on the duration of each set of rights, e.g. three years for FAPL and UEFA rights). Such a simplified approach, unlike an approach that uses economic depreciation methods based for example, on the forecasts of the profitability of BT Sport over time, may avoid the drawbacks set out in Section 6. However, we consider that this simplified approach is unlikely to be appropriate.
- A4.4 As we illustrate in an example below, the cyclical nature of rights implies that such an approach could in fact lead to an uneven (oscillating) pattern of cost recovery over time even when the total cost of rights is flat.³⁹
- Suppose BT obtains the rights for three years for a total of £150. Suppose that a new rights auction is held every three years. For simplicity, suppose BT retains the same rights in each auction for the same amount. Spreading the costs of rights over their duration would imply that BT would need to recover £50 each year. For simplicity, assume there is no discounting.
 - However, now suppose that the total of £150 is spread over 5 years instead (referring to the ACL, for example). In this scenario BT would need to recover £30 per year from the customers acquired in the first three years. However, it would need to recover £60 per year from customers acquired in years 4 and 5 (i.e. £30 for the rights relating to years 4-6 plus £30 for the unrecovered costs of the rights to years 1-3). This falls to £30 in year 6, rises to £60 in years 7 and 8 and so on.

³⁹ As explained in Section 7, we recognise that there are circumstances where a new entrant could legitimately defer the recovery of certain costs. However the simplified approach set out in this Annex may not necessarily result in fewer costs needing to be recovered in the early years after entry and more costs needing to be recovered once the entrant is better established.

Figure A4.1 – Cost recovery profile when rights obtained every three years are spread over a five year period – illustration



A4.5 In summary, while the simplified approach described above avoids some of the problems associated with forecasts, it has undesirable features of its own. We thus do not consider that it is an appropriate way to assess the costs of BT Sport.

Annex 5

Sources of evidence

Introduction

A5.1 We have noted throughout this statement the evidence we have relied upon in relation to our findings and how we have relied upon that evidence. This Annex lists the main sources of evidence used. We also list all respondents to our consultations and to our various section 26 and 135 requests.

A5.2 While the Annex lists the main evidence we have relied upon, the list is for convenience only and is not intended to be exhaustive.

List of respondents to the call for inputs

A5.3 We published a Call for Inputs ('CFI') on 9 November 2012 setting out our proposed approach to this market review and seeking stakeholder input. This can be found at the following link: <http://stakeholders.ofcom.org.uk/consultations/fixed-access-markets/>.

A5.4 Of the 21 stakeholders that provided written responses to the CFI, the following provided significant comments on the VULA margin:

- British Telecommunications plc
- Cable and Wireless Worldwide plc/Vodafone
- TalkTalk Telecom Group plc
- Tesco Broadband
- Virgin Media Limited
- [X]

A5.5 We have published the non-confidential versions of all the responses from stakeholders. These can be found on our website:

<http://stakeholders.ofcom.org.uk/consultations/fixed-access-markets/?showResponses=true>.

List of respondents to the July 2013 FAMR Consultation

A5.6 We published a Consultation on 3 July 2013 setting out our proposed market definitions, SMP assessments and remedies. This can be found at the following link: <http://stakeholders.ofcom.org.uk/consultations/fixed-access-market-reviews/>.

A5.7 Of the 14 stakeholders that provided written responses to the consultation document, the following commented specifically on the VULA Margin:

- Sky plc
- British Telecommunications plc

- Cable and Wireless Worldwide plc/ Vodafone
- TalkTalk Telecom Group plc
- Virgin Media Limited
- [REDACTED]
- [REDACTED]

A5.8 We have published the non-confidential versions of the responses from all the stakeholders listed above. These can be found on our website: <http://stakeholders.ofcom.org.uk/consultations/fixed-access-market-reviews/?showResponses=true&pageNum=1#responses>.

List of respondents to the 2014 FAMR Consultation

A5.9 We published the consultation on 16 January 2014, setting out further proposals on remedies, including notifying price changes, compliance with VULA margin pricing regulation and charge controls for TRCs and SFIs. This can be found at the following link: <http://stakeholders.ofcom.org.uk/binaries/consultations/famr-2014/summary/famr-2014.pdf>.

A5.10 Of the eight stakeholders that provided written responses to the consultation document, the following commented specifically on the VULA Margin:

- Sky plc
- British Telecommunications plc
- TalkTalk Telecom Group plc
- Verizon UK Limited
- Virgin Media Limited
- Vodafone
- [REDACTED]

A5.11 We have published the non-confidential versions of the responses from all the stakeholders listed above. These can be found on our website: <http://stakeholders.ofcom.org.uk/consultations/famr-2014/?showResponses=true>.

List of respondents to the 2014 VULA Margin Consultation

A5.12 We published the consultation on 19 June 2014, setting out further proposals on our approach to the VULA margin. This can be found at the following link: <http://stakeholders.ofcom.org.uk/consultations/VULA-margin/>.

A5.13 Nine stakeholders provided written responses to the 2014 VULA Margin Consultation:

- Advisory Committee for Wales
- British Telecommunications plc
- Communication Workers Union
- KCOM Group
- Sky plc
- TalkTalk Telecom Group plc
- The BitCommons
- Vodafone
- [X]

A5.14 We have published the non-confidential versions of the responses from all the stakeholders listed above. These can be found on our website:

<http://stakeholders.ofcom.org.uk/consultations/VULA-margin/?showResponses=true>.

Information-gathering using statutory powers (s.135)

A5.15 During this market review, we have issued a series of notices under section 135 of the CA03 requiring various CPs to provide specified information as set out in the notice. These information requests are listed below.

A5.16 Information request of 3 February 2011 regarding lines and connections provided by CPs in the UK. This information is provided quarterly by all relevant CPs (including BT, Sky, TalkTalk, and Virgin Media).

A5.17 Information request of 26 November 2012 regarding forecasts for use of MPF; capital investment in NGA networks; standard and superfast broadband customer numbers; upgrade and switching information; GEA migration costs; superfast broadband strategy; superfast broadband demand forecasts; competitor analyses for superfast broadband; marketing spend on superfast services; usage information for SLU, PIA and FVA; plans for vectoring; ISDN30 customer details; and ISDN30, ISDN2 and IP-based telephony volume data. Request sent to and response received from:

- BT – response received in nine tranches on 3 December, 10 December, 17 December, 19 December, 21 December 2012, 4 January, 11 January, 15 January and 18 January 2013.

A5.18 Information request of 22 April 2013 regarding confirmation of information provided at meetings; clarification of revenue forecasts; clarification of customer take-up forecasts for superfast broadband; clarification of superfast broadband and standard broadband profitability forecasts; and retail and wholesale fibre strategies. Request sent to and response received from:

- BT – response received in two tranches on 2 May and 15 May 2013.
- A5.19 Information request of 7 June 2013 requesting the provision of information on customer churn previously provided by BT in response to the information request dated 10 May 2013 issued by Ofcom under section 26 of the Competition Act 1998. Request sent to and response received from:
- BT – response received in one tranche on 14 June 2013.
- A5.20 Information request of 23 October 2013 regarding churn data and superfast broadband subscribers. Request sent to and response received from:
- BT – response received in three tranches on 8 November, 4 December and 10 December 2013.
 - EE – response received in five tranches on 8 November, 22 November, 2 December, 3 December and 4 December 2013.
 - Sky – response received in four tranches on 14 November, 22 November, 3 December and 6 December 2013.
 - TalkTalk – response received in one tranche on 8 November 2013.
 - Virgin Media – response received in four tranches on 8 November, 29 November, 2 December and 5 December 2013.
- A5.21 Information request of 17 December 2013 regarding peak throughput per end-user and unit bandwidth costs. Request sent and response received from:
- Sky – response received in one tranche on 15 January 2014.
- A5.22 Information request of 12 February 2014 regarding actual and forecast numbers of UK passed by FTTP; forecasts for superfast broadband demand; usage information for SLU, PIA and FVA; strategy and plans for vectoring and impact on SLU; and ISDN30, ISDN2 and IP-based telephony volume data. Request sent to and response received from:
- BT – response received in five tranches on 27 February, 28 February, 4 March, 17 March and 19 March 2014
- A5.23 Information request of 12 February 2014 regarding forecasts for superfast broadband demand; strategy and plans for SLU and PIA; and ISDN30 and IP-based telephony volume data. Request sent to and response received from:
- TalkTalk – response received in one tranche on 26 February 2014;
 - Virgin Media – response received in two tranches on 26 February and 7 March 2014; and
 - Vodafone – response received in two tranches on 26 February and 28 February 2014.

- A5.24 Information request of 12 February 2014 regarding forecasts for superfast broadband demand; and strategy and plans for SLU and PIA. Request sent to and response received from:
- EE – response received in two tranches on 26 February and 28 April 2014.
- A5.25 Information request of 21 February 2014 regarding forecasts for superfast broadband demand. Request sent to and response received from:
- Sky – response received in three tranches on 14 March, 24 March, 26 March 2014.
- A5.26 Information request of 8 August 2014 regarding the number of VULA products supplied to each of BT's downstream businesses; the number of superfast products provided by Plusnet; differences between BT Consumer and BT Business superfast products; difference between Plusnet residential and business superfast products; and criteria for access to BT Sport. Request sent to and response received from:
- BT – response received in one tranche on 5 September 2014.
- A5.27 Information request of 15 August 2014 regarding out of package call revenue data. Request sent to and response received from:
- EE – response received in one tranche on 4 September 2014.
- A5.28 Information request of 18 August 2014 regarding out of package call revenue data. Request sent to and response received from:
- BT – response received in one tranche on 5 September 2014;
 - Sky – response received in one tranche on 12 September 2014;
 - TalkTalk – response received in one tranche on 8 September 2014; and
 - Virgin Media – response received in two tranches on 5 September and 11 September 2014.
- A5.29 Information request of 10 September 2014 regarding bandwidth costs, charges, cost allocations and volumes. Request sent to and response received from:
- BT – response received in two tranches on 26 September and 1 October 2014.
- A5.30 Information request of 7 October 2014 regarding average call package revenues and call termination costs. Request sent to and response received from:
- BT – response received in one tranche on 10 October 2014.
- A5.31 Information request of 7 October 2014 regarding BT Sports revenues and take-up; customer lifetime data; and superfast broadband take-up and demand forecasts. Request sent to and response received from:
- BT – response received in 5 tranches on 21 October, 23 October, 5 November, 13 November and 14 November 2014.

A5.32 Information request of 7 October 2014 regarding customer lifetimes and superfast broadband take-up and demand forecasts. Request sent to and response received from:

- EE – response received in one tranche on 21 October 2014; and
- Virgin Media – response received in one tranche on 21 October 2014.

A5.33 Information request of 7 October 2014 regarding customer lifetimes; bandwidth costs; and superfast broadband take-up and demand forecasts. Request sent to and response received from:

- Sky – response received in 2 tranches on 21 October and 24 October 2014; and
- TalkTalk – response received in 3 tranches on 23 October, 24 October, and 27 October 2014.

A5.34 Information request of 10 October 2014 regarding out of package call revenues. Request sent to and response received from:

- BT – response received in two tranches on 24 October and 7 November 2014.

A5.35 Information request of 27 October 2014 regarding bandwidth costs, charges, cost allocations and volumes. Request sent to and response received from:

- BT – response received in one tranche on 7 November 2014.

A5.36 Information request of 29 October 2014 regarding superfast broadband subscriber numbers. Request sent to and received from:

- BT – response received in one tranche on 12 November 2014.

A5.37 Information request of 10 November 2014 regarding the future profitability of BT Sport; bandwidth data; Plusnet superfast broadband subscribers; and BT Consumer superfast broadband subscribers. Request sent to and response received from:

- BT – response received in two tranches on 19 November and 25 November 2014.

A5.38 Information request of 27 November 2014 regarding the costs of providing WBC bandwidth services. Request sent to and response received from:

- BT – response received in one tranche on 12 December 2014.

Information-gathering using statutory powers (s.26)

A5.39 We sought CPs' consent to use, for the purposes of this consultation, extracts from a series of notices under section 26 of the CA03 in relation to the Superfast Broadband Competition Act Investigation⁴⁰ and in relation to the PayTV Competition

⁴⁰ Ofcom, CW/01103/03/13: *Complaint from TalkTalk Telecom Group Plc. against BT Group Plc. about alleged margin squeeze in superfast broadband pricing*, http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_01103/.

Act Investigation⁴¹ requiring various CPs to provide specified information as set out in the notice. These information requests are listed below.

- A5.40 Information request of 10 May 2013 as part of the Superfast Broadband Competition Act Investigation regarding BT's customer lifetimes. Request sent to and response received from:
- BT – response received in three tranches on 13 May, 17 May and 20 May 2013.
- A5.41 Information request of 3 June 2013 as part of the Superfast Broadband Competition Act Investigation regarding BT's downstream costs, including regulatory overhead, line rental and upfront costs. Request sent to and response received from:
- BT – response received in two tranches on 12 June and 13 June 2013.
- A5.42 Information request of 21 June 2013 as part of the Superfast Broadband Competition Act Investigation regarding BT's costs, including revenues, volumes, one-off net costs, management accounts and bi-annual rolling forecasts. Request sent to and response received from:
- BT – response received in three tranches on 24 June, 26 June, and 28 June 2013.
- A5.43 Information request of 5 July 2013 as part of the Superfast Broadband Competition Act Investigation regarding cost of BT Sports. Request sent to and response received from:
- BT – response received in six tranches on 8 July, 10 July, 12 July, 17 July, 22 July and 23 July 2013.
- A5.44 Information request of 24 July 2013 as part of the Superfast Broadband Competition Act Investigation regarding TalkTalk's bandwidth costs. Request sent to and response received from:
- TalkTalk – response received in one tranche on 29 July 2013.
- A5.45 Information request of 20 August 2013 as part of the Superfast Broadband Competition Act Investigation regarding BT's management accounts, follow up to previous information requests and BT Sport. Request sent to and response received from:
- BT – response received in seven tranches on 21 August, 23 August, 30 August, 10 September, 16 September, 17 September and 18 September 2013.
- A5.46 Information request of 28 August 2013 as part of the Pay TV Competition Act Investigation regarding sports rights costs and agreements; subscriber numbers; retail prices; and wholesale prices. Request sent to and response received from:
- Sky – response received in one tranche on 5 September 2013.

⁴¹ Ofcom, CW/01106/05/13: *Complaint from British Telecommunications plc against British Sky Broadcasting Group plc alleging abuse of a dominant position regarding the wholesale supply of Sky Sports 1 and 2*, http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01106/.

- A5.47 Information request of 1 October 2013 as part of the Superfast Broadband Competition Act Investigation regarding BT's superfast broadband offers, model, marketing, and SG & A and TSO charges. Request sent to and response received from:
- BT – response received in eight tranches on 2 October, 3 October, 4 October, 11 October, 14 October, 18 October, 21 October and 28 October 2013.
- A5.48 Information request of 27 November 2013 as part of the Superfast Broadband Competition Act Investigation regarding TSO costs' and BT Sport take-up, business case, volumes, cost and revenue forecasts. Request sent to and response received from:
- BT – response received in six tranches on 29 November, 6 December, 13 December, 16 December, 17 December and 20 December 2013.
- A5.49 Information request of 6 January 2014 as part of the Superfast Broadband Competition Act Investigation regarding BT's subscriber numbers. Request sent to and response received from:
- BT – response received in three tranches on 10 January, 13 January and 20 January 2014.
- A5.50 Information request of 14 February 2014 as part of the Superfast Broadband Competition Act Investigation regarding BT's broadband products and BT Sport revenues, costs, applicable VAT, business case and availability. Request sent to and response received from:
- BT – response received in six tranches on 18 February, 21 February, 28 February, 3 March, 4 March and 7 March 2014.
- A5.51 Information request of 17 April 2014 as part of the Superfast Broadband Competition Act Investigation regarding BT's bandwidth costs. Request sent to and response received from:
- BT – response received in two tranches on 24 April and 30 April 2014.

UK Legislation

- A5.52 The Competition Act 1998, <http://www.legislation.gov.uk/ukpga/1998/41/contents>.
- A5.53 The Enterprise Act 2002, <http://www.legislation.gov.uk/ukpga/2002/40/contents>.
- A5.54 The Communications Act 2003, as amended, <http://www.legislation.gov.uk/ukpga/2003/21/contents>.
- A5.55 Enterprise and Regulatory Reform Act 2013, <http://www.legislation.gov.uk/ukpga/2013/24/contents/enacted>.

Ofcom documents

- A5.56 *Direction Setting the Margin between IPStream and ATM interconnection Prices*, 26 August 2004,
http://stakeholders.ofcom.org.uk/binaries/consultations/adsl_price/statement/statement.pdf.
- A5.57 *Better policy making: Ofcom's approach to impact assessment*, 21 July 2005,
http://stakeholders.ofcom.org.uk/binaries/consultations/ia_guidelines/summary/condoc.pdf.
- A5.58 *The Communications Market 2006*, July 2006,
<http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cm06/>.
- A5.59 *CW/988/06/08: Complaint from THUS plc and Gamma Telecom Limited against BT about alleged margin squeeze in Wholesale Calls pricing*,
http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_988/final.pdf.
- A5.60 *Review of BT network charge controls*, 19 March 2009,
http://stakeholders.ofcom.org.uk/binaries/consultations/review_bt_ncc/summary/reviewbtntcc.pdf.
- A5.61 *Pay TV statement*, 31 March 2010,
http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/statement/paytv_statement.pdf.
- A5.62 *Review of the wholesale local access market: Statement on market definition, market power determinations and remedies*, 7 October 2010,
http://stakeholders.ofcom.org.uk/binaries/consultations/wla/statement/WLA_statement.pdf.
- A5.63 *Review of the wholesale broadband access markets: Statement on market definition, market power determinations and remedies*, 3 December 2010,
<http://stakeholders.ofcom.org.uk/binaries/consultations/wba/statement/wbastatement.pdf>.
- A5.64 *Wholesale mobile voice call termination statement*, 15 March 2011,
<http://stakeholders.ofcom.org.uk/consultations/mtr/statement>.
- A5.65 *Penalty guidelines*, 13 June 2011, <http://www.ofcom.org.uk/about/policies-and-guidelines/penalty-guidelines/>.
- A5.66 *WBA Charge Control. Charge Control framework for WBA Market 1 Services – Statement*, 20 July 2011,
<http://stakeholders.ofcom.org.uk/binaries/consultations/823069/statement/statement.pdf>.
- A5.67 *Charge Control Review for LLU and WLR services – Statement*, 7 March 2012.
<http://stakeholders.ofcom.org.uk/consultations/wlr-cc-2011/statement-march2012/>.

- A5.68 *Securing the Universal Postal Service. Decision on the new regulatory framework – Statement*, 27 March 2012,
<http://stakeholders.ofcom.org.uk/binaries/consultations/review-of-regulatory-conditions/statement/statement.pdf>.
- A5.69 *Enforcement Guidelines*, 25 July 2012
<http://stakeholders.ofcom.org.uk/consultations/draft-enforcement-guidelines/enforcement-guidelines/>.
- A5.70 *CW/01103/03/13: Complaint from TalkTalk Telecom Group plc against BT Group plc about alleged margin squeeze in superfast broadband pricing*,
http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_01103/.
- A5.71 *Annual Plan 2013/14*, 28 March 2013,
<http://www.ofcom.org.uk/files/2013/03/annplan1314.pdf>.
- A5.72 *Business connectivity market review. Review of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments – Statement*, 28 March 2013, <http://stakeholders.ofcom.org.uk/consultations/business-connectivity-mr/>.
- A5.73 *Ofcom Technology Tracker Wave 1 2013*, May 2013,
<http://www.ofcom.org.uk/static/research/Wave-1-2013-data-tables.zip>.
- A5.74 *CW/01106/05/13: Complaint from British Telecommunications plc (“BT”) against British Sky Broadcasting Group plc (“Sky”) alleging abuse of a dominant position regarding the wholesale supply of Sky Sports 1 and 2 (“SS1&2”)*,
http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01106/.
- A5.75 *Fixed Access Market Reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Consultation on the proposed markets, market power determinations and remedies*, 3 July 2013
<http://stakeholders.ofcom.org.uk/binaries/consultations/fixed-access-market-reviews/summary/fixed-access-markets.pdf>.
- A5.76 *Review of the wholesale broadband access markets – consultation on market definition, market power determinations and remedies*, 11 July 2013,
http://stakeholders.ofcom.org.uk/binaries/consultations/review-wba-markets/summary/WBA_July_2013.pdf.
- A5.77 *Fixed access market reviews: Approach to setting LLU and WLR Charge Controls – Consultation*, 11 July 2013, Updated 20 August 2013,
http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-13/summary/LLU_WLR_CC_2014.pdf.
- A5.78 *Review of the fixed narrowband services markets: Statement on the proposed markets, market power determinations and remedies*, 26 September 2013,
http://stakeholders.ofcom.org.uk/binaries/consultations/nmr-2013/statement/Final_Statement.pdf.
- A5.79 *Communications Market Report 2013*, 1 August 2013,
http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/2013_UK_CMV.pdf.

- A5.80 *2014 Communications Market Report*, 7 August 2014, http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CMV.pdf.
- A5.81 *Fixed access market reviews: Openreach quality of service and approach to setting LLU and WLR Charge Controls – Consultation*, 19 December 2013, <http://stakeholders.ofcom.org.uk/binaries/consultations/fixed-access-market-llu-wlr-charge-controls/summary/famr-2013.pdf>.
- A5.82 *Regulatory Financial Reporting: a review – Consultation*, 20 December 2013, <http://stakeholders.ofcom.org.uk/binaries/consultations/bt-transparency/summary/BTRFS.pdf>.
- A5.83 *The Consumer Experience of 2013*, January 2014, http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-13/TCE_Research_final.pdf.
- A5.84 *Fixed access market reviews – further consultation on notification periods, compliance with requirements on the VULA margin, and approach to pricing for TRCs and SFIs*, 16 January 2014, <http://stakeholders.ofcom.org.uk/binaries/consultations/famr-2014/summary/famr-2014.pdf>.
- A5.85 *Annual Plan 2014/15*, 31 March 2014, http://www.ofcom.org.uk/files/2014/03/Annual_Plan_1415.pdf.
- A5.86 *Ofcom Technology Tracker data tables Wave 1 2014*, April 2014, <http://stakeholders.ofcom.org.uk/binaries/research/statistics/2014apr/2014w1.pdf>.
- A5.87 *Review of Pay TV wholesale must-offer*, 16 April 2014, <http://stakeholders.ofcom.org.uk/broadcasting/reviews-investigations/pay-tv/pay-tv-wholesale/>.
- A5.88 *Review of the wholesale broadband access markets – draft statement on market definition, market power determinations and remedies*, 19 May 2014, <http://stakeholders.ofcom.org.uk/binaries/consultations/review-wba-markets/statement/WBA-draft-statement.pdf>.
- A5.89 *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Draft statement on the markets, market power determinations and remedies*, 19 May 2014, <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/draftstatement/>.
- A5.90 *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN 30 Volume 2: Draft statement on LLU and WLR charge controls*, 19 May 2014, <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/draftstatement/>.
- A5.91 *Fixed access market reviews: Approach to the VULA margin – Consultation*, 19 June 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/summary/VULA_Margin_Consultation.pdf.

- A5.92 *Review of the wholesale broadband access markets: Final statement on market definition, market power determinations and remedies, 26 June 2014,* <http://stakeholders.ofcom.org.uk/consultations/review-wba-markets/statement/>.
- A5.93 *Review of the wholesale broadband access markets: Final statement on market definition, market power determinations and remedies, Statement Annexes, 26 June 2014,* <http://stakeholders.ofcom.org.uk/consultations/review-wba-markets/statement/>.
- A5.94 *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Statement on the markets, market power determinations and remedies, 26 June 2014,* <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/>.
- A5.95 *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN 30 Volume 2: LLU and WLR charge controls, 26 June 2014,* <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/>.
- A5.96 *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Annexes, 26 June 2014,* <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/>.
- A5.97 *Communications Market Report 2014, 7 August 2014,* http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CM.pdf.
- A5.98 *CW/01103/03/13: Complaint from TalkTalk Telecom Group plc against BT Group plc about alleged margin squeeze in superfast broadband pricing – Decision, 21 October 2014,* http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_01103/CW-01103-03-13.pdf.
- A5.99 *Communication services and SMEs: Call for inputs, 6 November 2014,* http://stakeholders.ofcom.org.uk/binaries/consultations/smes-cfi/summary/SMEs_CFI.pdf.
- A5.100 *Telecoms data updates, Q1 2005 to Q2 2014,* <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/tables/>.
- A5.101 *Quality of Customer Service 2014 report, December 2014.* <http://stakeholders.ofcom.org.uk/market-data-research/other/cross-media/quality-of-customer-service-annual-reports/2014/>.
- A5.102 *Infrastructure Report 2014, 8 December 2014,* <http://stakeholders.ofcom.org.uk/binaries/research/infrastructure/2014/infrastructure-14.pdf>.
- A5.103 *Directions for Regulatory Financial Reporting – consultation, 10 December 2014,* <http://stakeholders.ofcom.org.uk/binaries/consultations/financial-reporting/summary/Consultation.pdf>.

- A5.104 *Review of the pay TV wholesale must-offer obligation*, 19 December 2014, <http://stakeholders.ofcom.org.uk/binaries/consultations/wholesale-must-offer/summary/condoc.pdf>.
- A5.105 *Fixed access market reviews: Approach to the VULA margin – draft statement*, 15 January 2015, <http://stakeholders.ofcom.org.uk/consultations/VULA-margin/draft-statement/>.

EC documents

- A5.106 Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities, www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2002:108:0007:0020:EN:PDF.
- A5.107 *Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)*, 11 July 2002, <http://www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2002:165:0006:0031:EN:PDF>.
- A5.108 Case COMP/38.784 Wanadoo España v Telefónica (2007), http://ec.europa.eu/competition/antitrust/cases/dec_docs/38784/38784_311_10.pdf.
- A5.109 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services, as amended by Directive 2009/140/EC and Regulation 544/2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0037:0069:EN:PDF>.
- A5.110 *Communication from the Commission – Guidance on the Commission’s enforcement priorities in applying Article 82 of the EC Treaty (now Article 102 of the Treaty on the Functioning of the European Union) to abusive exclusionary conduct by dominant undertakings (2009/C 45/02)*, 24 February 2009, <http://www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2009:045:0007:0020:EN:PDF>.
- A5.111 *Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office*, 25 November 2009, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0001:0010:EN:PDF>.
- A5.112 *Commission recommendation of 20 September 2010 on regulated access to Next Generation Access Networks (NGA) OJ L251/35*, 20 September 2010, <http://www.eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2010:251:0035:0048:EN:PDF>.
- A5.113 *Commission recommendation on consistent non-discrimination obligations and costing methodologies to promote competition and enhance the broadband investment environment - C(2013) 5761*, 11 September 2013, http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=2735.
- A5.114 *Digital Agenda for Europe*, <http://www.ec.europa.eu/digital-agenda/about-our-goals>.

- A5.115 Article 102(a); Case C-280/08 *Deutsche Telekom AG v Commission* [2010] 5 CMLR 27.
- A5.116 Case C-52/09 *Konkurrensverket v TeliaSonera Sverige AB* [2011] 4 CMLR 982.
- A5.117 *Commission Decision concerning Case UK/2015/1692: Wholesale local access at a fixed location in the United Kingdom — Remedies*, 13 February 2015, https://circabc.europa.eu/d/d/workspace/SpacesStore/afb551df-607c-4c9d-88de-aced06c9c2bf/UK-2015-1692_Adopted_EN_PUBLIC.pdf.

Other documents

Advisory Committee for Wales

- A5.118 *ACW Response to the 2014 VULA Margin Consultation*, 28 August 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/Advisory_Committee_for_Wales.pdf.

BEREC

- A5.119 BoR (12) 127, *BEREC common position on best practice in remedies on the market for wholesale (physical) network infrastructure access (including shared or fully unbundled access) at a fixed location imposed as a consequence of a position of significant market power in the relevant market*, 8 December 2012, [http://www.berec.europa.eu/files/document_register_store/2012/12/2012120816362_8_BoR_\(12\)_127_BEREC_COMMON_POSITION_ON_BEST_PRACTICE_IN_REMEDIES_ON_THE_MARKET_FOR_WHOLESALE.pdf](http://www.berec.europa.eu/files/document_register_store/2012/12/2012120816362_8_BoR_(12)_127_BEREC_COMMON_POSITION_ON_BEST_PRACTICE_IN_REMEDIES_ON_THE_MARKET_FOR_WHOLESALE.pdf).
- A5.120 BoR (12) 128, *BEREC common position on best practice in remedies on the market for wholesale broadband access (including bitstream access) imposed as a consequence of a position of significant market power in the relevant market*, 8 December 2012, [http://www.berec.europa.eu/files/document_register_store/2012/12/BoR_\(12\)_128_CP_WBA.pdf](http://www.berec.europa.eu/files/document_register_store/2012/12/BoR_(12)_128_CP_WBA.pdf).
- A5.121 BoR (14) 190, *Guidance on the regulatory accounting approach to the economic replicability test (i.e. ex-ante/sector specific margin squeeze tests)*, 5 December 2014, http://berec.europa.eu/eng/document_register/subject_matter/berec/regulatory_best_practices/guidelines/4782-berec-guidance-on-the-regulatory-accounting-approach-to-the-economic-replicability-test-ie-ex-antesector-specific-margin-squeeze-tests.

BT

- A5.122 *Regulatory Financial Statements (RFS)*, <http://www.btplc.com/thegroup/RegulatoryandPublicaffairs/Financialstatements/index.htm>.
- A5.123 *BT Response to FAMR Call for Inputs*, 8 January 2013, <http://stakeholders.ofcom.org.uk/binaries/consultations/fixed-access-markets/responses/BT.pdf>.
- A5.124 *BT to create new businesses to replace BT Retail*, 30 July 2013, <http://www.btPlc.com/news/articles/showarticle.cfm?articleid=%7B68268030-3b15-4603-a6c8-7f2437114344%7D>.

- A5.125 *Detailed Attribution Methods (DAM) 2013*, 31 July 2013, <http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2013/DAM2013.pdf>.
- A5.126 *Submission to Ofcom by BT Group plc in respect of CW/01103/03/13 complaint from Talk Talk Telecom Group plc against BT Group plc about alleged margin squeeze in superfast broadband pricing*, 22 November 2013.
- A5.127 *BT Group results for the third quarter and nine months to 31 December 2013*, 31 January 2013, <http://www.btplc.com/News/ResultsPDF/q314-release.pdf>.
- A5.128 *BT products Terms and Conditions*, 23 January 2014, http://www.productsandservices.bt.com/consumerProducts/dynamicmodules/pagecontent/footer/pageContentFooterPopup.jsp?pagecontentfooter_popupid=13408&scid=con_FURL_broadbandterms.
- A5.129 *Results for the Third Quarter and Nine Months to 31 December 2013*, 31 January 2014, <http://www.btPlc.com/News/ResultsPDF/q314-release.pdf>.
- A5.130 *BT Group Results for the fourth quarter and year to 31 March 2014*, 8 May 2014, <http://www.btPlc.com/News/ResultsPDF/q414-release.pdf>.
- A5.131 *Results for the first quarter to 30 June 2014*, 31 July 2014, <http://www.btplc.com/News/ResultsPDF/q114-release.pdf>.
- A5.132 *BT Response to the 2014 VULA Margin Consultation*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group.pdf.
- A5.133 *BT Response to the 2014 VULA Margin Consultation – Annex B: The applicable legal framework*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group_-_Annex_B_-_The_applicable_legal_framework.pdf.
- A5.134 *BT Response to the 2014 VULA Margin Consultation – Annex C: Compass Lexecon report on the appropriate treatment of BT Sport*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group_Annex_C_Compass_Lexecon_The_appropriate_economic_treatment_of_BT_Sport.pdf.
- A5.135 *BT Response to the 2014 VULA Margin Consultation – Annex D: Margin squeeze test implementation by other NRAs in the EU*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group_-_Annex_D_-_Margin_squeeze_tests_by_other_NRAs.pdf.
- A5.136 *BT – Ofcom meeting: VULA margin*, presented at meeting between BT and Ofcom on 20 October 2014.
- A5.137 *BT Comments on responses to the 2014 VULA Margin Consultation*, 23 October 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group_comments_on_stakeholder_responses.pdf.
- A5.138 Letter from Mark Shurmer (BT) to David Clarkson (Ofcom) dated 29 October 2014.

- A5.139 *Results for the second quarter and half year to 30 September 2014*, 30 October 2014, <http://www.btplc.com/News/ResultsPDF/q214-release.pdf>.
- A5.140 *Compass Lexecon additional submission on the treatment of BT Sport*, 7 November 2014, [http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group-Compass Lexecon additional submission on the treatment of BT Sport.pdf](http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/BT_Group-Compass_Lexecon_additional_submission_on_the_treatment_of_BT_Sport.pdf).
- A5.141 Email from Gavin Patterson (BT) to Ed Richards (Ofcom), dated 16 November 2014, on fibre competition.
- A5.142 *Statement of change in Allocations for 21CN Costs in the 2013/4 Regulatory Financial Statements*, <http://www.btplc.com/Thegroup/RegulatoryandPublicaffairs/Financialstatements/2014/StatementofChangeinAllocationsfor21CNCosts.pdf>.
- A5.143 [✂]
- A5.144 *Ofcom's approach to VULA margin*, presented at meeting between BT and Ofcom on 9 December 2014
- A5.145 Letter from James Tickel (BT) to David Clarkson of 25 February 2015.
- A5.146 *VULA margin regulation – BT Sport cost issues*, presented at meeting between BT and Ofcom on 26 February 2015.
- A5.147 *BT enters into exclusive negotiations to acquire EE*, 15 December 2014, <https://www.btplc.com/News/Articles/ShowArticle.cfm?ArticleID=C166A667-9C87-4128-8A2C-03E2DD8E017C>.
- A5.148 BT Sport terms and conditions, <http://www.productsandservices.bt.com/consumerProducts/displayTopic.do?topicId=35950&pageTitle=Sport+Terms+and+Conditions>.
- A5.149 *How to get BT Sport with BT*, http://bt.custhelp.com/app/answers/detail/a_id/43272/related/1/session/L2F2LzEvdGltZS8xMzkyMTM4NTgxL3NpZC8xZmttcUdNbA%3D%3D.
- A5.150 *How to Get BT Sport with Plusnet*, <http://www.plus.net/tv/btsport/>.
- A5.151 *We're making changes to your BT Sport subscription*, http://assets.bt.com/v1/btmail/_2014/Sport/Esspresso/2014-07-21/cell7/bt_esspresso_cell7_online.html.

CityFibre

- A5.152 *Sky and TalkTalk partner with CityFibre to launch ultra-fast broadband*, 15 April 2014, <http://www.cityfibre.com/news/2014/4/14/sky-and-talktalk-partner-with-cityfibre-to-launch-ultra-fast-broadband>.
- A5.153 *Gigabit internet speeds to revolutionise business in Kirklees*, 5 November 2014, <http://www.cityfibre.com/news/2014/11/5/gigabit-internet-speeds-to-revolutionise-business-in-kirklees>.

Communication Workers Union

- A5.154 *CWU Response to the 2014 VULA Margin Consultation*, 28 August 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/Communication_Workers_Union.pdf.

Competition Appeal Tribunal

- A5.155 *British Telecommunications PLC v Office of Communications* [2011] CAT 5, <http://www.catribunal.org.uk/237-5136/1146-3-3-09-British-Telecommunications-Plc-.html>.
- A5.156 *Case 1152/8/3/10 (IR) British Sky Broadcasting Limited v Office of Communications (Interim relief)*, 5 November 2014, <http://www.catribunal.org.uk/238-8679/Judgment-Application-to-Vary-Interim-Relief-Order.html>.

Court of Appeal

- A5.157 *Hutchinson 3G (UK) Limited v Office of Communications (Mobile Call Termination)* [2008] CAT 11, http://www.catribunal.org.uk/files/Jdg_CAT11_1083_H3G_200508.pdf.
- A5.158 *Hutchinson 3G v Office of Communications (Mobile Call Termination)* [2009] EWCA Civ 683, http://www.catribunal.org.uk/files/1083_Hutchison_CoA_160709.pdf.
- A5.159 *British Telecommunications plc v Office of Communications* [2012] EWCA Civ 1051, http://www.catribunal.org.uk/files/1146_BT_Judgment_of_the_Court_of_Appeal_27_0712.pdf.
- A5.160 *TalkTalk Telecom Group plc (Wholesale Broadband Access Charge Control) v Office of Communications* [2013] EWCA Civ 1318, <http://www.catribunal.org.uk/238-7275/1186-3-3-11-TalkTalk-Telecom-Group-plc-Wholesale-Broadband-Access-Charge-Control.html>.

Department for Culture, Media and Sport

- A5.161 *Stimulating private sector investment to achieve a transformation in broadband in the UK by 2015*, 27 February 2013, <https://www.gov.uk/government/policies/transforming-uk-broadband>.

EE

- A5.162 *Groundbreaking new TV service now available from EE stores*, 6 November 2014, <http://ee.co.uk/our-company/newsroom/2014/11/06/groundbreaking-new-ee-tv-service-now-available-from-ee-stores>.

European Regulators Group

- A5.163 *ERG (09) 07, Report on the Discussion on the application of margin squeeze tests to bundles*, 7 March 2009, http://berec.europa.eu/doc/publications/2009/erg_09_07_report_on_the_discussion_of_the_application_of_margin_squeeze_tests_to_bundles.pdf.

House of Commons

- A5.164 Committee of Public Accounts, *The rural broadband programme – Twenty-fourth Report of Session 2013–14: Volume 1*, 11 September 2013, <http://www.publications.parliament.uk/pa/cm201314/cmselect/cmpubacc/474/474.pdf>.

Hyperoptic

- A5.165 *Hyperoptic adds four new hyper-cities and doubles footprint in six months*, 6 October 2014, https://hyperoptic.com/web/guest/press?p_p_id=press_WAR_pressportlet&p_p_life_cycle=0&p_p_state=normal&p_p_mode=view&p_p_col_id=column-1&p_p_col_count=1&press_WAR_pressportlet_render=article&press_WAR_pressportlet_urlTitle=hyperoptic-adds-four-new-hyper-cities-and-doubles-footprint-in-six-months.

ISPreview

- A5.166 *BT unveil new £5.99 FTTC superfast broadband, TV and Netflix bundle*, 10 November 2014, <http://www.ispreview.co.uk/index.php/2014/11/bt-unveil-new-5-99-fttc-superfast-broadband-tv-netflix-bundle.html>.

KCOM

- A5.167 *KCOM Response to the 2014 VULA Margin Consultation*, 28 August 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/KCOM_Group.pdf.

Openreach

- A5.168 *Local Loop Unbundling Pricing*, <http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=totid5BwFmkf9vLcBITRyZF9loRxWlBlKK6V7YWmiYAlMnGHsqdC0vzO163bJmh34D91D7M0q8u%2F%0AIIStlFAKw%3D%3D>.
- A5.169 *Generic Ethernet Access (FTTC) prices*, <http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=yzq%2FQaGYa3hVgsB2ZYfjHxzflSuq3px%2FWFtgATP2kPRZ6rNZujnCs99NblKJZPD9hXYmiiixH6wr%0ACQm97GZMyQ%3D%3D>.
- A5.170 *MPF prices*, <http://www.openreach.co.uk/orpg/home/products/pricing/loadProductPriceDetails.do?data=totid5BwFmkf9vLcBITRyZF9loRxWlBlKK6V7YWmiYAlMnGHsqdC0vzO163bJmh34D91D7M0q8u%2F%0AIIStlFAKw%3D%3D>.

Sky

- A5.171 *Sky Sports launches new channel dedicated to European football*, 10 June 2014, <http://corporate.sky.com/media-centre/news-page/2014/sky-sports-launches-new-channel-dedicated-to-european-football>.
- A5.172 *Sky Response to the 2014 VULA Margin Consultation*, 28 August 2014, <http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/Sky.pdf>.

A5.173 *BSkyB PLC Unaudited results for the three months ended 30 September 2014*, <http://corporate.sky.com/documents/investors/results/2015/q1-press-release.pdf>.

TalkTalk

- A5.174 *Interim results 2013/14 – Presentation*, 12 November 2013, <http://www.talktalkgroup.com/~media/Files/T/TalkTalk-Group/pdfs/presentations/2013/interim-results-presentation-2013-14-v2.pdf>.
- A5.175 [§<]
- A5.176 *Preliminary results Q1 2014*, 15 May 2014, <http://www.talktalkgroup.com/~media/Files/T/TalkTalk-Group/pdfs/presentations/2014/full-year-preliminary-results-presentation-13-14.pdf>.
- A5.177 *Interim Management Statement for the 3 months to 30 June 2014 (Q1 FY15)*, 23 July 2014, <http://www.talktalkgroup.com/press/press-releases/2014/q1-ims-2014.aspx>.
- A5.178 *Margin squeeze regulation of SFBB products*, presented at meeting between TalkTalk and Ofcom on 26 July 2014.
- A5.179 *TalkTalk Response to the 2014 VULA Margin Consultation*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group.pdf.
- A5.180 *TalkTalk Response to the 2014 VULA Margin Consultation – Frontier Economics Report on Ofcom’s VULA margin test*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group_-_Annex_-_Frontier_Economics_-_Report_on_Ofcom's_VULA_margin_test.pdf.
- A5.181 *IpsosMori survey on BT Sport customers – data tables*, 5 September 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group_-_Annex_-_Ipsos_MORI_Survey_data.xlsx.
- A5.182 *TalkTalk comments on BT’s response to the 2014 VULA Margin Consultation*, 17 October 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group_Comments_on_BTs_response.pdf.
- A5.183 *TalkTalk October 2014 Frontier Economics report*, 22 October 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group_Frontier_Economics_report_on_BTs_response.pdf.
- A5.184 *Response on further issues*, 28 October 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/TalkTalk_Group_Response_on_further_issues.pdf.
- A5.185 *TalkTalk Interim Results for the 6 months to 30 September 2014*, 11 November 2014, <http://www.talktalkgroup.com/~media/Files/T/TalkTalk-Group/pdfs/reports/2014/h1-results-11-11-2014.pdf>.

The Bit Commons

- A5.186 *The Bit Commons Response to the 2014 VULA Margin Consultation*, 9 July 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/The_Bit_Commons.pdf.

USwitch

- A5.187 *Sky offers 2 years' free unlimited broadband to Sky Sports customers*, June 2014, http://www.uswitch.com/broadband/news/2014/06/sky_offers_2_years_free_unlimited_broadband_to_sky_sports_customers/.

Virgin Media

- A5.188 *New Virgin Media broadband twice as fast as anyone else*, 11 November 2013, <http://about.virginmedia.com/press-release/9409/new-virgin-media-broadband-twice-as-fast-as-anyone-else>.
- A5.189 *Virgin Media launches broadband twice as fast as the rest*, 28 February 2014, <http://about.virginmedia.com/press-release/9418/virgin-media-launches-broadband-twice-as-fast-as-the-rest>.
- A5.190 *Q2 2014 Selected Operating and Financial Results*, 6 August 2014, <http://investors.virginmedia.com/phoenix.zhtml?c=135485&p=irol-financial-results>.

Vodafone

- A5.191 *Vodafone Response to the 2014 VULA Margin Consultation*, 5 September 2014, <http://stakeholders.ofcom.org.uk/binaries/consultations/VULA-margin/responses/Vodafone.pdf>.

Confidential respondent [REDACTED]

- A5.192 [REDACTED]

Annex 6

Glossary

Access Directive - one of the directives comprising the European Regulatory Framework. It deals with setting the basic rules, procedures and principles for imposing access and interconnection obligations on undertakings with significant market power.

Average Customer Lifetime (ACL) – the average length of time a customer subscribes to an operator for the supply of broadband services. We calculate this figure using historical churn rates.

Average Revenue Per User (ARPU) – average revenue generated per user, usually derived by dividing the total revenue by the number of subscribers.

Asynchronous Transfer Mode (ATM) – a network technology that uses asynchronous time division multiplexing techniques and which supports data transmissions at up to 622Mbit/s.

Aviva Premiership Rugby – a professional league competition for rugby union football clubs in the top division of the English rugby union system. The competition is currently known as Aviva Premiership Rugby because of the league's sponsorship by Aviva.

Broadband – a service or connection which is capable of supporting always-on services which provide the end user with high data transfer speeds.

Broadband Remote Access Server (BRAS) – a server that routes traffic to and from a broadband remote access device on an internet service provider's network.

BT – BT Group plc and any subsidiary or holding company thereof including, for the sake of doubt, British Telecommunications plc and BT Wholesale.

BT Business – retail division of BT providing retail services, including broadband, to business and corporate customers.

BT Consumer – retail division of BT providing retail services, including broadband, to residential customers.

BT Sport – a package of premium sport channels offered by BT, including BT Sport 1, BT Sport 2, ESPN, BT Sport 1 HD, BT Sport 2 HD and ESPN HD.

BT TV – a subscription IPTV service offered by BT. BT TV is available over the DTT platform using a BT Vision set top box. It is also available over a combination of DTT and Multicast services, using the YouView platform.

BT Wholesale – the wholesale division of BT that runs BT's network services and sells interconnection products to CPs.

Chapter II prohibition – a prohibition, under section 18 of the Competition Act 1998, on conduct on the part of one or more undertakings that amounts to the abuse of a dominant position in a market and that may affect trade within the UK or any part of the UK.

Common costs – costs which are shared by all the services supplied by a firm.

Common Regulatory Framework (CRF) – 2002 EU legislation, subsequently amended, comprising Directives commonly known as the Framework Directive, the Authorisation Directive, the Access Directive, the Universal Service Directive and the Privacy Directive.

Communications Act 2003 (CA03) – the Act setting out Ofcom’s functions, powers and duties with regard to, amongst other things, electronic communications.

Communications provider (CP) – a person who provides an electronic communications network or an electronic communications service.

Competition Act 1998 (CA98) – the Act prohibiting agreements preventing, restricting or distorting competition and prohibiting the abuse of a dominant position.

Consumer price index (CPI) – the official measure of inflation of consumer prices in the UK.

Cost-volume elasticity (CVE) – cost-volume elasticities measure the percentage change in costs for a given change in volumes.

Current cost accounting (CCA) – an accounting convention, where assets are valued and depreciated according to their current replacement cost while maintaining the operating or financial capital of the business entity.

Current generation access (CGA) – access over the copper based network which supports only lower download speeds, typically up to 24Mbit/s.

Customer premises equipment (CPE) – any terminal and associated equipment that is connected to an electronic communications service at customers’ premises. Equipment is often provided and connected by consumers and includes for example, telephones, answering machines, and modems.

Digital subscriber line (DSL) – a family of technologies generically referred to as Digital Subscriber Line (xDSL), capable of transforming ordinary local loops into high-speed digital lines, capable of supporting advanced services such as fast Internet access and video-on-demand. ADSL (Asymmetric Digital Subscriber Line), HDSL (High bit rate Digital Subscriber Line) and VDSL (Very high data rate Digital Subscriber Line) are all variants of xDSL.

Digital subscriber loop access multiplexer (DSLAM) – apparatus used to terminate DSL enabled local loops, which comprises a bank of DSL modems and a multiplexer which combines many local loops into one data path.

Digital terrestrial television (DTT) – free-to-air digital television broadcasts.

Discounted cash flow (DCF) – a method of valuing a project, company, or asset using the concepts of the time value of money.

Dual-play – retail bundles that include voice telephony and broadband.

Equally efficient operator (EEO) – an operator with the same costs and revenues as the chosen benchmark (in this case BT).

Equivalence of Inputs (Eol) – the concept established by BT's undertakings in which BT provides, in respect of a particular product or service, the same product or service to all CPs (including BT) on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes, and includes the provision to all CPs (including BT) of the same commercial information about such products, services, systems and processes.

Ethernet Access Direct (EAD) – a wholesale Ethernet product supplied by BT which offers permanently connected, point-to-point high speed data circuits that provide a secure and un-contended access service for CPs. EAD is a next generation network compatible service designed to complement Openreach's Ethernet Backhaul Direct (EBD) and Bulk Transport Link (BTL) products.

Ethernet Backhaul Direct (EBD) – a wholesale Ethernet product supplied by BT which offers permanently connected, point-to-point high bandwidth data circuits that provide a secure and un-contended backhaul service for CPs.

ESPN UK – originally an abbreviation for Entertainment and Sports Programming Network. ESPN Inc. is a US-based global cable and satellite television channel. ESPN UK is a sports television channel in the UK and Ireland owned by BT Group under licence from American sports broadcaster ESPN Inc. The channel was operated by ESPN from 3 August 2009 to 31 July 2013, when it was sold to BT and became part of its BT Sport package focusing on international sporting events, especially American sports. Programming is available in standard definition and high definition formats.

FA Cup – Football Association Cup. The FA runs numerous competitions, the most famous of which is the FA Cup.

FA Premier League (FAPL) – the top tier English professional league for men's association football clubs.

Fair, reasonable and non-discriminatory (FRAND) condition – we understand that, where BT refers to a FRAND condition, it is referring to the regulatory obligations imposed on BT in the 2014 FAMR Statement which require it to provide network access on fair and reasonable terms, conditions and (in certain cases) charges (Condition 1) and to not unduly discriminate against other operators (Condition 4).

Fibre-to-the-cabinet (FTTC) – an access network structure in which the optical fibre extends from the exchange to a flexibility point in the BT access network known as a cabinet. The street cabinet is usually located only a few hundred metres from the subscriber's premises. The remaining part of the access network from the cabinet to the customer is usually copper wire but could use another technology, such as wireless.

Fibre-to-the-premises (FTTP) – an access network structure in which the optical fibre network runs from the local exchange to the end user's house or business premise. The optical fibre may be point-to-point – there is one dedicated fibre connection for each home – or may use a shared infrastructure such as a GPON. Sometimes also referred to as Fibre-To-The-Home (FTTH).

Fixed Access Market Reviews (FAMR) – Ofcom’s review of the following markets (as defined in those reviews): wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30.
Framework Directive – one of the directives comprising the European Regulatory Framework. It deals with the main principles, objectives and procedures for an EU regulatory policy regarding the provision of electronic communications services and networks.

Flows to equity (FTE) – one of three commonly used discounted cash flow methods of corporate valuation.

Football Association (FA) – the FA is the governing body of football in England, and the Crown dependencies of Jersey, Guernsey and the Isle of Man. All of England's professional football teams are members of the FA.

Fully allocated costs (FAC) – an accounting approach under which all the costs of the company are distributed between its various products and services. The fully allocated cost of a product or service may therefore include some common costs that are not directly attributable to the service.

Generic Ethernet Access (GEA) – BT’s wholesale non-physical product providing CPs with access to higher speed broadband products. BT provides this to fulfil the requirement to provide VULA.

Gigabit Passive Optical Network (GPON) – a shared fibre network architecture that can be used for NGA.

Gigabyte (GB) – A measure of digital data size. A multiple of the unit byte for digital information. A gigabyte is a thousand million bytes. A byte is 8 bits.

Herfindahl–Hirschman Index (HHI) – a tool of economic analysis that provides an indicator of the degree of market concentration.

Infinity – brand name for BT’s range of superfast broadband products.

Internet protocol (IP) – a network technology used in packet-switched networks to route packets across network nodes.

Internet protocol television (IPTV) – A system through which television services are delivered using the Internet Protocol suite over a packet-switched network such as a local area network or the internet, instead of being delivered through traditional terrestrial, satellite signal, and cable television formats.

iOS – a mobile operating system developed by Apple.

Internet service provider (ISP) – an organisation that provides internet access services.

Local loop – the access network connection between the customer’s premises and the local serving exchange, usually comprised of two copper wires twisted together.

Local loop unbundling (LLU) – a process by which a dominant provider’s local loops are physically disconnected, or partially disconnected, from its network and connected to a

competing provider's networks. This enables operators other than the incumbent to use the local loop to provide services directly to customers.

Long run incremental cost (LRIC) – the cost caused by the provision of a defined increment of output given that costs can, if necessary, be varied and that some level of output is already produced.

LRIC+ – a measure of LRIC which includes an element for the recovery of non-attributable common costs.

Main distribution frame (MDF) – an internal wiring frame where copper access network cables are terminated and cross connected to exchange equipment by flexible wire jumpers.

Market Facing Units (MFUs) – a corporate business unit which provides services externally to the organisation of which it is part, e.g. Openreach, BT Wholesale, BT Global Services and BT Consumer.

Megabits per second (Mbit/s) – a measure of download speed or bandwidth in a digital system (1 Megabit = 1 million bits).

Megabyte (MB) – a measure of digital data size. A multiple of the unit byte for digital information. A megabyte is a million bytes. A byte is 8 bits

Metallic Path Facility (MPF) – the provision of access to the copper wires from the customer premises to a BT MDF that covers the full available frequency range, including both narrowband and broadband channels, allowing a competing provider to provide the customer with both voice and/or data services over such copper wires.

Minimum Efficient Scale (MES) - the scale of production where the internal economies of scale have been fully exploited.

Modified Greenfield approach – the approach when we conduct our analysis to define the relevant retail and wholesale markets, where we assume that there is no SMP regulation in place in the market under consideration or in downstream markets.

Moto GP – the premier class of the Road Racing World Championship Grand Prix, a championship of road motorcycle racing.

Multiple Service Access Node (MSAN) – a network device, located in a telephone exchange which provides telephony and broadband services to multiple premises over copper and/or fibre access networks. Also includes a multiplexing function for backhaul.

Multi-Service Interconnect Link (MSIL) – provides physical Ethernet connectivity between BT's 21CN (BT's next generation network upgrade) and other CPs core networks.

Mobile Virtual Network Operator (MVNO) – a mobile virtual network operator provides mobile services using the infrastructure of one of the mobile network operators.

National Basketball Association (NBA) – the pre-eminent men's professional basketball league in North America.

Net Present Value (NPV) – the present value of cash inflows and the present value of cash outflows.

Next Generation Access (NGA) – wired access networks which consist wholly or in part of optical elements and which are capable of delivering broadband access services with enhanced characteristics (such as higher throughput) as compared to those provided over already existing copper networks. In most cases, NGAs are the result of an upgrade of an already existing copper or co-axial access network.

Openreach – BT's infrastructure division, established in 2006 pursuant to undertakings offered by BT and accepted by Ofcom, pursuant to the Enterprise Act 2002, to ensure that rival telecom operators have equivalence of access to BT's local network.

Out of Package (OOP) – used in relation to call and data revenues. OOP revenues are earned when customers make calls outside of those included in their call package, or use data that exceeds their monthly data allowance.

Over the Top (OTT) - delivery of audio, video, and other media over the Internet without the involvement of a multiple-system operator who controls or distributes the content.

Pay per view (PPV) – a service offering single viewings of a specific film, programme or event, provided to consumers for a one-off fee

Pay TV – subscription-based television services.

Payments to Other Licensed Operators (POLOs) – charges paid by an operator to cover the costs of terminating calls on other operators' networks.

Physical Infrastructure Access (PIA) – regulatory obligation under which BT is required to allow CPs to deploy NGA networks in the physical infrastructure of its access network (i.e. ducts and poles).

Plusnet – Plusnet plc, a BT subsidiary company, providing retail voice and broadband services, and marketed by BT Consumer as a value brand.

Product unit costs (PUCs) – charges associated with the conveyance of calls across the BT network.

Public Accounts Committee (PAC) – the Parliamentary select committee responsible for overseeing Government expenditure.

Public Switch Telephony Network (PSTN) – the conventional telephony network used to provide telephone calls using circuit-switching.

Reasonably efficient operator (REO) – an operator with costs and revenues considered reasonable in relation to the provision of particular products and services.

Regulatory Financial Statement (RFS) – the financial statements that BT is required by Ofcom to prepare and publish.

Sales, General and Administration (SG&A) costs – category of costs BT records that includes all direct and indirect selling expenses (e.g. marketing, billing) and general and administrative expenses (e.g. office space rent, heat and electricity).

Shared Metallic Path Facility (SMPF) – the provision of access to the copper wires from the customer's premises to a BT MDF that allows a competing provider to provide the customer with broadband services, while BT continues to provide the customer with conventional narrowband communications.

Significant Market Power (SMP) – the significant market power test is set out in European Directives. It is used by NRAs, such as Ofcom, to identify those CPs which must meet additional obligations under the relevant Directives.

Small and medium-sized enterprises (SMEs) – defined in the UK as any business with fewer than 250 employees.

Special Fault Investigations (SFIs) – a chargeable fault investigation product from Openreach.

Sub-Loop Unbundling (SLU) – like LLU, except that communications providers interconnect at a point between the exchange and the end user, usually at the cabinet.

Superfast broadband – a broadband connection that can support a maximum download speed of 30Mbit/s or greater.

Terabyte (TB) – a measure of digital data size. A multiple of the unit byte for digital information. A gigabyte is a thousand million bytes. A byte is 8 bits.

Time-Related Charges (TRCs) – raised by Openreach to recover costs incurred when Openreach engineers perform work not covered under the terms of the Openreach service.

Triple-play – retail bundles that include voice telephony, broadband and TV.

UEFA Champions League – an annual continental football club competition organised by UEFA since 1992.

UEFA Europa League – the UEFA Europa League is an annual men's association football club competition organized by UEFA since 1971 for eligible European football clubs. Clubs qualify for the competition based on their performance in their national leagues and cup competitions.

UFC World Championship – Ultimate Fighting Championship world championship.

Union of European Football Associations (UEFA) – the governing body of football in Europe.

Virtual Unbundled Local Access (VULA) – an access remedy first imposed by Ofcom in the 2010 WLA Statement that requires BT to provide access to its NGA network in a way that is similar to LLU. It provides a connection from the nearest 'local' aggregation point to the customer premises.

Weighted Average Cost of Capital (WACC) – the rate that a company is expected to pay on average to all its security holders to finance its assets.

Wholesale Broadband Access (WBA) – between the WLA market and retail market for provision of fixed telecommunications services to end-users.

Wholesale Broadband Connect (WBC) – a BT WBA product, using ADSL2+ technology to offer maximum downstream speeds of up to 24Mbit/s, or using Openreach's GEA product to offer speeds above 30Mbit/s where GEA is available.

Wholesale Broadband Managed Connect (WBMC) – a type of broadband product that BT Consumer purchases from BT Wholesale in order to provide broadband services.

Wholesale Content Connect (WCC) – a product offered by BT Wholesale that allows customers to efficiently transmit video over broadband.

Wholesale Local Access (WLA) – fixed telecommunications infrastructure, specifically the physical connection between end users' premises and a local exchange.

Wholesale Must Offer (WMO) obligation – a rule that requires Sky to offer its Sky Sports 1 and 2 channels to other pay TV retailers on a wholesale basis.

Wholesale Line Rental (WLR) – the regulated wholesale exchange line service provided by BT both to its own downstream businesses and to competing CPs.

Women's Tennis Association (WTA) – the principal organising body for women's professional tennis

YouView – an Internet TV service in the UK, formed as a joint venture between three telecommunications companies (BT, TalkTalk and Arqiva) and four broadcasters (BBC, ITV, Channel 4 and Channel 5). YouView provides access to free-to-air DTT channels and to TV on demand services via a 'hybrid' set-top box, connected with both a broadband internet connection and a television aerial. Catch-up and on-demand content is delivered over the internet.