COMPETITION COMMISSION

(1)VERIZON UK LIMITED (2) VODAFONE LIMITED V OFFICE OF COMMUNICATIONS
Case 1210/3/3/13

A reference under section 193 of the Communications Act 2003

Determination

Notified: 12 December 2013

Website: www.competition-commission.org.uk

Members of the Competition Commission who conducted this inquiry

Roger Witcomb *(Chairman of the Group)*

Jayne Scott

Jon Stern

John Wotton

Chief Executive and Secretary of the Competition Commission

David Saunders

Excisions in this determination marked with [✂]
relate to commercially confidential information:
Schedule 4, paragraph 1, to the Enterprise Act 2002.

Contents

Page

1. Introduction to the Competition Commission's determination

Introduction

1.1 On 28 March 2013 the Office of Communications (Ofcom) published a Statement entitled *Business Connectivity Market Review—Review of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments* (the BCMR), which among other things set out the product and geographic markets and the charge controls[1] for business connectivity services until 31 March 2016.

1.2 The BCMR was a review of the markets for the provision of 'leased lines', which provide dedicated symmetric transmission capacity between fixed locations. Ofcom distinguished between services that use Traditional Interface (TI) technologies and those that use Alternative Interface (AI) technologies. TI is the older technology and makes use of various time division multiplexing or analogue technologies. AI circuits mainly make use of Ethernet technology, which is optimized for data traffic and is more efficient than TI technologies.

1.3 British Telecommunications plc (BT) supplies TI services through its BT Wholesale division but AI services are supplied by Openreach.[2] BT remains the largest wholesale supplier of leased lines in the UK. Ofcom estimates that BT has an 82 per cent volume market share of all wholesale circuits and that the majority of other suppliers of leased lines remain reliant on BT's network in providing services to their customers.[3]

1.4 In the BCMR, Ofcom defined a number of geographic and product markets and made significant market power (SMP) findings in relation to some of them (including finding that BT had SMP in several TI and AI markets).[4] The SMP conditions imposed by Ofcom in the BCMR were imposed pursuant to sections 45, 87, 88 and 91 of the Communications Act 2003 (the Act).

1.5 The BCMR contained decisions to impose charge controls on BT in relation to various leased line services supplied by BT in a number of UK markets where SMP had been identified. In particular the BCMR set the level of the price control on TI services at RPI + 2.25 per cent and on AI services at RPI – 11.5 per cent.[5]

The appeals

1.6 Verizon UK Limited (Verizon) and Vodafone Limited (Vodafone), (together, the appellants) are both major suppliers of leased lines services in the UK and purchase significant volumes of wholesale leased lines from BT.

1.7 On 30 May 2013 the Competition Appeal Tribunal (the Tribunal) published a notice of an appeal[6] (the Appeal) against Ofcom's decision set out in the BCMR on the price control on TI services (the TI Price Control Decision). The appellants have filed a

---

[1] Note the terms 'charge control' and 'price control' are used in this document since parties have used one or both terms but we consider that both terms have the same meaning.
[2] Openreach is an operating division of BT. Openreach is a functionally separate business within BT, which was set up as a result of a number of undertakings in lieu of a reference to the Competition Commission (under §154 of the Enterprise Act 2002) given to Ofcom by BT on 22 September 2005 as part of measures intended by Ofcom to increase competition in the provision of telecommunications services over fixed lines. Openreach manages BT's copper access network (the 'local loop') so that other BT businesses and competing communications providers (CPs) can access that network on an open and equal basis.
[3] BCMR, ¶1.3.
[4] ibid, ¶7.6.
[5] ibid, ¶¶19.4 & 20.4.
[6] Case number 1210/3/3/13.

joint Notice of Appeal (NoA). A Case Management Conference took place on 20 June 2013. On 24 June 2013 the Tribunal made orders setting out the case management directions, granting BT permission to intervene, refusing British Sky Broadcasting Limited (BSkyB) and TalkTalk Telecom Group plc (TalkTalk) permission to intervene and establishing a confidentiality ring. A ruling on BSkyB's and TalkTalk's permission to intervene was handed down on 27 June 2013.

1.8 On 22 July 2013, the Tribunal made an Order referring the specified price control matters arising in the appeal to the Competition Commission (CC) for determination on or before 23 December 2013.

The appellate framework

1.9 The Act provides for a specific appellate regime for appeals relating to price controls imposed by Ofcom. It provides, in relevant part:

> **192 Appeals against decisions by Ofcom, the Secretary of State etc.**
>
> …
>
> (2) A person affected by a decision to which this section applies may appeal against it to the Tribunal.
>
> …
>
> (5) The notice of appeal must set out—
>
> (a) the provision under which the decision appealed against was taken; and
>
> (b) the grounds of appeal.
>
> (6) The grounds of appeal must be set out in sufficient detail to indicate—
>
> (a) to what extent (if any) the appellant contends that the decision appealed against was based on an error of fact or was wrong in law or both; and
>
> (b) to what extent (if any) the appellant is appealing against the exercise of a discretion by Ofcom, by the Secretary of State or by another person.
>
> **193 Reference of price control matters to the Competition Commission**
>
> (1) Tribunal rules must provide in relation to appeals made under section 192(2) relating to price control that the price control matters arising in that appeal, to the extent that they are matters of a description specified in the rules, must be referred by the Tribunal to the Competition Commission for determination.
>
> (2) Where a price control matter is referred in accordance with Tribunal rules to the Competition Commission for determination, the Commission is to determine that matter—

(a) in accordance with the provision made by the rules;

(b) in accordance with directions given to them by the Tribunal in exercise of powers conferred by the rules; and

(c) subject to the rules and any such directions, using such procedure as the Commission consider appropriate.

(3) The provision that may be made by Tribunal rules about the determination of a price control matter referred to the Competition Commission in accordance with the rules includes provision about the period within which that matter is to be determined by that Commission.

(4) Where the Competition Commission determines a price control matter in accordance with Tribunal rules, they must notify the Tribunal of the determination they have made.

(5) The notification must be given as soon as practicable after the making of the notified determination.

(6) Where a price control matter arising in an appeal is required to be referred to the Competition Commission under this section, the Tribunal, in deciding the appeal on the merits under section 195, must decide that matter in accordance with the determination of that Commission.

(7) Subsection (6) does not apply to the extent that the Tribunal decides, applying the principles applicable on an application for judicial review, that the determination of the Competition Commission is a determination that would fall to be set aside on such an application.

…

(9) For the purposes of this section an appeal relates to price control if the matters to which the appeal relates are or include price control matters.

(10) In this section 'price control matter' means a matter relating to the imposition of any form of price control by an SMP condition the setting of which is authorised by—

(a) section 87(9);

(b) section 91; or

(c) section 93(3).

…

195 Decisions of the Tribunal

(1) The Tribunal shall dispose of an appeal under section 192(2) in accordance with this section.

(2) The Tribunal shall decide the appeal on the merits and by reference to the grounds of appeal set out in the notice of appeal.

(3) The Tribunal's decision must include a decision as to what (if any) is the appropriate action for the decision-maker to take in relation to the subject-matter of the decision under appeal.

(4) The Tribunal shall then remit the decision under appeal to the decision-maker with such directions (if any) as the Tribunal considers appropriate for giving effect to its decision.

(5) The Tribunal must not direct the decision-maker to take any action which he would not otherwise have power to take in relation to the decision under appeal.

(6) It shall be the duty of the decision-maker to comply with every direction given under subsection (4).

1.10 The Tribunal rules referred to in section 193 are the Competition Appeal Tribunal (Amendment and Communications Act Appeals) Rules 2004 (SI 2004 No 2068) (the 2004 Rules). The 2004 Rules provide, in relevant part:

Reference of price **control** matters to the Competition Commission

3.—(1) For the purposes of subsection (1) of section 193 of the Act, there is specified every price control matter falling within subsection (10) of that section which is disputed between the parties and which relates to—

(a) the principles applied in setting the condition which imposes the price control in question,

(b) the methods applied or calculations used or data used in determining that price control, or

(c) what the provisions imposing the price control which are contained in that condition should be (including at what level the price controls should be set).

…

(5) The Tribunal shall refer to the Commission for determination in accordance with section 193 of the Act and rule 5 every matter which … it decides is a specified price control matter.

…

Determination by Competition Commission of price control matters

5.—(1) Subject to any directions given by the Tribunal (which may be given at any time before the Commission have made their determination), the Commission shall determine every price control matter within four months of receipt by them of the reference.

(2) The Tribunal may give directions as to the procedure in accordance with which the Commission are to make their determination.

(3) The Tribunal may give directions under this rule of its own motion or upon the application of the Commission or of any party.

1.11 The parties to this appeal agreed that the price control matters in the appeals fell to be referred to the CC for determination.

The Tribunal's reference

1.12 In the order entitled *Reference of Specified Price Control Matters to the Competition Commission* dated 22 July 2013 (the Reference), the Tribunal made reference to the NoA lodged by the appellants, and referred to the CC for its determination the specified price control questions arising in this appeal, pursuant to rule 3(5) of the 2004 Rules and section 193 of the Act.

1.13 The Reference required us to determine the following questions:

(a) Question 1: whether the price control on TI services has been set at a level which is inappropriate because Ofcom erred in law deciding not to allocate common costs away from TI services in proportion to all forecast customer migration, rather only in proportion to forecast customer migration from TI services to Ethernet services for the reasons set out in paragraphs 74 to 78 of the NoA;

(b) Question 2: whether the price control on TI services has been set at a level which is inappropriate because Ofcom erred in fact for the reasons set out in paragraphs 79 to 90 of the NoA;

(c) Question 3: whether the price control on TI services has been set at a level which is inappropriate because Ofcom's decision not to allocate common costs away from TI services in proportion to all forecast customer migration is inconsistent with its regulatory objectives and approach and is not justified for the reasons set out in paragraphs 91 to 95 of the NoA; and

(d) Question 4: in the event that the CC determines that Ofcom did err in any of the respects set out above, the CC is to include in its determination insofar as reasonably practicable: *(a)* clear and precise guidance as to how any such error found should be corrected; and *(b)* a determination as to any consequential adjustments to the charge control.

1.14 A copy of the Reference from the Tribunal is attached in Appendix A. In essence the questions set out in paragraphs 1.13*(a)* to 1.13*(c)* concern the allocation of common costs to TI services while the question in paragraph 1.13*(d)* concerns how, if an error is found, the error should be corrected.

1.15 The Tribunal required us to determine the issues that had been referred to us by 23 December 2013.

1.16 Following internal review by Ofcom of a matter raised at the Case Management Conference on 20 June 2013, the Tribunal granted Ofcom permission to amend its Defence.[7] References in this determination to the 'Defence' are to the amended Defence. The Defence was amended to clarify the modelling approach used by Ofcom to determine the charge control set out in its March 2012 LLU/WLR Statement.

---

[7] Order of the Chairman of the Tribunal made on 12 September 2013.

The legal framework

1.17 Regulation of the telecommunications sector takes place across Europe under the Common Regulatory Framework (CRF). The CRF consists of a number of Directives, the most relevant of which are Directive 2002/21/EC on the common regulatory framework for electronic communications networks and services (the Framework Directive, as amended) and Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive, as amended). The CRF imposes on member states the obligation to designate independent national regulatory authorities (NRAs), sets out objectives and principles that the NRAs are to be guided by in carrying out their functions, obliges them to carry out market reviews, and empowers them to impose certain obligations on undertakings with SMP including price controls. Of particular relevance are Articles 8 and 13 of the Access Directive which provide, in relevant parts:

> *Article 8*
>
> **Imposition, amendment or withdrawal of obligations**
>
> 1. Member States shall ensure that national regulatory authorities are empowered to impose the obligations identified in Articles 9 to 13a.
>
> 2. Where an operator is designated as having significant market power on a specific market as a result of a market analysis carried out in accordance with Article 16 of Directive 2002/21/EC (Framework Directive), national regulatory authorities shall impose the obligations set out in Articles 9 to 13 of this Directive as appropriate.
>
> …
>
> *Article 13*
>
> **Price control and cost accounting obligations**
>
> 1. A national regulatory authority may, in accordance with the provisions of Article 8, impose obligations relating to cost recovery and price controls, including obligations for cost orientation of prices and obligations concerning cost accounting systems, for the provision of specific types of interconnection and/or access, in situations where a market analysis indicates that a lack of effective competition means that the operator concerned might sustain prices at an excessively high level, or apply a price squeeze, to the detriment of end-users. To encourage investments by the operator, including in next generation networks, national regulatory authorities shall take into account the investment made by the operator and allow him a reasonable rate of return on adequate capital employed, taking into account the risks specific to a particular new investment network project.
>
> 2. National regulatory authorities shall ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits. In this regard national regulatory authorities may also take account of prices available in comparable competitive markets.

1.18 The UK's NRA is Ofcom and the CRF was implemented in the UK by the Act, in which the powers and duties set out in the Directives are reflected.

1.19 The Act, in line with the CRF, imposes general duties and objectives upon Ofcom. These include, in section 3, duties to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition. Section 4 imposes certain duties on Ofcom for the purpose of fulfilling EU obligations, which, in so far as are relevant, include a requirement to promote competition in relation to the provision of electronic communications networks and services, an obligation to encourage the provision of network service and interoperability for the purpose of securing efficient investment and innovation, and a requirement to take account of the desirability of it carrying out its functions in a manner which, so far as practicable, does not favour one form of electronic communications network, service or associated facility over another or one means of providing or making available such a network, service or facility over another.

1.20 Section 45 of the Act provides Ofcom with the power to set binding conditions, including SMP conditions. An SMP condition can be applied to a communications provider that Ofcom has determined as having SMP in a specific market (sections 46(7)–(8)), but only if Ofcom is satisfied that the following tests (found in section 47) are met:

(a) that the condition is objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;

(b) that the condition is not such as to discriminate unduly against particular persons or against a particular description of persons;

(c) that the condition is proportionate to what it is intended to achieve; and

(d) that the condition is, in relation to what it is intended to achieve, transparent.

1.21 Section 87(9) gives Ofcom the specific power to set SMP conditions that impose price controls. The imposition of price controls is subject to section 88, which provides, in relevant part:

> **88 Conditions about network access pricing etc.**
>
> (1) Ofcom are not to set an SMP condition falling within section 87(9) except where—
>
> (a) it appears to them from the market analysis carried out for the purpose of setting that condition that there is a relevant risk of adverse effects arising from price distortion; and
>
> (b) it appears to them that the setting of the condition is appropriate for the purposes of—
>
> (i) promoting efficiency;
>
> (ii) promoting sustainable competition; and
>
> (iii) conferring the greatest possible benefits on the end-users of public electronic communications services.
>
> (2) In setting an SMP condition falling within section 87(9), Ofcom must take account of the extent of the investment in the matters to which the condition relates of the person to whom it is to apply.

1.22 In determining each of the Reference Questions we have had regard to the CRF and the domestic provisions implementing it. We consider our conclusions to be consistent with the legal framework.

Standard of review

1.23 In our determination of the price control references in Mobile Call Termination (MCT)(1),[8] Cable and Wireless,[9] Carphone Warehouse (LLU),[10] Carphone Warehouse (WLR),[11] MCT(2)[12] and WBA,[13] and LLU/WLR[14] we outlined the nature of our appellate function under the Act. In this determination, we have followed the same approach as in those cases, in particular as set out in paragraphs 1.30 to 1.33 of the CC determination in MCT(1), which we have also cited in other cases:

> 1.30 Section 195(2) of the 2003 Act provides for an appeal on the merits. Section 192(6) shows that appeals can be brought on the basis of errors of fact or law or against the exercise of discretion. The Tribunal interpreted its role under a section 192 appeal as being one of a specialist court designed to be able to scrutinize the detail of regulatory decisions in a profound and rigorous manner. In our view, our role in determining the specified price control matters that have been referred to us is similar. We note that this is the role that appears to have been contemplated for us by the Tribunal in its Reference Ruling and in the wording of the Reference itself (reference question 8 in particular).
>
> 1.31 We also note that the wording of rule 3 of the 2004 Rules envisages a determination of disputes that relate to the principles or methods applied or the calculations or data used in determining a price control, as well as disputes that relate to what the provisions imposing the price control should be (including at what level the price control should be set). That also suggests a rigorous and detailed examination of the price control matters subject to appeal.
>
> 1.32 We have carried out that examination with the purpose of determining whether Ofcom erred for any of the specific reasons put forward by the parties. In determining whether it did so err, we have not held Ofcom to be wrong simply because we considered there to be some error in its reasoning on a particular point—the error in reasoning must have been of sufficient importance to vitiate Ofcom's decision on the point in whole or in part.
>
> 1.33 We have also kept in mind the point made by the Interveners that Ofcom is a specialist regulator whose judgement should not be readily dismissed. Where a ground of appeal relates to a

---

[8] CC determination: *Hutchison 3G UK Limited and BT v Ofcom, consolidated, Cases 1083/3/3/07 and 1085/3/3/07, Mobile Call Termination,* 16 January 2009.
[9] CC determination: *Cable & Wireless v Ofcom, Case 1112/3/3/09 Determination,* 30 June 2010.
[10] CC determination: *Carphone Warehouse v Ofcom*, *Case 1111/3/3/09 Local Loop Unbundling,* 31 August 2010.
[11] CC determination: *Carphone Warehouse v Ofcom*, *Case 1149/3/3/09 Wholesale Line Rental,* 31 August 2010.
[12] CC determination: *BT and others v Ofcom, consolidated Cases 1180–1183/3/3/11 Wholesale Mobile Call Termination,* 9 February 2012.
[13] CC determination: *BT v Ofcom*, *Case 1187/3/3/11 WBA,* 11 June 2012.
[14] CC determination: *BT v Ofcom Case 1193/3/3/12 and BSkyB and TalkTalk v Ofcom Case 1192/3/3/12,* March 2013.

claim that Ofcom has made a factual error or an error of calculation, it may be relatively straightforward to determine whether it is well founded. Where, on the other hand, a ground of appeal relates to the broader principles adopted or to an alleged error in the exercise of a discretion, the matter may not be so clear. In a case where there were a number of alternative solutions to a regulatory problem with little to choose between them, we do not think it would be right for us to determine that Ofcom erred simply because it took a course other than the one that we would have taken. On the other hand, if, out of the alternative options, some clearly had more merit than others, it may more easily be said that Ofcom erred if it chose an inferior solution. Which category a particular choice falls within can necessarily only be decided on a case-by-case basis.

1.24 In the TalkTalk WBA case,[15] the Tribunal reiterated, by reference to its earlier decision in an appeal brought by H3G against Ofcom,[16] that the appeal was conducted on the merits and not in accordance with the rules that would apply on a judicial review. It cited the statement that the appropriate level of scrutiny in such appeals was 'profound and rigorous' and added that 'the question is whether Ofcom's determination was right, not whether it lies within the range of reasonable responses for a regulator to take'.

1.25 In respect of Reference Questions that relate to instances where it can legitimately be said that Ofcom has exercised regulatory judgement and/or discretion, we noted that the Tribunal in the TalkTalk WBA case observed in paragraphs 73 and 74:

> 73. That said, we are mindful of two other important *dicta* regarding the Tribunal's role on a section 192 appeal. First, Jacob LJ in *T-Mobile (UK) Limited v Office of Communications* [2008] EWCA Civ 1373 made absolutely clear that the section 192 appeal process is not intended to duplicate, still less, usurp, the functions of the regulator. In paragraph 31, he stated:
>
> 'After all it is inconceivable that Article 4 [of the Framework Directive], in requiring an appeal which can duly take into account the merits, requires Member States to have in effect a fully equipped duplicate regulatory body waiting in the wings just for appeals. What is called for is an appeal body and no more, a body which can look into whether the regulator has got something materially wrong. That may be very difficult if all that is impugned is an overall value judgment based upon competing commercial considerations in the context of a public policy decision.'
>
> 74. Secondly, and following on from this point, in *T-Mobile (UK) Limited v Office of Communications* [2008] CAT 12, the Tribunal noted (at paragraph 82):
>
> 'It is also common ground that there may, in relation to any particular dispute, be a number of different approaches which Ofcom could reasonably adopt in arriving at its determination. There may well be no single "right answer" to the dispute. To that extent, the Tribunal may, whilst still conducting a merits review of

[15] *Case 1186/3/3/11 TalkTalk v Ofcom* [2012] CAT 1 [71–72].
[16] *Case 1083/3/07 Hutchison 3G v Ofcom* [2008] CAT 11 [164].

> the decision, be slow to overturn a decision which is arrived at by an appropriate methodology even if the dissatisfied party can suggest other ways of approaching the case which would also have been reasonable and which might have resulted in a resolution more favourable to its cause.'

1.26 In its judgment on the 2011 MCT Appeals, the Tribunal reiterated the role of the CC in this process:

> However [the CC's role] under section 193 is not to exercise an original or investigative jurisdiction. That is Ofcom's role. The Commission's role is to determine, on the merits, the reference questions remitted to it. These reference questions arise out of the notices of appeal made in respect of Ofcom's decision. Thus, albeit in a somewhat indirect way, the Commission is reviewing on the merits the decision of another administrative body. In short, the Commission is acting as an administrative appeal body.[17]

1.27 In its Defence, and in relation to matters of discretion or judgement, Ofcom referenced the judgment of the Court of Appeal in *Telefónica O2 Ltd v British Telecommunications plc* [2012] EWCA Civ 1002, from which it quoted per Lord Justice Lloyd at [67] 'if the regulator has addressed the right question by reference to relevant material, any value judgment on its part, as between different relevant considerations, must carry great weight', and at [90] 'the Tribunal ought to respect the policy decisions and matters of judgment involved in Ofcom's decisions'.[18]

1.28 In our provisional determination we stated that Ofcom's submission in this regard had not provided cause for us to depart from the approach that we had followed previously. We note that paragraph 67 of the *Telefónica* judgment was cited by the Tribunal in its recent decision in *Colt Technology Services v Ofcom* [2013] CAT 29 at [56] and [170]. This judgment did not affect our approach in this appeal.

1.29 The role of the CC is to determine on the merits the Reference Questions. We have assessed whether the appellants have shown that Ofcom erred on the basis of the material in the BCMR and the parties' pleadings and submissions (including clarifications obtained at the bilateral hearings and by way of responses to our written questions). In the 2011 MCT Appeals, the Tribunal made it clear that the CC's determination was dependent upon the issues as laid down by the appellant and upon the evidence put before it by the parties:

> it is important to note that, in Section 192 Appeals:
>
> The grounds of appeal are laid down by the appealing party in its notice of appeal. It is the appealing party which determines the issues that will be examined on appeal.
>
> The evidence in support of those grounds is produced by the appealing party at the time when the notice of appeal is lodged. Naturally, that evidence will be supplemented when—in time—the respondents to the appeal (and any interveners) serve their pleadings in response. The

[17] *BT and others v Competition Commission* [2012] CAT 11, [188(2)(ii)].
[18] Defence, ¶17, referring to *Telefónica O2 Ltd v British Telecommunications plc* [2012] EWCA Civ 1002.

critical point to note, however, is that the evidence before the Tribunal comes from the parties to the appeal.[19]

1.30 The Tribunal went on to add: 'The Commission's role is confined to determining the questions referred to it by the Tribunal. The Commission is not investigating anything—it is determining whether Ofcom erred in its decision for the reasons set out in the notice of appeal.'[20]

1.31 As set out in the CC's determination in WLR,[21] in paragraph 1.34, we do not exercise a merely supervisory jurisdiction to consider whether the reasons given in a decision are flawed. If the price control is set correctly notwithstanding a flaw in methodology adopted by Ofcom, there is no error in the price control. In a different case but on the same point the Court of Appeal observed in its judgment *Everything Everywhere Limited v Competition Commission* [2013] EWCA Civ 154, per Lord Justice Moses at paragraph 24:

> The appeal is against the decision, not the reasons for the decision. It is not enough to identify some error in reasoning; the appeal can only succeed if the decision cannot stand in the light of that error. If it is to succeed, the appellant must vault two hurdles: first, it must demonstrate that the facts, reasoning or value judgments on which the ultimate decision is based are wrong, and second, it must show that its proposed alternative price control measure should be adopted by the Commission. If the Commission (or Tribunal in a matter unrelated to price control) concludes that the original decision can be supported on a basis other than that on which Ofcom relied, then the appellant will not have shown that the original decision is wrong and will fail.

1.32 Accordingly, a flaw or flaws in Ofcom's reasoning may not in itself lead to a successful appeal. An appeal on the merits requires us to decide whether the price control was wrong for the reasons set out by appellants.

1.33 The Act also requires that the grounds of appeal be set out in sufficient detail to indicate:

> *(a)* to what extent (if any) the appellant contends that the decision appealed against was based on an error of fact or was wrong in law or both; and
>
> *(b)* to what extent (if any) the appellant is appealing against the exercise of a discretion by Ofcom, by the Secretary of State or by another person.[22]

Points on jurisdiction and procedure made by the appellants in response to the provisional determination

1.34 In response to the provisional determination that we issued on 5 November 2013 the appellants submitted a number of points on jurisdiction and procedure that we have addressed below.

[19] *BT and others v Competition Commission* [2012] CAT 11 [197].
[20] *BT and others v Competition Commission* [2012] CAT 11 [203].
[21] CC determination: *Carphone Warehouse v Ofcom*, *Case 1149/3/3/09 Wholesale Line Rental,* 31 August 2010.
[22] §192(6) of the Act.

Jurisdiction

1.35 The appellants submitted that we had erred as to the nature of the appellate jurisdiction that we are exercising. In their view, we should have considered the specific errors alleged; it is not sufficient to dismiss the alternative solution proposed by them; and we failed to exert profound and rigorous scrutiny to the detail of Ofcom's decision.[23]

1.36 The appellants stated that the nature of our appellate jurisdiction was concisely explained by the Tribunal in *British Telecommunications plc v Office of Communications* [2010] CAT 17 in the following terms:

> 76. By section 192(6) of the 2003 Act and rule 8(4)(b) of the 2003 Tribunal Rules, the notice of appeal must set out specifically where it is contended OFCOM went wrong, identifying errors of fact, errors of law and/or the wrong exercise of discretion. The evidence adduced will, obviously, go to support these contentions. What is intended is the very reverse of a de novo hearing. OFCOM's decision is reviewed through the prism of the specific errors that are alleged by the appellant. Where no errors are pleaded, the decision to that extent will not be the subject of specific review. What is intended is an appeal on specific points.

1.37 In further support of their contention that we had erred as to the nature of our jurisdiction, the appellants referred to the quoted text at paragraph 1.23. The appellants also pointed out that in Carphone Warehouse (LLU), the CC had distinguished between finding a specific error and a finding as to the impact of that error on the overall charge control. The appellants pointed out that in paragraph 1.62 of that decision we had said:

> 1.62Secondly, we have concluded that Ofcom did not err in setting the price control <u>where any error of fact or approach did not have a material effect on the price control set</u>. This means that any errors we have found must have been capable of producing some material effect upon the actual price control. We have concluded that an error will not be a material error where it has only an insignificant or negligible impact in relative terms on the overall level of price control that has been set by Ofcom. Where, for example, the impact of any perceived error would be a 0.1 per cent change in the price control level we have concluded that such an impact is not material. It would fall within an acceptable margin of error for a regulator. [emphasis added by appellants]

1.38 Drawing on this reasoning, the appellants submitted that we had confused an appeal on a specific point with a mere criticism of Ofcom's reasoning. In their view, our approach betrayed a misunderstanding of what was meant by an appeal on the merits in that 'it is well established that, even in cases where a discretion is being exercised, it is sufficient to show that the decision was reached on the basis of having considered irrelevant factors, of having failed to take relevant factors into account or as being founded on a misdirection'. In support of this contention, the appellants referred to two cases: *Aldi Stores Limited v WSP Group plc* [2007] EWCA Civ 1260 at §§14 and 15 and *E.I. Du Pont Nemours & Co v S.T. Du Pont* [2003] EWCA Civ 1368; [2006] 1 W.L.R. 2793 per Lord Justice May at §§85 to 98.

---

[23] Verizon/Vodafone, Response to the provisional determination, §8, §§21–43.

1.39 Furthermore, the appellants submitted that requiring appellants to mount a challenge to the price control from the 'top down' rather than from the 'bottom up' would be to impose a requirement which would be practically impossible or excessively difficult to meet, hence breaching the EU law principle of effectiveness.

- *Our view*

1.40 This appeal is unusual in that the three questions that were referred to us by the Tribunal were all premised on a single proposition as advanced in the NoA that there was a divergence between the reallocation decision that Ofcom took and what the appellants characterized as the 'correct' approach, which they alleged was 'common ground' between themselves and Ofcom. In summary, we found that the proposition on which the Reference Questions were based did not hold (paragraph 2.153). We did not find that there was compelling evidence of a divergence between the level at which the charge control was actually set, and what should be understood to be the correct level. This was not a simple dismissal of the alternative solution proposed by the appellants; instead, we disagreed that Ofcom had erred for the reasons set out in the NoA.

1.41 In coming to those conclusions, we considered the question of whether or not there was an error on the basis of the appellants' NoA and the evidence adduced in support of their contentions, taking into account further pleadings and information provided during the hearing and the appellants' views on answers from other parties to written questions. We then considered Ofcom's pleadings, evidence, submissions and information provided at the bilateral hearing, Ofcom's responses to written questions, the BCMR as well as relevant BCMR consultation documents.

1.42 In determining whether or not Ofcom had erred, we also had in mind the guidance from the Tribunal detailed in paragraph 1.31 that: 'The appeal is against the decision, not the reasons for the decision. It is not enough to identify some error in reasoning; the appeal can only succeed if the decision cannot stand in the light of that error.'

1.43 We found that there were some inconsistencies in the way in which Ofcom had explained the TI Price Control Decision (see paragraph 2.158). However, in our view it would be wholly inappropriate to read the statements in the BCMR on which the appellants rely in isolation. In our view, those statements should be read in the context of Ofcom's ultimate decision on the TI charge control and the proposal that Ofcom had consulted on, as well as Ofcom's consistently stated view that the decline in TI services would be expected to be associated with a loss of economies of scale (paragraph 2.60).[24]

1.44 Our assessment of the available evidence in relation to the validity of the proposition that formed the basis of the appeal and the three Reference Questions did not lead us to identify an error of law, fact or the exercise of discretion, material or otherwise. Since the Reference Questions and the remainder of the appeal were based on a proposition that we concluded did not hold (paragraph 2.153), it would have been inappropriate for us to carry out further analysis or to consider what the answer to the Reference Questions might have been had we found the underlying proposition to be valid.

---

[24] We note that the Tribunal in *Colt Technologies v Ofcom* [2013] CAT 29 at [147] took a similar approach in its analysis of ground 3 in that case.

1.45 We consider that the approach we took was consistent with our appellate jurisdiction. We were mindful of the Courts' guidance, as reflected in the CC's Guidelines,[25] that our remit in these appeals is not to investigate (see paragraph 1.30 above) but to determine whether or not Ofcom erred for the reasons set out in the NoA. This is the context in which we subjected Ofcom's decision to 'profound and rigorous scrutiny'. In this case, given how the appeal was constructed and our finding on the proposition that formed the basis of the three Reference Questions, we did not consider that it would be appropriate to carry out further analysis.

1.46 We do not agree that the approach in these appeals generally (or in this case specifically) would imperil the effectiveness of EU law. First, the approach is consistent with that contemplated by the legislation as interpreted by the Courts and outlined in the CC's Guidelines. Second, appellants in these appeals are normally well informed by virtue of being market participants and due to their involvement in the consultation process. Third, there is an established procedure for discovery which allows appellants to obtain relevant information by making applications to the Tribunal.

1.47 Overall, we did not consider that the arguments made and the case law cited in the appellants' response to our provisional determination were cause for us to adopt an approach that was different from that which the CC had adopted in previous cases and which was recently confirmed by the Tribunal in *Colt Technology Services v Ofcom* [2013] CAT 29.

Procedure

1.48 In their response to our provisional determination, the appellants submitted that we were in danger of adopting a course which would be unhelpful to the Tribunal and was procedurally flawed in that we had failed to answer the Reference Questions in the alternative and we had failed to leave ourselves sufficient freedom to vary our provisional determination in the event that we changed our mind on the proposition that underpins the Reference Questions.

- *Our view*

1.49 The Reference from the Tribunal required us to answer the Reference Questions. We found that Ofcom had not erred for the reasons set out in the NoA, and we do not consider that there was any shortcoming in our procedure. The appellants' grounds of appeal all fail for the same reason and we have answered the Reference Questions accordingly. In this case, we saw no reason to answer the Reference Questions in the alternative.

Our process

1.50 Key aspects of our process were:

(a) the appellants filed the NoA on 24 May 2013;

(b) Ofcom filed its Defence on 15 July 2013;

(c) following receipt of the Reference from the Tribunal on 22 July 2013, we sent all parties a first day letter setting out key aspects of how we proposed to conduct

[25] CC13, for example paragraphs 2.5, 2.6 & 3.7.

the appeal. Details of the appeal were published on the CC website on 1 August 2013 and the administrative timetable was published on 20 August 2013;

(d) BT filed its Statement of Intervention (SoI) on 2 August 2013;

(e) we received Core Submissions from all parties on 21 August 2013. The purpose of the Core Submission was to clarify the key aspects of each party's arguments and allow each party to comment on the arguments of the other parties;

(f) on 5 September 2013 Ofcom circulated a letter to all parties that it sent to BSkyB and TalkTalk concerning an aspect of the LLU price determination that may have been relevant to the leased lines appeal. On 12 September 2013 the Tribunal granted Ofcom permission to amend its defence;

(g) bilateral hearings were held with Ofcom, the appellants and BT on 10 September 2013, 12 September 2013 and 18 September 2013 respectively. Transcripts were circulated to all parties;

(h) on 16 September 2013 the appellants responded to Ofcom's 5 September 2013 letter and Ofcom's Defence with a Supplemental Core Submission;

(i) further information was requested by the CC from Ofcom and BT through written questions to clarify points raised in the hearings; the responses were circulated to all parties;

(j) responses were received on 9 October 2013 from BT and Verizon/Vodafone, commenting on the factual accuracy and admissibility of the evidence received from other parties through the bilateral hearings and responses to written questions. Verizon/Vodafone responded to BT's letter on 11 October 2013;

(k) on 24 October 2013 Ofcom circulated a further letter to all parties that it sent to BSkyB and TalkTalk concerning the LLU/WLR charge control. Verizon/Vodafone responded on 29 October 2013;

(l) on 5 November 2013 we provided a confidential version of the provisional determination to all parties, setting out our provisional conclusions on the Reference Questions, followed by a non-confidential version on 8 November 2013. We invited responses to the provisional determinations that focused on factual accuracy and errors of reasoning; and

(m) we received responses to the provisional determination from all parties by 22 November 2013, which we considered carefully, and where relevant we refer to these in this determination.

1.51 We have carefully reviewed and considered all the pleadings, submissions and evidence put before us. However, we have not referred to or summarized all this information and evidence in our determination. Instead we have focused on the key arguments and evidence that we considered relevant to our determination of the Reference Questions.

The structure of our determination

1.52 Following this introduction, in Section 2 we set out our assessment of the appellants' arguments that Ofcom had made an inappropriate allocation of costs to TI services that had resulted in the price control on TI services being set at an inappropriate level. We then address the Reference Questions directly in Section 3.

1.53 Note that reference line numbers are to confidential versions of transcripts and documents. As noted above in paragraph 1.16, references to Ofcom's Defence are to the amended Defence.

2. Assessment

Introduction

2.1 In this section we set out our assessment of the appellants' arguments that Ofcom had made an inappropriate allocation of costs to TI services that had resulted in the price control on TI services being set at an inappropriate level. We summarize Ofcom's approach in setting the TI price control; summarize the appellants' main arguments in the grounds of the appeal; set out each party's view on the appropriate basis for cost allocation; and set out our assessment and conclusions.

2.2 Central to this appeal is the appellants' view that Ofcom should have reallocated common costs[26] away from the TI charge control in line with all forecast customer migration away from TI services, rather than only in proportion to forecast customer migration from TI services to Ethernet services. The appellants contend that this would have been 'the correct approach',[27] and that Ofcom—in the BCMR—had already concluded as much.[28] The appellants argued that the only basis presented in the TI Price Control Decision for not reallocating costs away from TI in line with all forecast migration was the need to ensure BT's recovery of common costs.[29] The Reference Questions concern the specific reasons why the appellants consider Ofcom's cost recovery justifications to have been in error.

Summary of Ofcom's approach

2.3 The price control on TI services is part of the Leased Lines Charge Control (LLCC) that was set for the period 2013/14 to 2015/16. Ofcom had previously set an LLCC in 2009[30] (and before that in 2004). The LLCC was set as an outcome of the BCMR, which reviewed markets for the provision of leased lines.

2.4 The BCMR consultation process was as follows:

(a) in April 2011 Ofcom published a Call for Inputs to gather stakeholder views on key aspects of the review;[31]

(b) Ofcom then published a consultation document in June 2012 (the June 2012 Consultation) which set out its provisional findings on BCMR issues, and its proposals for addressing identified concerns, including that there should be a LLCC covering a defined set of TI and Ethernet services in some geographical areas;[32,33]

[26] The ways in which the term 'common costs' has been used are considered in paragraphs 2.89–2.93 below.
[27] NoA, ¶73.
[28] NoA, ¶74.
[29] NoA, ¶76.4.1.
[30] Ofcom, Leased Lines Charge Control: Statement, 2 July 2009.
[31] Ofcom, Business Connectivity Market Review: Call for Inputs, 21 April 2011.
[32] Ofcom, Business Connectivity Market Review: Consultation, 18 June 2012.
[33] After reviewing responses to the June 2012 Consultation, Ofcom published a further consultation in November 2012 on some changes to its broader set of BCMR proposals. These changes were not directly concerned with the approach to the LLCC.

(c) the specific proposals setting out how the LLCC should be applied were then consulted on in July 2012[34] (the July 2012 LLCC Consultation); and

(d) the outcome of these consultations—including the TI Price Control Decision—was set out in the BCMR in March 2013.[35]

2.5 The BCMR included price controls on two separate baskets—a TI basket and an Ethernet basket—both of which also contained a number of sub-caps on particular services. The scope of these baskets reflected the product and geographic markets in which BT had been found to have SMP, and where a charge control was identified by Ofcom to be an appropriate remedy:

(a) The TI basket is currently subject to an RPI + 2.25 per cent charge control and covers: low, medium and high bandwidth services outside the WECLA (the Western, Eastern and Central London Area—a defined area of London, including Slough); low bandwidth within the WECLA; and regional trunk services at all bandwidths.

(b) The Ethernet basket is currently subject to an RPI – 11.5 per cent charge control and covers Ethernet services up to and including 1Gbit/s outside the WECLA, and Ethernet services above 1Gbit/s outside the WECLA.

Ofcom's approach to setting the TI charge control

2.6 Ofcom's starting point when setting the level of the TI charge control was BT's Regulatory Financial Statements (RFS). Ofcom used BT's RFS to determine an appropriate measure of costs for the services covered by the TI basket in the 'base year'. This involved some adjustments to the costs shown in the RFS, for example, to reflect the scope of the control (as not all products in all geographic areas are included in the basket).

2.7 Having established an appropriate measure of costs for the services covered by the TI basket in the 'base year', Ofcom forecast costs in the final year of the charge control: 2015/16. This forecast was then used to determine the level of the charge control to be applied, with the permitted year-on-year change in the level of prices set such that the charge control level would be in line with this measure of costs in the final year of the control.[36]

2.8 In order to forecast final year costs, Ofcom made assumptions about the potential for efficiency improvements,[37] the appropriate weighted average cost of capital (WACC) that should apply,[38] and likely asset price changes.[39] These assumptions were not challenged as part of the appeal.

2.9 The appeal concerns whether the way in which Ofcom took account of its volume forecasts when forecasting final year costs resulted in the TI price control being set at an inappropriate level. Ofcom forecast that by the end of the charge control, the number of TI circuits would decline by 62 per cent as compared with 2011/12 (the

---

[34] Ofcom, *Leased Lines Charge Control—Proposals for a new charge control framework for certain leased lines services*, 5 July 2012.
[35] Ofcom, Business Connectivity Market Review: Statement, 28 March 2013.
[36] BCMR, ¶18.119.
[37] ibid, ¶18.92.
[38] ibid, ¶¶18.94 & 18.95.
[39] ibid, ¶18.90.

base year).[40] The appellants have not challenged Ofcom's forecast of TI volume reductions.

2.10 Ofcom's model estimated the impact that forecast changes in volume would have on costs through the use of:[41]

(a) Cost volume elasticities (CVEs): these model the percentage increase in operating costs for a 1 per cent increase in volume and were used by Ofcom to determine the change in the level of operating costs in response to changes in volume.

(b) Asset volume elasticities (AVEs): these model the percentage increase in assets, valued at gross replacement costs, required for a 1 per cent increase in volume and were used by Ofcom to determine the change in the level of capital costs in response to the forecast changes in volume.

Ofcom's proposed reallocation in the July 2012 LLCC Consultation

2.11 In the July 2012 LLCC Consultation, Ofcom said that: 'Cost components are defined in BT's system such that TI and Ethernet services do not share the same underlying cost components, even though these components use the same underlying assets,'[42] and that given this: 'there was a need to explicitly reallocate some costs between the TI and Ethernet baskets.'[43] Ofcom illustrated the significance of this point in its consultation document by reference to the cost of ducts:

> The impact of this migration can be seen by considering the movements in unit duct costs for TI and Ethernet services implied by the AVE of 0.08.
>
> - Our forecasts show that TI component volumes fall by 70% over the charge control period. However, the AVE of 0.08 implies that the total duct cost allocated to TI will fall by just 5.6%. As this duct cost is spread over a significantly reduced volume, this will result in a significant increase in duct costs allocated to the remaining TI circuits.
>
> - We expect Ethernet circuits to increase by over 80% by the end of the charge control period. The AVE of 0.08 implies that total duct costs allocated to Ethernet would only increase by 6.4%. This will result in a significant reduction in per unit duct costs allocated to Ethernet services.
>
> In practice, we do not believe unit costs would change in this way. Over the period, we expect BT to reallocate common costs to reflect the changing use of that network. This will mean that BT will allocate fewer costs to declining services, and more to growing services. Specifically, the share of total costs allocated to TI will fall to reflect the lower use of the network by TI circuits, and the share of costs allocated to Ethernet services to rise.[44,45]

[40] Defence, ¶8.
[41] BCMR, ¶¶18.88 & A12.126.
[42] ibid, ¶19.314.
[43] ibid, ¶19.314.
[44] Ofcom, Leased Line Charge Control consultation (Annex 5), ¶¶A5.257 & A5.258.

2.12 Ofcom had noted that capital and operating cost information was available at different levels of detail, and this affected Ofcom's proposed approach to reallocating costs between the TI and the Ethernet baskets. In particular, Ofcom stated that capital costs could be divided into costs for TI-specific assets[46] and costs for common assets which were used to provide other services in addition to TI services.[47] By contrast, while operating costs were said to include 'direct costs that relate specifically to the delivery of the services in question, such as general support and maintenance, as well as fixed and common costs such as finance, billing, general management, personnel and administration',[48] Ofcom did not have a detailed breakdown of operating costs into these cost categories.

2.13 Ofcom's proposed approach to cost reallocation in the July 2012 LLCC Consultation took a different approach as between capital and operating costs to reflect this:

(a) Capital costs: Ofcom treated cable, duct and land & buildings as assets that were not specific to TI services and proposed that TI unit capital costs associated with these assets be held constant in real terms.[49] Ofcom proposed that the difference between the modelled level of capital costs (based on AVEs) for these assets and the total level of capital costs for these assets (assuming unit capital costs were held constant) be reallocated to Ethernet.

(b) Operating costs: Ofcom calculated the extent to which operating costs were 'non-marginal'—that is, were treated as fixed with respect to volume changes in its modelling. This was done using the CVEs that it had applied in its modelling, such that if, for example, a component had a CVE of 0.6, this would imply that 40 per cent of costs were non-marginal. Ofcom proposed that non-marginal operating costs be reallocated to Ethernet in line with the forecast reduction in the number of TI circuits.[50]

2.14 On this basis, Ofcom proposed a reallocation from the TI basket to the Ethernet basket of £101 million. This reduced the TI charge control from RPI + 18.75 per cent, to the level that Ofcom proposed at that time: RPI + 3.25 per cent.[51] The reallocation resulted in an increase in the charge control proposed for the Ethernet basket from RPI – 17.50 per cent to RPI – 12.00 per cent.[52]

Responses to the July 2012 LLCC Consultation

2.15 Ofcom received several stakeholder responses[53] to its proposal to make a reallocation of costs from the TI to the Ethernet basket.[54] None of the responses objected to the principle of the reallocation of costs but each raised concerns regarding the methodology Ofcom proposed to use to carry out the reallocation. The concerns raised related to the calculation of admin-related costs, the calculation of the common costs to be reallocated; and the treatment of services which lay outside

---

[45] The forecast changes for TI and Ethernet volumes referred to here are higher than those used in the Decision. They were Ofcom's estimates at the consultation stage, and related to a 2010/11 base year.
[46] We consider the meaning of 'TI-specific' assets and costs in paragraphs 2.94–2.107 below.
[47] BCMR, ¶19.315.
[48] ibid, ¶19.315.
[49] Capital costs associated with other assets were not adjusted, and thus unit capital costs associated with these other assets were assumed to increase in line with the forecasts generated by Ofcom's AVE-based modelling.
[50] BCMR, ¶19.319.
[51] ibid, ¶19.321.
[52] ibid, ¶19.321.
[53] These responses are discussed in the BCMR, ¶¶19.323–19.343.
[54] From Cable and Wireless Worldwide (Vodafone acquired Cable and Wireless Worldwide in 2012), TalkTalk, BSkyB, Exponential-e, and EE/MBNL.

the scope of the LLCC. The responses, as reported by Ofcom in the BCMR Statement, are summarized below.

2.16 Cable and Wireless Worldwide (CWW) argued that administrative costs were common across many services and queried why unit administrative costs had more than doubled in the July 2012 LLCC Consultation. It said that there was no specific evidence of significant TI-specific fixed costs or significant rises in admin-related costs across all services. CWW argued that the increase in TI unit costs indicated that Ofcom had inadequately addressed the failings in BT's forecasting approach and incompletely dealt with the over-allocation of common costs to the TI basket.[55]

2.17 On the proposed methodology for calculating the common costs to reallocate from the TI to the Ethernet basket:

(a) CWW said that Ofcom did not explain how the significant rise in unit costs (an increase of 44 per cent from 2010/11 to 2015/16) was consistent with the cost drivers underlying TI services. CWW argued that the increase appeared to be attributable to Ofcom's changed approach to forecasting unit costs compared with 2009. It said that Ofcom's approach of reallocating capital costs on the basis of keeping unit costs fixed for the cable, duct, and land & buildings cost categories implied dramatic unit cost increases for other operational asset capital costs.[56]

(b) TalkTalk and BSkyB argued that it was unrealistic/unreasonable to assume that TI unit capital costs were stable and that TI unit costs should rise over time, given economies of scale. They argued that Ofcom did not take account of the fact that AI services would make more efficient use of resources (such as duct, fibre and accommodation) than TI services, and this should mean a rise in TI unit costs. TalkTalk also argued that there were reasons based on economic efficiency for having a higher common cost recovery from TI services than from AI services, including that it would encourage efficiency gains from migration away from TI services.[57]

(c) Exponential-e questioned whether the proposed reallocation to AI was a fair allocation and objected to the lack of detail provided.[58]

2.18 On the services outside the scope of the LLCC:

(a) CWW said that there were excess common costs among the operational assets and the admin-related costs and proposed that they should either be removed from the TI and Ethernet cost base altogether or allocated to the Ethernet cost base to the degree that the allocation of these costs would properly switch from TI services to Ethernet services over time. CWW argued that in future many customers would take up NGA,[59] rather than Ethernet.[60]

(b) TalkTalk and BSkyB were also concerned that Ofcom's proposed methodology did not adequately take into account services outside the scope of the LLCC.[61]

---

[55] BCMR, ¶¶19.325–19.328.
[56] ibid, ¶¶19.330–19.333.
[57] ibid, ¶¶19.334–19.336.
[58] ibid, ¶19.337.
[59] Next generation access.
[60] BCMR, ¶19.339.
[61] ibid, ¶¶19.340 & 19.341.

(c) EE/MBNL said that the logic that TI services should attract a declining amount of certain fixed costs seemed sound but questioned why all of these costs were reallocated to Ethernet and said that some should also be allocated to other BT products outside the market review which also use the same common costs.[62]

(d) Exponential-e said that the operational costs of providing network management needed close scrutiny such that only an appropriate proportion of those functions had their costs put into the Ethernet basket.[63]

Ofcom's approach to reallocation in the TI Price Control Decision

2.19 The 2015/16 cost forecast generated by Ofcom's model would—in the absence of any reallocation—have resulted in a charge control for TI services of RPI + 8.25 per cent.[64] This price increase followed from the fact that Ofcom's model (and in particular the application of the AVEs and CVEs) showed the 62 per cent forecast reduction in volumes as resulting in a much smaller percentage reduction in costs: 38 per cent.

2.20 Ofcom used a different approach to reallocating costs in the TI Price Control Decision. Instead of treating capital and operating costs separately (and—for capital costs—seeking to identify TI-specific costs), Ofcom calculated the amount to be reallocated as a proportion of all (ie capital and operating) 'non-marginal' costs. In line with the comments above, non-marginal costs were identified as those that were effectively treated as fixed in Ofcom's AVE/CVE-based modelling. Ofcom decided that a proportion of non-marginal costs should be reallocated from TI to Ethernet services in line with the forecast level of migration from TI to Ethernet services. Specifically, 29 per cent of non-marginal costs were reallocated in this way in line with survey evidence[65] that 29 per cent of business customers were likely to switch from TI to Ethernet services.[66]

2.21 Ofcom considered the case for a further reallocation of costs away from the TI basket to reflect the fact that some TI customers were likely to migrate to non-leased lines services. However, Ofcom decided it would be inappropriate to allocate common costs outside the leased lines market.[67]

2.22 Ofcom's decision on reallocating costs resulted in £46 million of non-marginal costs being reallocated from TI to Ethernet services.[68] This reallocation resulted in the TI charge control being reduced from RPI + 8.25 per cent to RPI + 2.25 per cent. The reallocation resulted in an increase in the charge control for the Ethernet basket from RPI – 13.75 per cent to RPI – 11.50 per cent.[69]

Summary of Verizon/Vodafone's main arguments

2.23 In the NoA, the appellants began their description of the grounds of appeal with a section that set out what they considered to be the 'correct approach to determining

[62] ibid, ¶19.342.
[63] ibid, ¶19.343.
[64] In its response to CC questions (q5) Ofcom explained that the reason for the change was that the Ofcom model was updated with 2011/12 data between the 2012 LLCC Consultation (which was based on 2010/11 data) and the TI Price Control Decision. There were material changes in TI services as the number of local ends reduced by approximately 20 per cent between the two years.
[65] Jigsaw Research, Business Connectivity Services Review, 11 October 2011.
[66] BCMR, ¶¶19.367–19.369.
[67] ibid, ¶19.362.
[68] ibid, ¶19.369.
[69] Ofcom hearing transcript, p79, line 18.

the appropriate allocation of common costs'.[70] The appellants contended that Ofcom should have reallocated common costs away from the TI services basket in line with *all* forecast migration away from TI services (not simply forecast migration from TI to Ethernet). They said that in the TI Price Control Decision Ofcom had already concluded such an approach was appropriate[71] and followed from the consistent application of BT's cost allocation methodology.[72]

2.24 The appellants submitted that the only basis presented in the TI Price Control Decision for not reallocating costs away from TI in line with all forecast migration was concerns over BT's recovery of common costs from non-leased lines services, given the need to 'ensure' recovery of common cost.[73] In support of this view, the appellants pointed to a number of Ofcom statements in the BCMR,[74] and most significantly to the following:

> We have considered whether it is appropriate to reallocate some of the common costs to services other than leased lines. <u>We consider that such an approach would be justified if BT were able to recover the common costs from other markets</u>. For example, if customers migrate from TI to other (not leased lines) BT services then BT may be able to recover the common costs, previously recovered from TI from the other services. If in the charge control we were to allocate all the common costs within the leased line market, then there is a risk that BT may double-recover those common costs[75]
>
> (Emphasis added when presented in NoA, paragraph 61.)

2.25 The appellants argued that Ofcom's assessment of BT's ability to recover additional common costs from non-leased lines services (as a result of migration away from TI) did not justify moving away from what they said was otherwise considered (including—according to the appellants—by Ofcom) the 'correct' approach to common cost allocation. The grounds of appeal set out the specific reasons why the appellants considered Ofcom's cost recovery justifications to have been erroneous.

2.26 The appellants described those costs that—in their view—should have been re-allocated away from the TI basket in line with forecast migration away from TI services, but were not reallocated, as: the 'Excess Common Costs'.[76] The grounds of appeal were presented in terms of these 'Excess Common Costs'. In summary the grounds were:

(a) Ground 1: Ofcom misdirected itself, and erred in law, in seeking to determine from which services, other than leased lines, the 'Excess Common Costs' should be recovered.[77] The appellants argued that Ofcom asked itself the wrong question. They argued that, having concluded that the 'Excess Common Costs' should not be recovered from the TI basket, Ofcom wrongly asked itself whether it was appropriate to allocate those costs to the services to which TI customers were migrating, which fell outside the scope of the charge control. The appellants argued that Ofcom breached its legal duties of: proportionality; regulatory

---

[70] NoA, §E(1), p29.
[71] NoA, ¶74.
[72] Verizon/Vodafone Core Submission, Volume 1, ¶4.2.
[73] NoA, ¶76.4.1.
[74] NoA, ¶¶57–70 points to Ofcom comments in BCMR, ¶¶19.352–19.366.
[75] BCMR, ¶19.353.
[76] In its Defence Ofcom disputed the use of the term 'Excess Common Costs' by the appellants and instead referred to the costs under dispute as the 'Disputed Common Costs' (Ofcom Defence, ¶4).
[77] NoA, §E(2), p31.

consistency; equal treatment and technological neutrality; and regulatory restraint.[78] The appellants also argued that Ofcom failed to promote its statutory duties in relation to: distortion of competition and investment; and failure to promote the interests of citizens, users and consumers.[79]

(b) Ground 2: Ofcom erred in fact in concluding that, if the 'Excess Common Costs' were not allocated to TI services, BT would not be able to recover those common costs from other services.[80] The appellants argued that even if Ofcom were correct in asking itself whether BT could recover the 'Excess Common Costs' from other services, it got the answer to that question wrong. The appellants set out a number of reasons why they considered this to be the case.

(c) Ground 3: Ofcom's decision to allocate the 'Excess Common Costs' to the TI basket is inconsistent with its regulatory objectives and approach and is not justified.[81,82] The appellants argued that Ofcom's cost recovery concerns were unfounded and could not justify a decision which Ofcom otherwise considered to be inappropriate[83] and the effect of Ofcom's decision was that TI services were treated differently and this was likely to lead to inefficient migration and distortions of competition.

Our approach to assessing the appellants' arguments

2.27 The above section described how the appellants' grounds are all based on the proposition that the 'correct' approach to cost allocation would have been for the reallocation to have been based on all forecast migration away from TI services[84] and rely on the proposition that there is a divergence between the reallocation decision that Ofcom took and what should be understood as the 'correct' approach.

2.28 Given the importance of this proposition, and—more generally—the appropriateness of the approach to cost allocation that Ofcom actually took, we began our assessment by first considering the parties' views on the appropriate basis for cost allocation. In undertaking our assessment we were mindful of the relevant legal principles set out in Section 1 above and summarized in paragraphs 1.29 to 1.32.

2.29 In response to our provisional determination the appellants said that we had misunderstood the grounds of appeal. They said that our provisional determination was premised upon the assumption that the approach advocated by the appellants was the 'correct' approach.[85] The appellants said that the approach set out in paragraphs 72 and 73 of the NoA was the appellants' conclusion. The appellants said that while it was true that the specific remedy sought by the appellants was that £49 million of cost should be removed from the TI basket, we had mistaken this specific remedy for a premise of the appellants' arguments.[86]

2.30 The appellants said that the proper and usual approach for the CC to adopt was: first, to consider the specific errors alleged in the NoA; second, to consider whether the decision challenged by the appellants could be upheld on other grounds; and third, if the decision challenged by the appellants was found to be flawed and could not be

[78] NoA, ¶77.
[79] NoA, ¶78.
[80] NoA, §E(3), p36.
[81] NoA, §E(4), p42.
[82] NoA, ¶95.
[83] NoA, ¶94.
[84] As set out in NoA, ¶¶72 & 73.
[85] Verizon/Vodafone response to the provisional determination, ¶11.
[86] ibid, ¶12.6.

upheld on other grounds, to consider whether it would be correct to: (i) make the adjustment to the level of the price control advocated by the appellants; (ii) make some other adjustment; or (iii) remit the matter to Ofcom. The appellants said that this aspect was usually considered at the stage of remedies. The parties said that the CC had only given proper consideration to whether it would be correct to make the adjustment sought by the appellants.[87]

2.31 The appellants also stated that the CC appeared to have equated the approach advocated by the appellants with the view that TI unit costs should remain constant.[88] They said that 'Ofcom's own view in the BCMR, §§19.347 to 19.352, was specifically that adopting a migration-based approach was not necessarily identical to holding unit costs constant', and whether or not it was depended upon the precise approach used.[89]

2.32 We carefully considered the concerns raised by the appellants that are summarized in paragraphs 2.29 to 2.31 above. In the NoA the appellants set out their views on the appropriate approach to cost allocation in section E(1), titled 'The correct approach to determining the appropriate allocation of common costs'. In that section, in paragraph 72, the appellants set out what they alleged to be common ground of what the 'correct' approach should have been to determining the appropriate allocation of common costs.[90] In paragraph 73, the appellants then set out their case that the correct approach for Ofcom was to remove from the TI basket not only a proportion of common costs which reflected migration to Ethernet, but also a proportion of common costs which reflected migration to other services. The appellants defined these costs as the 'Excess Common Costs' and stated that Ofcom's decision to allocate the 'Excess Common Costs' to the TI basket should be reversed. Finally, the appellants quantified the 'Excess Common Costs' by stating that £49 million of costs should be removed from the TI basket, and the TI charge control should be changed from RPI + 2.25 per cent to RPI – 4.85 per cent.

2.33 We note the appellants' view that we had mistaken the specific remedy proposed by them for a premise of their arguments (paragraph 2.28). However, as noted in paragraph 2.32, the specific remedy proposed by the appellants was simply a quantification of their view of the extent of the 'Excess Common Costs' that they argued should be removed from the TI basket. Each of the appellants' grounds (paragraph 2.26) was directed at the consideration of cost recovery issues in relation to the 'Excess Common Costs'. We consider that the arguments made by the parties in paragraphs 72 and 73 about: (i) 'the correct' approach to cost allocation; and (ii) the existence and magnitude of 'Excess Common Costs', were used by the appellants as the basis for their presentation of the grounds of appeal.

2.34 We also consider that the approach advocated by the appellants, treating all non-marginal costs as though they were variable, implied that the appellants were arguing that unit costs should remain constant. This conclusion is not affected by the observation that other approaches could have been proposed that did not involve holding unit costs constant.

2.35 We note that the appellants said that the CC had only given proper consideration to whether it would be correct to make the adjustment sought by the appellants (paragraph 2.30). However, our assessment also considered the broader question of whether there was a divergence between the level at which the charge control was

---

[87] ibid, ¶9.
[88] ibid, ¶12.4.
[89] ibid, ¶13.
[90] Note we review the appellants' views on the extent of common ground between the parties in ¶¶2.69–2.87.

actually set, and what should be understood as the 'correct' level given Ofcom's regulatory objectives. We did not find such a divergence (see paragraph 2.153). The errors alleged by the appellants were all based on the view that there was a better ('correct') measure of costs that Ofcom should have used, such that there was some level of 'Excess Common Costs'.

Views on the appropriate basis for common cost allocation

Verizon/Vodafone's views

2.36 In the NoA, the appellants began the section which set out what they considered to be the 'correct approach to determining the appropriate allocation of common costs',[91] by stating what they considered to be common ground. In particular, they submitted that it was common ground that:[92]

(a) Ofcom should aim to set the charge control so as to allow for the recovery of a proportion of common costs to TI services which is appropriate in view of the regulatory objectives;[93]

(b) Ofcom should take into account BT's likely future allocation of costs to the TI basket;[94]

(c) hence an appropriate proportion of common costs may be determined by reference to an allocation methodology based on usage;[95]

(d) an allocation in proportion to usage is both a reasonable approach to adopt in itself, and is consistent with Ofcom's practice in relation to other charge controls;[96]

(e) an allocation in proportion to usage is consistent with the methodology that BT will in fact adopt for the allocation of common costs between its services over the course of the charge control period;[97]

(f) given that Ofcom's cost forecasting methodology does not explicitly model changes in usage over the course of the charge control period, it is appropriate to adjust the allocation of common costs to TI services in subsequent years to take account of declining usage of TI circuits;[98]

(g) forecast decline in output, as measured in line volumes, is a proxy for a decline in usage and migration away from TI is an appropriate proxy for the decline in output;[99]

(h) Ofcom should seek to avoid systematic under- or over-recovery of common costs by BT;[100] and

[91] NoA, §E(1), p29.
[92] We consider the extent to which these propositions are indeed common ground in paragraph 2.69 below.
[93] NoA, ¶72.1.
[94] NoA, ¶72.1.
[95] NoA, ¶72.2.
[96] NoA, ¶72.2.
[97] NoA, ¶72.2.
[98] NoA, ¶72.3.
[99] NoA, ¶72.3.
[100] NoA, ¶72.4.

(i) in doing so, Ofcom's objective is to ensure that BT has the opportunity to recover its efficiently incurred costs, on an expected basis.[101]

2.37 The appellants submitted that 'in view of those conclusions and principles', the correct approach would have been for Ofcom to have removed from the TI basket not only a proportion of common costs which reflects migration to Ethernet, but also a proportion of common costs which reflects migration to other services.[102] In the NoA, the appellants said that removing a portion of common costs to reflect migration to other services (this being what the appellants referred to as the 'Excess Common Costs') would involve removing £49 million of cost from the TI basket and changing the charge control from RPI + 2.25 per cent to RPI – 4.85 per cent.[103] This quantitative assessment was revised on the basis of volume data provided in the Defence. The appellants revised their estimate of the costs that should be removed from the TI basket to £51.4 million, and their estimate of the resulting charge control to RPI – 5.23 per cent.[104]

2.38 The appellants commented further on their view that Ofcom should have taken into account BT's likely future allocation of costs to the TI basket[105] in their Core Submission, in response to points that were made by Ofcom and BT. In particular, the appellants argued that:

(a) Ofcom had adopted a Current Cost Accounting (CCA) Fully Allocated Cost (FAC)[106] standard for its assessment of costs, and it was clear, and was common ground, that Ofcom's overall aim was to forecast costs in the final year of the control by reference to a CCA FAC standard.[107]

(b) This process implicitly involved Ofcom making a forecast of the allocation of common costs in the final year of the control.[108]

(c) As a matter of practice, Ofcom chooses in general as a starting point to forecast a common cost allocation for the final year which is identical to that in the base year.[109]

(d) In order for Ofcom's forecasts to remain consistent with its overall aim of approximating CCA FAC costs, it was necessary for Ofcom to make an adjustment to the 'frozen' cost allocation[110] given that during the period of this charge control, there was evidence of a dramatic change in the relative volumes of services and hence in their relative usage of underlying assets.[111]

2.39 The appellants argued that this was in line with the principle of regulatory consistency. They argued that—properly understood—this did not require Ofcom mechanistically to adopt an approach in each price control which was identical in all respects.[112] Rather, they said that it required Ofcom to adopt an approach which properly took account of objectively different situations in each charge control, such

---

[101] NoA, ¶72.4.
[102] NoA, ¶73.
[103] NoA, ¶73.
[104] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, fn22.
[105] NoA, ¶72.1.
[106] BT's RFS are prepared on a CCA FAC basis.
[107] Verizon/Vodafone Core Submission, Volume 2, ¶20.1.
[108] ibid, Volume 2, ¶20.2.
[109] ibid, Volume 2, ¶20.3.
[110] ie the common cost allocation for the final year is identical to that in the base year.
[111] Verizon/Vodafone Core Submission, Volume 2, ¶34.3.
[112] ibid, Volume 2, ¶26.

as the forecast of sharply declining TI volumes as against services with more stable volumes.[113]

2.40 In support of this, the appellants pointed to Ofcom's approach in relation to the March 2012 LLU/WLR Statement, where Ofcom had considered it necessary to take volume forecasts into account to ensure that common cost allocation was robust across all Openreach services. They noted that Ofcom had accepted the cost allocation produced by its forecasting method and did not seek to conduct any separate enquiry as to whether BT would in fact recover the common costs from out-of-scope services, considering that consistently pursuing a CCA FAC standard would be adequate, and also considered that it was practicable to adopt such an approach.[114]

2.41 In their Core Submission, the appellants responded to Ofcom's arguments in the Defence concerning how practical and proportionate it would have been for Ofcom to seek to forecast how costs would have been allocated along the lines of BT's RFS methodology. They stated that Ofcom should have used migration, as it was a practicable, evidence-based proxy for changes in relative usage, and Ofcom had identified it as appropriate in the BCMR.[115]

2.42 The appellants also commented in their Core Submission on arguments that Ofcom's approach appropriately reflected a loss of economies of scale, and in doing so distinguished between TI-specific fixed costs and common costs.

2.43 The appellants stated that losses in economies of scale in respect of TI specific fixed costs would arise when there was an absolute decline in TI service volumes of the kind forecast by Ofcom.[116] However, they argued that the issue in the present case concerned the reallocation of common costs, and hence the loss of economies of scale which was directly relevant in the present case was that in respect of common costs, not TI-specific fixed costs. They argued—based on the expert reports of Mr Mantzos—that the available evidence indicated that TI-specific fixed costs were 'small'.[117] Mr Mantzos for the appellants set out the evidence upon which this view was based in his 2nd Expert Witness Statement:[118]

(a) Ofcom had, in the BCMR, adopted 'non-marginal costs' as a broad proxy for costs which were common between TI and other services.

(b) Ofcom had previously in the July 2012 LLCC Consultation indicated that by the end of the charge control period, virtually all of the TI-specific assets would be almost or fully depreciated, and the rise in unit capital costs was thus mainly attributable to common cost allocation.

(c) Mr Morden for BT used non-marginal costs as a proxy for common costs in analysis presented in his statement.[119]

2.44 The appellants argued that losses of economies of scale in respect of common costs would only arise if there was a fall in total usage across all services to which the costs were common. They argued that a fall in the relative usage of TI services would not imply any loss of economies of scale in respect of common costs, and that there would have to be dramatic reductions in non-TI service volumes before a reallocation

[113] ibid, Volume 2, ¶27.1.
[114] Verizon/Vodafone Supplemental Core Submission, ¶¶6–8.
[115] Verizon/Vodafone Core Submission, Volume 2, ¶23.
[116] ibid, ¶54.1.
[117] ibid, fn58.
[118] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶¶6.18 & 6.19.
[119] BT, SoI, W/S John Morden, Annex 2.

on the basis of migration would cease to be broadly consistent with BT's usage method.[120]

2.45 When commenting on the transcripts of the Ofcom and BT hearings, the appellants stated further that Ofcom's claims that there were significant TI-specific fixed costs were inconsistent with BT statements that there were no TI-specific fixed costs.[121] The appellants also argued that these Ofcom claims were inconsistent with Ofcom's own admission that it did not have a breakdown of non-marginal costs between those that were TI-specific and those that were common across other services.

Ofcom's views

Ofcom's Defence

2.46 As noted in paragraph 2.26 Ofcom stated that it did not accept that the costs which the appellants alleged should have been removed from the TI basket were in 'excess', and described them instead as the 'Disputed Common Costs'. In its Defence, Ofcom stated that it had sought to balance a number of specific policy objectives, derived from its statutory duties, of which three were particularly relevant to the appeal:[122]

(a) promoting efficient and sustainable competition: by seeking to set prices in line with costs to improve allocative efficiency;

(b) providing regulatory certainty: promoted by following consistent approaches in different charge controls and being reluctant to reopen charge controls; and

(c) ensuring sustainability by providing BT with the opportunity to recover its efficiently-incurred costs: the charge control should not deny BT the opportunity to recover its efficiently incurred costs.

2.47 Ofcom stated that it was important to distinguish between BT's methodology for allocating common costs—which involved the application of BT's Detailed Attribution Methodology (DAM) and used approximately 60,000 different cost codes—and Ofcom's approach to cost forecasting. Ofcom described its cost forecasting methodology as follows:

> It takes BT's DAM allocation of CCA FAC costs in the base year (here 2011/12), and effectively assumes that it is fixed for the charge control period, adjusting only for changes in efficiency, inflation, WACC and incremental costs. Ofcom's approach does <u>not</u> seek to forecast how BT's common cost allocation might evolve on the basis of forecast changes in usage over the period of the charge control.[123]

2.48 In terms of common cost allocation, Ofcom further commented that:

> AVEs and CVEs model how total costs change with incremental volumes. They do <u>not</u> capture any movements in BT's non-marginal cost allocation between markets: BT's non-marginal cost allocation to individual services is taken as given from the base year RFS, and adjusted only for expected overall changes in efficiency and inflation

---

[120] Verizon/Vodafone Core Submission, Volume 2, ¶54.2.
[121] Letter from appellants of 9 October: Attachment A (confidential), No.5.
[122] Defence, ¶¶24 & 25.
[123] ibid, ¶27.2.

and WACC. The base year allocation of common costs is thus spread over a changing number of units.[124]

2.49 Ofcom said that this reflected its usual approach in a range of markets, and that this approach did not involve attempting to forecast the evolution of BT's allocation of common costs in the RFS over the period of the charge control.[125]

2.50 Ofcom stated that the NoA appeared to proceed on the basis of a misunderstanding of Ofcom's cost forecasting methodology:[126] Ofcom's adoption of CCA FAC did not require it to estimate how BT was likely to change its allocation of costs over the control period;[127] and, it was not common ground that it was appropriate for the overall allocation of common costs to be made on the basis of usage.[128] Ofcom said that it was not trying to forecast how common costs would be allocated by BT's usage method,[129] and that attempting to forecast this would be an enormously difficult task, involving consideration of many services outside the LLCC.[130]

2.51 Ofcom argued that if its cost forecasting approach was applied consistently across different charge controls, there was no need to undertake the task of forecasting changes in usage of individual services over the charge control period. It argued that, while it was possible for the actual allocation of costs to turn out to be different from the forecast for any individual service, the expectation was that the total amount of common costs would be recovered in aggregate, and the possibility of error was not biased in either direction. Ofcom described this process as providing for a 'fair bet'.[131] Ofcom said that, adopting its approach, in some years there would be over-recovery and in some years there would be under-recovery, but overall it would net out. It said that with the appellants' approach there would be some years in which there would be recovery and some years in which there would not be.[132]

2.52 Ofcom argued that its decision to reallocate costs to Ethernet, but not to allocate costs away from TI to other non-leased lines services, was consistent with its general approach.[133] It argued that because TI and Ethernet were within the scope of the same market review, the reallocation resulted in the same total costs being recovered from leased lines as a whole, and therefore it did not generate any inconsistency with other charge controls.[134] By contrast, it argued that reallocation away from the leased lines market would risk under-recovery of costs, and—if done on a consistent and symmetric basis—would involve an enormous amount of work (to predict the evolution of BT's RFS[135]).

2.53 Ofcom agreed with the appellants that in its March 2012 LLU/WLR Statement it used a different modelling approach (the LLU Model) from the BCMR. Ofcom said that although the purpose of the LLU Model was to calculate costs for LLU services, it allocated costs to all Openreach services and included forecast volumes for non-LLU services, including TI services. Ofcom said that the LLU Model included some 'static' allocation bases (which allocated common costs by reference to actual base year volumes) and some 'dynamic' allocation bases (which allocated common costs by

[124] ibid, ¶30.
[125] ibid, ¶34.
[126] ibid, ¶35.
[127] ibid, ¶35.1.
[128] ibid, ¶35.2.
[129] ibid, ¶36.
[130] ibid, ¶35.2.
[131] ibid, ¶37.
[132] Ofcom hearing transcript pp81 & 82, lines 20–26 & 1–3.
[133] Defence, ¶38.
[134] ibid, ¶38.1.
[135] ibid, ¶38.2.

reference to forecast volumes). It said that in the LLU Model, the forecast TI volumes did affect the allocation of some common costs to LLU/WLR services, in that, if actual base year TI volumes had been used instead of forecast TI volumes, a smaller proportion of the affected sub-set of costs would have been allocated to LLU/WLR services. However, Ofcom said that the sub-set of costs was a small proportion of total costs.[136] Ofcom said that there were historic reasons as to why it used this modelling approach in setting the LLU/WLR charge control. However, it said that the way it was proposing to set the LLU/WLR charge control next time was going to be consistent with the LLCC, wholesale broadband access charge control, mobile termination rate charge control, and so forth.[137]

2.54 Ofcom said that the appellants were wrong to characterize Ofcom as having established any kind of general principle that the total amount of common costs allocated to leased lines should vary in line with migration, or that any common costs which were allocated to leased lines in the RFS were not appropriately recovered from the TI and Ethernet baskets.[138] The Defence said that:

> Ofcom recognises that the drafting of paragraph 19.353 of the BCMR Statement appears to suggest that Ofcom had intended that, if BT would be able to recover the common costs from other markets, it <u>would</u> (rather than might) be appropriate to reallocate some of the common costs to services other than leased lines. ...Ofcom did not in fact intend to make such a categorical statement, as it had not considered a situation where costs would be recoverable ... There are several weighty reasons why it might well not be appropriate to reallocate costs outside the scope of a charge control even if cost recovery was possible in other markets, and these would have required careful consideration.[139]

2.55 Ofcom referred, in particular, to the following reasons:[140]

(a) the need to consider whether it was justifiable to adopt a selective and asymmetrical approach;

(b) the practicalities, given the large amount of information about all of BT's activities needed to predict how BT would reallocate its common costs in the RFS; and

(c) the need to avoid a situation in which there was a retrospective reclassification of profit as recovery of common cost, as this would be contrary to the principle of regulatory certainty.

Ofcom's views at the hearing

2.56 When asked about the specific duties and objectives that underpinned its reallocation decision, Mr Culham for Ofcom told us that these were:[141]

(a) efficient migration;

(b) the protection of consumers of TI services; and

---

[136] In a 24 October 2013 letter to BSkyB and TalkTalk Ofcom estimated that the impact on the LLU/WLR costs would be around [✂], which amounted to less than [✂] per cent of LLU/WLR costs in the base year.
[137] Ofcom hearing transcript, p89, lines 14–21.
[138] Defence, ¶39.
[139] ibid, ¶67.
[140] ibid, ¶¶67.1–67.3.
[141] Ofcom hearing, pp52 & 53, line 26 and lines 1 & 2.

(c) the opportunity for the recovery of efficiently incurred costs.

2.57 Mr McIntosh for Ofcom told us that when Ofcom had looked at the results of its modelling—which showed that TI prices would have to go up by RPI + 8.25 per cent—in light of the evidence and in light of some of its regulatory objectives, Ofcom did not consider that the TI price increase struck the right balance, in particular, in terms of protecting the interests of those more captive customers who, for the time being at least, had to use TI services.[142]

2.58 Ms Kalmus for Ofcom told us[143] that total TI costs in the base year were £486 million, and provided a breakdown in terms of a number of cost categories: ducts & cable, transmission, land & buildings, other, operating expenditure and admin. She told us that Ofcom's modelling, and in particular the application of the AVEs and CVEs, resulted in a forecast of final year TI costs of £299 million, and provided a breakdown of this in terms of the same cost categories.

2.59 Ms Kalmus noted that there was nothing in Ofcom's model which was specifically labelled 'common costs'.[144] Mr Culham noted that the cost figures provided by Ms Kalmus were 'total' costs, and included marginal and non-marginal costs. He noted that, in principle, non-marginal costs could be split into fixed common costs and service-specific fixed costs, but that Ofcom's model did not make that split: they simply—by using the AVEs and CVEs—drew a distinction between those things that varied with volumes and those that did not. Ms Kalmus noted that AVEs and CVEs were calculated for individual cost categories,[145] so there would be an AVE for duct, and that AVE would be the same for every service that used duct. She noted that there were not specific AVEs or CVEs for TI services,[146] but there were some cost components which were TI-specific.[147]

2.60 Ofcom provided an estimated breakdown of what was driving the forecast rise in unit costs that was generated by its modelling (ahead of any reallocation).[148] Ms Kalmus told us that for some cost categories—and, in particular, duct, cable and administrative costs—the forecast rise in unit costs was unlikely to be appropriate.[149] This was highlighted in particular in relation to duct and cable, which was estimated to account for [✂] per cent of the unit cost increase:

> As we all know, these are used by BT to deliver many services and at an absolute level there are definitely economies of scale in cable and duct; in that increasing the number of circuits, you can get more circuits down the same duct. That results in a low AVE. And, before re-allocation, we forecast a significant increase in these costs per unit. However, what our pure model did not capture was the ability for this cable and duct to be reused to deliver other services over time and that was one of the factors behind the reallocation.[150]

2.61 However, Ms Kalmus told us that for some other cost categories, Ofcom did consider that some unit cost increase was appropriate:

---

[142] Ofcom hearing transcript, p11, lines 19–25.
[143] ibid, p20.
[144] ibid, p22.
[145] ibid, p24, lines 16 & 17.
[146] ibid, p24, lines 21–25.
[147] ibid, p25, lines 5–7.
[148] Chart handed out at Ofcom hearing.
[149] Ofcom hearing transcript, pp38 & 39.
[150] ibid, pp38 & 39, lines 25–26 and 1–9.

- Transmission equipment: Ms Kalmus described this as a kind of TI-specific fixed cost related to assets that would not in practice be used for the provision of other services as TI declines. She told us that while a lot of these costs had been depreciated, they were not fully depreciated, and that transmission equipment was estimated to account for [✂] per cent of the rise in unit costs.[151,152]

- Operating costs: This accounted for the largest portion in Ofcom's estimated shares of the rise in unit costs: [✂] per cent.[153] Ms Kalmus told us that: 'quite a bit of this will be TI-specific',[154] as the main driver was equipment at the local exchange, and maintenance, power, etc would be required while TI circuits remained and those requirements would not fall directly in relation to volume. She made a similar point in relation to motor transport costs (said to be related to engineer visits to fix equipment).[155]

- Land and buildings: This only accounted for [✂] per cent of the unit cost rise in Ofcom's estimate. Ms Kalmus told us that there would not be a one to one relationship between the fall in volumes and the fall in costs, effectively because much of the TI equipment, which occupied floor space at the exchange, was needed to provide the service irrespective of the number of customers it served.[156]

2.62 In line with this, Mr Culham described the rise in unit costs shown by Ofcom's modelling as reflecting both 'the efficiency point that service specific unit costs are rising' and also a common cost allocation effect.[157]

BT's views

2.63 BT intervened in support of Ofcom. Mr Richardson for BT told us that BT thought there had been a misunderstanding of how BT attributed costs to services, and that while it was true that BT used what it described as a 'usage method', that did not result in a simple and direct relationship between costs and volumes.[158]

2.64 BT said that the cost allocation process undertaken as part of the preparation of its RFS was a complex exercise,[159] involving the application of a large number of attribution methodologies at a very granular level.[160] In his statement, Mr Morden said that BT's Activity Based Costing system performed 1.4 million separate calculations to produce the final RFS, and allocated costs to over 600 sets of services.[161] BT argued that the appellants' suggestion that a usage-based methodology could or should be employed by Ofcom in forecasting costs in modelling charge controls was neither practical nor appropriate.[162]

2.65 Mr Morden for BT told us that it was the usage of assets that determined costs rather than the volume of services that ran over them.[163] Mr Dolling for BT said that the terms 'volume' and 'usage', which BT used in a generic way, could mean a lot of

---

[151] ibid, p39, lines 10–16.
[152] Specifically, Ms Kalmus thought the ratio of net to gross replacement cost would be about 20 per cent (Ofcom hearing transcript, p45, lines 21–24).
[153] Chart handed out at Ofcom hearing.
[154] Ofcom hearing transcript, p38, lines 23 & 24.
[155] ibid, p39, lines 21–23.
[156] ibid, pp26 & 27.
[157] ibid, p42, lines 22–25.
[158] BT hearing transcript, p5, lines 19–23.
[159] BT, SoI, ¶3.
[160] ibid, ¶12.
[161] BT, SoI, W/S John Morden, ¶¶19 & 20.
[162] BT, SoI, ¶3.
[163] BT hearing transcript, p19, lines 7–9.

different things in the allocation process,[164] for example: actual customer volumes, volume of floor space used in an exchange, or bandwidth.[165] In his statement, Mr Morden noted (by reference to BT's DAM document) that the process for apportioning the costs of duct between local access and the backhaul/core transmission networks was driven by the relative cross-sectional area (ie diameter) of cables contained in each duct section in BT's engineering survey.[166]

2.66 BT said that the allocation approach was based on relative usage such that a fall in usage of one service would not necessarily have any effect on cost allocation under the RFS as it would depend upon usage of other services which drew upon the same assets and consequently also on the volumes of those other services.[167] BT also said that the impact of volume changes on costs would depend on the relevant usage factors relating to the underlying assets used to provide those services, and that a corresponding increase in other services did not imply that those services would make the same contribution to common costs as the services which were relinquished, as the usage factor relating to the underlying assets of each of those services might be different.[168] Mr Richardson told us that TI and AI services were produced over different infrastructure run by different operating units and that they had quite different cost structures.[169]

2.67 Mr Morden told us that BT did not separately identify common costs,[170] and in its SoI BT referred to non-marginal costs as 'fixed and common costs'.[171] Mr Morden said that there was no equipment that it could identify that was purely TI specific: it was all shared with something, but usually with services of a similar vintage to TI.[172] Mr Morden told us that common costs which were allocated to TI would often relate to assets which were only used by a few services of a similar vintage and which were also in decline.[173] Mr Richardson said that it would be wrong to treat all of the fixed and common costs incurred in support of TI services as if they were variable costs.[174] Mr Richardson stated that economies of scale and scope were a dominating feature of telecom economics.[175]

2.68 BT argued that Ofcom was right to note that increasing unit prices for legacy services would be consistent with its statutory duties (in particular the promotion of efficiency) and therefore an appropriate outcome as TI services declined and some became obsolete.[176] Mr Morden told us that Ofcom's modelling, using the CVEs and AVEs that it did, probably under-allocated costs to TI (rather than over-allocated costs, as was alleged by the appellants). He told us that this was because of limitations on when costs could be removed when there were declining volumes. He said that there were, for example, limitations on the removal of a box from an exchange, and what was connected to it, until the last service using that box was removed.[177]

---

[164] ibid, p24, lines 3 & 4.
[165] BT hearing transcript, pp23 & 24.
[166] BT, SoI, W/S John Morden, Annex 1, p33.
[167] BT, SoI, ¶13.
[168] ibid, ¶36.
[169] BT hearing transcript, pp53 & 54, lines 27 and 1 & 2.
[170] ibid, p43, lines 2–5.
[171] For example, BT, SoI, W/S John Morden, Annex 2.
[172] BT hearing transcript, p19, lines 15–19.
[173] ibid, p20, lines 9 & 10.
[174] ibid, p7, lines 3–7.
[175] ibid, p6, lines 20 & 21.
[176] BT, SoI, ¶32.
[177] BT hearing transcript, p37, lines 2–5.

Assessment

The extent of common ground between the parties

2.69 In paragraph 2.36 above, we set out nine propositions that the appellants presented in the NoA as being common ground[178] and as providing the basis for the appellants' view that the 'correct' approach for Ofcom was to remove common costs from the TI basket in line with all forecast migration away from TI services.[179] We consider the extent to which these propositions can be regarded as common ground below, by considering how they relate to:

- regulatory objectives;
- the view that some adjustment to Ofcom's forecast of TI costs was appropriate; and
- the appropriate basis for adjusting Ofcom's forecast of TI costs.

Regulatory objectives

2.70 Ofcom's description at the hearing of what it considered to be the key considerations underpinning the Decision (paragraph 2.56) recognized the potential for prices to be excessive, and the importance of incentives to increase efficiency. Mr Culham, for Ofcom, told us at the hearing that the specific objectives that were relevant to the reallocation decision were: efficient migration, the protection of consumers of TI services, and the opportunity for BT to recover efficiently incurred costs.[180] Ofcom's concluding comments in the TI Price Control Decision on the level of the TI charge control were also consistent with these having been key considerations:

> An RPI + 2.25% control will mean that the price of TI services will rise in real terms over the charge control period. We consider that the level of the control reflects the loss of economies of scale as the network declines and provides the appropriate balance between allowing for efficient pricing signals and protecting customers from excessive prices.[181]

2.71 Three of the propositions put forward by the appellants as common ground directly concerned regulatory objectives:

- Ofcom should aim to set the charge control so as to allow for the recovery of a proportion of common costs to TI services which is appropriate in view of the regulatory objectives (see paragraph 2.36*(a)*).
- Ofcom should seek to avoid systematic under- or over-recovery of common costs by BT (see paragraph 2.36*(h)*).
- In doing so, Ofcom's objective is to ensure that the firm has the opportunity to recover its efficiently incurred costs, on an expected basis (see paragraph 2.36*(i)*).

---

[178] These propositions all come from NoA, ¶72.
[179] NoA, ¶73.
[180] Ofcom hearing, pp52 & 53, lines 26 and 1 & 2.
[181] BCMR, ¶19.378.

2.72 We consider that these propositions can all be treated as common ground. Ofcom considered that its decision was consistent with its regulatory objectives[182] and with the avoidance of any systematic bias in terms of BT's recovery of common costs.[183] Ofcom also explicitly recognized the appellants' acceptance of the principle that BT should have the opportunity to recover its efficiently incurred costs, on an expected basis.[184]

2.73 Ofcom is subject to a broad set of duties and objectives that impact on its charge control setting activities. We have not found there to be material disagreement over what these duties are. Rather, the appeal concerns how they were taken into account when setting the TI charge control, and grounds 1 and 3 both include claims that Ofcom's decision was in conflict with its relevant duties and objectives. These claims are considered in relation to Reference Questions 1 and 3 in paragraphs 3.2 to 3.21 below.

The view that some adjustment to Ofcom's forecast of TI costs was appropriate

2.74 The appellants submitted that it was common ground that: given that Ofcom's cost forecasting methodology did not explicitly model changes in usage over the course of the charge control period, it was appropriate to adjust the allocation of common costs to TI services in subsequent years to take account of declining usage of TI circuits (see paragraph 2.36*(f)*).

2.75 Ofcom agreed[185] with the comment of Mr Mantzos for the appellants that:

> the cost components and their AVEs/CVEs do not reflect the structure of common costs, and the fact that common costs will be reallocated in future as each service's share of total usage changes. As a result, reliance on AVEs/CVEs alone will not in general give an accurate forecast of the common costs which will be allocated to a service by BT's usage method in years following the base year.[186]

2.76 The Defence also stated that:

> Ofcom did specifically consider whether to adjust the results of the pure AVE/CVE cost forecast by making some reallocation, given the forecast large volume shifts away from TI, and forecast growth in Ethernet volumes. As stated above, Ofcom decided that it was appropriate to reallocate costs between TI and Ethernet[187]

2.77 In line with these comments, we consider that the above proposition from the appellants can be treated as common ground.

2.78 Ofcom stated that it was *not* trying to forecast how common costs would be allocated by BT's usage method.[188] The appellants made a number of counter arguments.[189] In particular they argued that Ofcom was inevitably engaged in forecasting BT's future common cost allocation;[190] that what the appellants referred to as a 'frozen' common

[182] Defence, ¶68.
[183] Defence, WS Culham, ¶42.
[184] Defence, ¶41.
[185] ibid, ¶36.
[186] NoA, EW/S, Adam Mantzos, ¶4.6.
[187] Defence, ¶38.
[188] ibid, ¶36.
[189] Verizon/Vodafone Core Submission, Volume 2, ¶¶18–23.
[190] ibid, ¶34.2.

cost allocation was not appropriate where large relative volume changes were forecast, as they were with TI services;[191] and that a ‘frozen’ allocation would result in an over-allocation of cost to TI services. As highlighted earlier,[192] the appellants considered that an adjustment to this ‘frozen’ allocation was necessary for regulatory consistency, and pointed to the March 2012 LLU/WLR Statement as a practical example of where Ofcom had moved away from the use of a ‘frozen’ allocation approach.

2.79 These comments do not change our view that we should treat it as common ground that it was appropriate to adjust the allocation of common costs to TI services to take account of declining usage of TI circuits. Ofcom was of the view that the CVE/AVE approach on its own would have been likely to over-allocate costs to TI services, and that some downward adjustment to the forecast level of TI costs was appropriate (paragraph 2.60). This view underpinned the reallocation of TI costs in the Decision, and the rationale for it was set out in the July 2012 LLCC Consultation, the Decision, and in the hearing. Ofcom did not adopt what the appellants refer to as a ‘frozen’ cost allocation approach.

The view that Ofcom should have taken into account BT’s likely future allocation of costs to the TI basket (see paragraph 2.36(b))

2.80 A related proposition that the appellants submitted was common ground was that Ofcom should take into account BT’s likely future allocation of costs to the TI basket. We note that Ofcom explicitly stated that this was not common ground.[193] Ofcom explained this position by stating that its usual approach to modelling costs for charge controls did not take into account future reallocations of common costs.[194] However, it noted that there may be circumstances that would warrant some variation of Ofcom’s usual approach, and that one such circumstance could be where forecasts of volumes changed sharply over time. Ofcom noted that this was particularly the case where there were low CVEs and AVEs, such as in the case of duct, such that Ofcom’s usual approach might give rise to sharp changes in unit costs.

2.81 In practice, notwithstanding Ofcom’s statement that this proposition is not common ground, we have not found the view that Ofcom should have taken into account BT’s likely future allocation of costs to the TI basket when setting the TI charge control to raise material points of disagreement. We note that other comments from Ofcom indicate that BT’s likely future allocation of costs was indeed considered a relevant factor and taken into account. Thus, as was noted earlier (paragraph 2.60), when considering the appropriateness of the forecast change in duct costs implied by its AVE-based modelling, Ofcom commented that: ‘In practice, we do not believe that unit costs would change in this way. Over the period, we expect BT to reallocate common costs to reflect the changing use of that network. ... Specifically, the share of total costs allocated to TI will fall to reflect the lower use of the network by TI circuits’.[195]

2.82 We assess below to what extent these points are common ground as between the appellants and Ofcom in order to isolate the areas of dispute.

---

[191] ibid, ¶34.3.
[192] Paragraph 2.38*(d)*.
[193] Defence, WS Culham, ¶35.
[194] ibid, ¶35.
[195] Ofcom, Leased Line Charge Control Consultation (Annex 5), ¶A5.258.

The appropriate basis for adjusting Ofcom's forecast of TI costs

2.83 The appellants presented four propositions as common ground that concerned what the appropriate basis for adjusting Ofcom's forecast of TI costs should have been:

(a) an appropriate proportion of common costs may be determined by reference to an allocation methodology based on usage (see paragraph 2.36*(c)*);

(b) an allocation in proportion to usage is both a reasonable approach to adopt in itself, and is consistent with Ofcom's practice in relation to other charge controls (see paragraph 2.36*(d)*);

(c) an allocation in proportion to usage is consistent with the methodology that BT will in fact adopt for the allocation of common costs between its services over the course of the charge control period (see paragraph 2.36*(e)*); and

(d) forecast decline in output, as measured in line volumes, is a proxy for a decline in usage and migration away from TI is an appropriate proxy for the decline in output (see paragraph 2.36*(g)*).[196]

- *An appropriate proportion of common costs may be determined by reference to an allocation methodology based on usage*[197,198]

2.84 Ofcom noted that the NoA was correct in stating that *BT* allocated common costs across all services based on usage.[199] However, Ofcom said that it was *not* common ground—other than in relation to the base year—that it was appropriate for the overall allocation of common costs to services to be made on the basis of usage.[200] Ofcom therefore drew a distinction between its cost allocation methodology and BT's.[201] This statement, therefore, can be understood as common ground if related to BT's cost allocation methodology, but not common ground (other than in relation to the base year) if related to Ofcom's cost forecasting approach.

- *An allocation in proportion to usage is both a reasonable approach to adopt in itself, and is consistent with Ofcom's practice in relation to other charge controls*[202]

2.85 The view that an allocation in proportion to usage is consistent with Ofcom's practice in relation to other charge controls is not common ground. As was highlighted in paragraph 2.80, Ofcom said that its usual approach to modelling costs for charge controls did not take into account future reallocations of common costs.[203]

[196] NoA, ¶72.3.
[197] NoA, ¶72.2.
[198] The appellants also presented a very similar proposition as common ground at NoA, ¶49: that it is appropriate for the overall allocation of common costs to services to be made on the basis of usage.
[199] Defence, ¶27.1.
[200] ibid, ¶35.2.
[201] ibid, ¶27.
[202] NoA, ¶72.2.
[203] Defence, WS Culham, ¶35.

- *An allocation in proportion to usage is consistent with the methodology that BT will in fact adopt for the allocation of common costs between its services over the course of the charge control period*[204]

2.86 As was highlighted above, Ofcom noted that the NoA was correct in stating that BT allocated common costs across all services based on usage.[205] In line with this, we consider that this proposition can be treated as common ground.

- *Forecasted decline in output, as measured in line volumes, is a proxy for a decline in usage and migration away from TI is an appropriate proxy for the decline in output*[206]

2.87 We note that this proposition refers to the relationships between four terms: 'output', 'line volumes', 'migration' and 'usage'. Our consideration of the submissions from the appellants and Ofcom have not provided the basis for us to conclude whether this proposition should be regarded as common ground.

What is meant by 'common costs', and how does it relate to the cost assessment exercise that Ofcom undertook?

2.88 The grounds of appeal explicitly concern the reallocation of common costs, and the term was used a great deal in the NoA, the TI Price Control Decision and in Ofcom's Defence. The term 'common costs' typically refers to costs that are common between two or more activities.[207] In practice, it is apparent that the category 'common costs' has not been straightforwardly identifiable in this context. There is not a distinct set of common costs identified in BT's accounts, and Ofcom does not routinely seek to identify or use measures of common costs for charge control purposes.

2.89 In order to assess the issues raised in the appeal, it is necessary to consider the context within which attempts to identify and measure 'common costs' have been made. The relevant context was that Ofcom were seeking to determine the appropriate level of TI *total* costs for the final year of the control period (2015/16).

2.90 Ofcom did that by starting with BT's RFS data for the base year and (after making a number of adjustments) modelling the impact that forecast volume changes would have on the level of costs through the use of explicitly identified cost/volume relationships. This was done in a disaggregated manner, with different AVEs and CVEs used for a range of different cost categories, including cable, duct, local exchange, main exchange, transmission and buildings.

2.91 The AVEs and CVEs defined the extent to which the costs associated with each category (eg duct) were treated as 'marginal', and were assumed to vary directly with volume. As noted in paragraph 2.13*(b)*, an AVE of 0.6 for a given cost category would imply that 60 per cent of the costs associated with that category were treated as variable. The remaining 40 per cent of costs were treated as fixed, and have been referred to by Ofcom as 'non-marginal'.

2.92 The appeal concerns the appropriate treatment of these non-marginal costs within Ofcom's cost forecasting process. The appellants considered that all 'non-marginal'

---

[204] NoA, ¶72.2.
[205] Defence, ¶27.1.
[206] NoA, ¶72.3.
[207] This is consistent with the way in which BT defines 'fixed common costs', for example, in: BT Primary Accounting Documents, 31 July 2013, p54.

costs could be treated as equivalent to 'common' costs, and that all common costs could be treated as varying directly in proportion to volume. Thus, while the appellants argued that the 'correct' approach would have been for all common costs to have been reallocated away from TI in line with all forecast migration away from TI services, they also contended that all 'non-marginal' costs should have been reallocated in this way. As was highlighted above, however, Ofcom considered that only some part of non-marginal costs should be understood as common across services, with the rest being understood as a form of TI-specific fixed costs. BT said that although there was no equipment that it could identify that was purely TI-specific, common costs which were allocated to TI would often relate to assets which were only used by a few services of a similar vintage which were also in decline, and it would be wrong to treat all fixed and common costs incurred in support of TI services as if they were variable costs (paragraph 2.67).

What is meant by 'usage', and how does it relate to 'line volumes' and 'migration'?

2.93 The term 'migration' suggests the movement of customers from one type of service to another—that is, migration of demand. The scale of what the appellants refer to as 'Excess Common Costs' has been calculated on the basis of the overall forecast decline of 62 per cent in TI volumes.[208] In practice, such volume forecasts will reflect the expected net impact of all migration and other relevant changes in service volumes: such as new customer demands (including service upgrades) and customers ceasing to take services. Both Ofcom and BT provided reasons why they would not expect costs—as allocated under BT's usage method—to fall in line with the forecast decline in TI local ends.[209]

(a) Ofcom told us that it used 'local ends' as the measure of circuits in its volume comparisons as this reflected the number of circuits delivered to the final customer. In practice, Ofcom's CVE/AVE approach to cost forecasting used a more disaggregated set of circuit volume measures, and some of those measures (in particular, distribution kilometres and link connections) were not forecast to fall as quickly as local end volumes.[210]

(b) BT set out in its SoI that its cost allocation approach was based on relative usage of network components, with the impact of volume changes on costs dependent both on usage factors that are applied to the underlying assets, and on volumes of other services which use the same assets. BT told us that, given this, an identified fall in the volume of one service would not necessarily have any effect on the overall level of cost allocated under the RFS (paragraph 2.66).

Ofcom's approach to cost reallocation

2.94 Ofcom's cost modelling, using the CVEs and AVEs, implied that the forecast 62 per cent reduction in TI circuits would have resulted in a 38 per cent reduction in total costs, and thus a significant increase in TI unit costs, and a TI charge control of

[208] NoA, ¶73, showed the appellants' initial estimate of the 'Excess Common Costs' as £49 million. The basis upon which this figure was calculated was set out in the first statement of Mr Mantzos, which explained that it assumed reduction in TI volumes was 60.5%, and said that this volume reduction estimate was based on visual inspection of Figure 19.8 of the BCMR which showed volumes of local ends (NoA, EW/S, Adam Mantzos, ¶12 and fn 55). Verizon/Vodafone Core Submission, Volume 2, ¶7.5, showed the appellants' revised estimate of the 'Excess Common Costs' as £51.4 million. The basis upon which this was calculated was set out in the second statement of Mr Mantzos, which explained that it was based on the 62% forecast fall in TI volumes referred to in Ofcom's Defence (Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, fn 22). This 62% forecast fall in volumes also related to TI local ends (Ofcom's written response of 27 September to the CC's question 3, following the bilateral hearings).

[209] ¶¶2.54 & 2.55 and 2.60 & 2.61 above.

[210] Ofcom's written response of 27 September to the CC's question 3.

RPI+8.25 per cent.[211] As was highlighted earlier (paragraph 2.60), Ofcom told us that for some categories—in particular, duct, cable and administrative costs—it considered that its forecast rise in unit costs was unlikely to be appropriate because the modelling did not capture the ability for, for example, duct, to be reused over time to deliver other services. This underpinned its view that some cost reallocation was appropriate.

2.95 At the same time, however, Ofcom considered that some unit cost increase was appropriate in relation to other cost categories, as a number of costs (including those associated with transmission equipment, land and buildings, and operating costs) would not be expected to fall directly in relation to volume. Thus, Ofcom considered that some non-marginal costs were fixed and common, whereas others were fixed and could be understood as specific to TI (or at least could be expected to decline more slowly than TI volumes (paragraph 2.61)).

2.96 Ofcom considered that the reallocation of 29 per cent of non-marginal costs to Ethernet resulted in an outcome that was consistent with its assessment of how TI costs would be expected to change given the large forecast fall in volume. Thus, in the Decision, Ofcom explained its basis for using the 29 per cent figure, and not reallocating further costs away from the TI basket, as follows:

> We consider it preferable to recover those common costs from the remaining TI customers. In our regulatory judgement, such an approach will promote efficiency in line with our regulatory objectives. As the legacy services decline, there is a loss of economies of scale such that unit costs rise. We consider it appropriate that this rise in unit costs is reflected in the pricing of TI services, subject to the adjustment for the common costs likely to be recovered from the Ethernet basket.[212]

2.97 At the Ofcom hearing, Mr Culham described the use of the 29 per cent as follows:

> We did a calculation based on migration to AI and we said, What does it look like if you re-allocate that quantum of costs? And we said, That looks more reasonable than where we started. That looks like a good balance, we will go with that.[213]

2.98 The appellants argued that the ‘correct’ approach would have been to remove from the TI services basket not only a proportion of common costs which reflects migration to Ethernet, but also a proportion of common costs which reflects migration to other services. The appellants said that this would involve removing £51.4 million of cost from the TI basket (paragraph 2.37). This means the appellants were arguing that 62 per cent of non-marginal costs should have been reallocated away from TI services, in proportion to the reduction in TI volumes.

2.99 If non-marginal costs were allocated away from TI in line with all forecast migration away from TI then (from a TI perspective at least) they would be treated in the same way as marginal costs. Given this, although the appellants focus their arguments on *common* cost allocation questions, the way in which their estimate of common costs has been arrived at means that their argument relies on it being correct to treat *total* costs as varying proportionately to volumes. The appellants’ approach effectively relies on it being appropriate to assume that TI unit costs are constant as TI volumes

---

[211] Defence, W/S Culham, ¶¶44–47.
[212] BCMR, ¶19.366.
[213] Ofcom hearing, p62, lines 10–14.

fall by 62 per cent, which is equivalent to saying that there would be no loss of economies of scale.

2.100 Both Ofcom (paragraphs 2.59 to 2.61) and BT (paragraphs 2.67 and 2.68) strongly disagreed with this approach. In its Defence, Ofcom said: 'It is well-known that economies of scale are significant in the telecommunications sector, and it is reasonable to expect some rise in unit costs in a declining service, just as it is reasonable to expect falling unit costs as markets grow.'[214] BT said that it would be wrong to treat all TI fixed and common costs as if they were variable costs (paragraph 2.67).

2.101 In their response to the provisional determination, the appellants argued that the allocation of common costs away from TI (which is the subject of the appeal) was not set by Ofcom on the basis of a view of economies of scale.[215]

2.102 The appellants also said that the evidence of Dr Lilico provided a basis for concluding that it was 'economically incorrect' to set the TI price on the basis of the cost allocation methodology used by Ofcom.[216]

2.103 The appeal is directly concerned with how costs should have been adjusted to reflect a forecast reduction in TI volumes. In our view, the consideration of economies of scale issues was integral to Ofcom's assessment of the extent to which the TI charge control was based on an appropriate measure of costs. Ofcom has a standard approach to forecasting costs for the purpose of setting a charge control, a key component of which is the application of its CVE/AVE approach. The purpose of cost modelling using CVE/AVEs is to develop a forecast of the relationship between costs and volumes. In the absence of economies of scale, there would have been no need for any explicit development or modelling of such cost/volume relationships.

2.104 The extent to which there are economies of scale is plainly of direct relevance to consideration of the view that there were 'Excess Common Costs' allocated to TI services.

2.105 Dr Lilico considered that Ofcom's reallocation methodology was 'methodologically incoherent', and that this incoherence would tend to over-allocate costs to TI relative to Ethernet and other services.[217] In support of this view, Dr Lilico argued that if Ofcom's analysis in respect of TI implied that, in a competitive market, the TI price would not include 31 per cent of previously borne common costs, because of migration to other services that use the same common cost generating assets, then Ofcom should not allocate those common costs to TI. He argued that if Ofcom did allocate those costs to TI, then it would result in a TI price that was, relative to other services (and assuming that Ofcom's methodology was correct in all other respects), too high (ie above the level that would pertain in a competitive market).[218]

2.106 However, this argument is based on the assumption that Ofcom's assessment had shown that the TI price being set exceeded Ofcom's assessment of an appropriate level of costs. We found the evidence of Dr Lilico to be of limited assistance in determining whether the TI price control had been set at an inappropriate level.

[214] Defence, ¶44.3.
[215] Verizon/Vodafone Response to provisional determination, ¶15.3.
[216] ibid, ¶25.
[217] 1st Lilico, ¶4.1.1.
[218] ibid, ¶4.7.

2.107 In support of their view that the correct approach would have been for non-marginal costs to be reallocated in line with all migration away from TI services, the appellants rely on:

(a) the contention that Ofcom itself had said that—but for cost recovery concerns—reallocation in line with all migration would have been appropriate;

(b) the view that reallocation out of the TI basket in line with falling TI output is broadly consistent with BT's usage method; and

(c) views on the significance of TI-specific fixed costs and economies of scale.

These points are considered in turn.

The contention that Ofcom had identified reallocation in line with all migration as appropriate but for cost recovery concerns

2.108 The appellants argued that: 'Ofcom's own reasoning is that, if aggregate common cost recovery concerns are left to one side, a full reallocation of costs out of the TI basket in line with migration would be appropriate.'[219]

2.109 Some statements in the BCMR suggest that, absent cost recovery concerns, it would have been appropriate to have allocated common costs away from TI services in line with all forecast migration. This is most obvious in relation to the Ofcom statement that: 'We have considered whether it is appropriate to reallocate some of the common costs to services other than leased lines. We consider that such an approach would be justified if BT were able to recover the common costs from other markets.'[220]

2.110 This could be understood as implying that Ofcom considered that it would have been reasonable for unit common costs to have remained constant as volumes fell by 62 per cent. However, we do not consider that this statement can be taken to imply, as relied on by the appellants (paragraph 2.99), that Ofcom was of the view that TI unit costs should remain constant as TI volumes fell by 62 per cent and that there would be no loss of economies of scale. The views in Ofcom's Defence[221] and the views that Ofcom presented at the hearing (paragraphs 2.58 to 2.61), make it clear that Ofcom did *not* consider constant unit costs to be a reasonable assumption.

2.111 The view that unit costs should have remained constant is also at odds with other statements in the BCMR where, for example, Ofcom stated that:

> As the legacy services decline, there is a loss of economies of scale such that unit costs rise. We consider it appropriate that this rise in unit costs is reflected in the pricing of TI services subject to adjustment for the common costs likely to be recovered from the Ethernet basket.[222]
>
> The volume of TI services is forecast to decline substantially over the period of the proposed charge control as demand increases for higher

[219] NoA, ¶92.
[220] BCMR, ¶19.353.
[221] Defence, ¶44.3.
[222] BCMR, ¶19.366.

bandwidth services. TI fixed costs are shared over fewer volumes as TI circuits decline and CPs[223] migrate to new solutions.[224]

An RPI + 2.25% control will mean that the price of TI services will rise in real terms over the charge control period. We consider that the level of the control reflects the loss of economies of scale as the network declines and provides the appropriate balance between allowing for efficient pricing signals and protecting customers from excessive prices.[225]

2.112 Ofcom consistently stated in the BCMR that TI unit costs could be expected to rise with declining volumes, as a result of loss of economies of scale and concluded that this rise should be borne by TI users. This was also consistent with Ofcom's proposal in the July 2012 LLCC Consultation, which assumed that unit costs would rise as volumes declined. We therefore do not conclude that Ofcom had determined that, but for cost recovery concerns, holding TI unit costs constant would have been the appropriate approach to take in setting the TI price control.

2.113 In their response to the provisional determination, the appellants state that the BCMR paragraph 19.366 quoted above (paragraph 2.111) does not express the kind of view in respect of economies of scale which is now set out in the provisional determination, arguing that Ofcom was concerned with a very specific point, namely whether it was appropriate to reallocate to Ethernet all of the common costs associated with migration away from TI having reached the view that it was not possible to allocate costs outside the leased lines market. The appellants pointed in particular to paragraph 19.365 of the Statement where Ofcom said that it would have considered it appropriate for common costs to have been reallocated to Ethernet in line with the forecast reduction in TI services in the scenario where all migrating customers were going to Ethernet services. The appellants argued that if Ofcom had believed that the reallocation of common costs away from TI should be limited to reflect losses of economies of scale associated with migration to other services, then it would follow that a full reallocation to Ethernet would have been inappropriate even if all migration were to Ethernet.[226]

2.114 The appellants also suggested that the references to economies of scale in the BCMR paragraphs 19.377 and 19.378 quoted above (paragraph 2.111) are at best no more than a 'cross-check' on the final level of the price control, and at worst, simply broad assertion.[227]

2.115 Our provisional determination recognized that there were some inconsistencies in the way in which Ofcom explained the TI price control decision. However, we did not conclude that Ofcom had determined that, but for cost recovery concerns, holding unit costs would have been the appropriate approach to take in setting the TI price control. As we noted in the provisional determination, such a conclusion would have been inconsistent with Ofcom's ultimate decision on the TI charge control, with the proposal that Ofcom had consulted on, and with Ofcom's stated view in other parts of the BCMR, in its Defence and at its hearing that the decline in TI services would be associated with a loss of economies of scale.

[223] Communications providers.
[224] BCMR, ¶19.377.
[225] ibid, ¶19.378.
[226] Verizon/Vodafone Response to provisional determination, ¶16.
[227] ibid, ¶17.

2.116 We consider that the proposal that Ofcom consulted on for the TI price control is particularly relevant to consideration of paragraphs 19.363 to 19.365 of the BCMR, as that proposal (in line with the 2009 LLCC) was based on only considering changes in TI and Ethernet volumes. That proposal was based on a reallocation approach that explicitly differentiated between 'TI-specific' and 'common' assets, and assumed that the forecast decline in TI volumes would result in a significant increase in TI unit costs. Indeed, as was noted in paragraph 2.17*(a)*, in its response to the July 2012 LLCC Consultation, CWW explicitly pointed to Ofcom's proposed approach as involving a 44 per cent increase in TI unit costs.

2.117 Ofcom's view in July 2012—as expressed as part of the price control proposal that it consulted on—was that a significant increase in unit costs would be expected as TI volumes fell as there would be a significant loss of economies of scale. Ofcom's comments on economies of scale in paragraph 19.366 of the BCMR are consistent with this view. While paragraphs 19.363 to 19.365 of the BCMR could be read to imply a different view in relation to economies of scale, this did not lead us to conclude that Ofcom had determined that, but for cost recovery concerns, holding unit costs would have been the appropriate approach to take in setting the TI price control.

2.118 We consider that it was only as a result of a consideration of the output of the CVE/AVE approach that any reallocation was being made at all. In our view, what the appellants described as a 'cross-check' was a justifiable approach by Ofcom to ensure that the adjustment that it made to the output of its standard approach to modelling the impact of forecast volume changes on costs resulted in an appropriate measure of costs, and consideration of economies of scale was integral to that assessment (see paragraph 2.104). As we explain in paragraph 2.152, Ofcom considered that there were good reasons why its CVE/AVE approach would be likely to overstate TI costs—reasons that had been set out in documents, including the LLCC Consultation. However, Ofcom also considered that some of the increase in TI unit costs forecast by its standard modelling approach was appropriate due to a loss of economies of scale. Ofcom's comments in paragraphs 19.377 and 19.378 of the BCMR clearly indicated that the level of the TI price control was considered to be consistent with its objectives, and explicitly highlighted the loss of economies of scale.

The view that reallocation out of the TI basket in line with falling TI output would have been broadly consistent with BT's usage method

2.119 The appellants argued that reallocation out of the TI basket in line with all migration away from TI services would have been broadly consistent with BT's usage method, and—when setting the TI price control—Ofcom was inevitably engaged in a forecast of BT's common cost allocation in the final year of the control.[228] The appellants contended that Ofcom should have reallocated costs on the basis of migration away from TI as a practicable, evidence-based proxy for changes in relative usage.[229]

2.120 In presenting this view, the appellants rely on the evidence of Mr Mantzos. In his first statement, Mr Mantzos said that: 'A full reallocation of common costs out of the TI basket in line with migration out of TI services would appear to be broadly consistent with BT's usage method.'[230] In support of this view, Mr Mantzos presents an illustrative calculation relating to TI usage of duct, and states that since 'TI's fall in

[228] Verizon/Vodafone Core Submission, Volume 2, ¶20.5.
[229] ibid, Volume 2, ¶23.
[230] NoA, EWS, Adam Mantzos, ¶6.

absolute usage appears to be broadly consistent with the fall in TI's share of usage, and since TI's share of total usage appears to be mostly small, the two are likely to be broadly similar'.[231]

2.121 In our view, this simplified illustration does not provide an adequate basis upon which to draw conclusions on the likely operation of BT's cost allocation process in the context of a large decline in TI volumes. It is notable that the calculation related to duct, a category that Ofcom highlighted as underpinning the rationale for some reallocation. In a footnote Mr Mantzos stated that:

> I would need more detailed information if it were judged important to estimate the relationship between TI's fall in absolute usage and the fall in TI's share of total usage more accurately. However, since Ofcom appears to have accepted the fall in output as a reasonable proxy for the reallocation that would occur absent cost recovery concerns, I do not consider this a material limitation to my conclusions[232]

2.122 This indicates to us that his view relies heavily on the assumption that Ofcom had concluded that migration away from TI provided a reasonable proxy for how BT would allocate costs over time. Similarly, in his second statement, Mr Mantzos's views proceed on the basis that the reasonableness of a 'migration-based' approach had already been established (given Ofcom's comments in the BCMR).

2.123 In response to Ofcom and BT comments that BT's cost allocation process is highly detailed and that forecasting TI's common cost allocation would be extremely difficult and require a disproportionate level of effort, Mr Mantzos commented that:

> Nor do I believe it reasonable to assume that a simplified measure such as Ofcom's migration-based reallocation cannot be broadly consistent with BT's methodology, solely because BT's methodology is highly detailed.[233] ...
>
> most modelling is an abstraction of reality, requiring approximations and the simplification of complex systems.[234]

2.124 We recognize the detailed and relatively complex nature of the cost allocation processes that underpin the development of BT's RFS. It may be possible to develop simplified and yet reasonable approximations of such processes that can be adequate for some purposes. However, the appellants have not shown that 'migration' provides such a reasonable approximation in the context within which they are saying that it should have been used. Instead they have relied on the contention that Ofcom had already determined that such an approach was appropriate for that purpose.

2.125 In its Defence, Ofcom argued that the fact that it had decided to use migration as the basis for reallocating costs within the LLCC between TI and AI, did not mean that any kind of general principle had been established.[235] We do not consider that Ofcom had concluded that migration away from TI provided a reasonable proxy for how BT would allocate costs over time. Such a conclusion would have been in conflict with Ofcom's stated view (paragraphs 2.60 and 2.70), and the evidence provided by BT

---

[231] ibid, ¶6.4.2.
[232] ibid, fn32.
[233] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.4.
[234] ibid, ¶6.4.2.
[235] Defence, ¶39.
[235] ibid.

(paragraph 2.67), that a loss of economies of scale would be expected given the sharp forecast reduction in TI volumes.

Views on the significance of TI-specific fixed costs and economies of scale

2.126 Ofcom's view—as set out in the BCMR—that the TI price control was set at a level that reflected the loss of economies of scale that would be expected to arise given the large forecast decline in TI volumes, was not commented on in the NoA.[236] Neither was any comment made in the NoA concerning the potential significance of TI-specific fixed costs, although such costs were referred to in a footnote in the first statement of Mr Mantzos: he noted the potential for TI-specific fixed costs to contribute to non-marginal costs.[237] Mr Mantzos said that Ofcom adopted non-marginal costs as a broad proxy for common costs, that this implied that TI specific fixed costs were 'small'. This was also said to be consistent with Ofcom's comments in the 2012 LLCC Consultation that by the end of the charge control period, virtually all of the TI-specific assets would be almost fully depreciated, and that the rise in unit capital costs being identified at that time was mainly attributable to common cost allocation.[238]

2.127 Mr Mantzos reiterated these points in his second statement and provided further illustrative comments relating to why he did not consider that there were likely to be significant economies of scale.

2.128 The following first considers comments made on TI-specific fixed costs,[239] before turning to consider the comments made on economies of scale associated with 'aggregate usage across all services',[240] and on the historical relationship between migration and common cost allocations.[241] In their response to the provisional determination, the appellants pointed to the evidence of Mr Harding in relation to economies of scale. This is considered below (paragraphs 2.137 to 2.140).

- *TI-specific fixed costs*

2.129 We note that Mr Mantzos pointed to Ofcom's comments in paragraph A5.250 of the 2012 LLCC Consultation that 'by the end of the charge control period, virtually all of the TI-specific assets will be almost or fully depreciated. The rise in unit capital costs was thus mainly attributable to common cost allocation' (paragraph 2.126). He inferred from this that 'the effect of TI-specific fixed costs (and their impact on TI unit costs) was likely to be minor, and not significant enough to prevent the full reallocation actually considered by Ofcom in the BCMR Statement being broadly consistent with BT's usage method'. However, this view is not consistent with what Ofcom was actually proposing at that time. Ofcom's proposed approach explicitly sought to differentiate between TI-specific and non-TI-specific capital costs. At that time, Ofcom treated capital costs associated with duct, cable and land & buildings as 'common', and all other capital costs (including those associated with transmission) as effectively TI-specific. Notwithstanding the statement referred to by Mr Mantzos, Ofcom's proposal in the July 2012 LLCC Consultation for the TI price control did not

---

[236] We note that the NoA states that Ofcom found that 'by the end of the charge control period, virtually all of the TI-specific assets will be almost or fully depreciated' (paragraph 2.43*(b)*). This was an argument from CWW made in response to the 2012 LLCC Consultation that there was little evidence of TI-specific fixed costs. However, this does not mean that there are no economies of scale—see the evidence from Ofcom and BT referred to in paragraph 2.125.
[237] NoA, EWS, Adam Mantzos, ¶5.1 & fn 26.
[238] ibid, fn26.
[239] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.20.
[240] ibid, ¶¶6.21–6.28.
[241] ibid, ¶¶6.29–6.32.

involve treating non-marginal costs as a proxy for common costs and did not assume that unit costs would remain constant.

2.130 In practice, Ofcom's proposed approach in the July 2012 LLCC Consultation and the approach that it adopted in the Decision were consistent in not adopting a constant unit cost assumption: in both cases unit costs were forecast to rise.

2.131 The appellants later pointed to the BT comment from its hearing that it had identified no equipment that was TI-specific as confirming Mr Mantzos's conclusion that TI-specific costs were 'small'. BT's comments at its hearing add a layer of complexity to consideration of the relevant cost assessment. BT's comment that 'there was nothing that we could find that is purely TI specific',[242] was, on the face of it, at odds with Ofcom's characterization of some costs as TI-specific. Nevertheless, it is clear that BT concurred with Ofcom's assessment that there would likely be a loss of economies of scale (and thus a rise in unit costs) associated with the forecast decline in TI services (paragraph 2.66).

2.132 When interpreting these comments, we consider it appropriate to recognize the relatively crude nature of several of the distinctions that have been drawn in the context of considering the appropriate extent of reallocation. The approximate nature of Ofcom's assessment of non-marginal costs was apparent from some of the ways in which the reallocation process was described. For example, in relation to transmission equipment, Ms Kalmus said: 'This is a sort of TI specific fixed cost, as, in fact, that network will not be able to be used to deliver other services.'[243] More generally, Ofcom looked to be using the term 'TI-specific fixed cost' to reflect situations where they considered that costs were not likely to fall directly in proportion to volumes (and this is consistent with the way in which Mr Mantzos described TI-specific fixed costs[244]).The differing views did not cast doubt on the proposition that there are economies of scale and unit costs are not constant.

- *Economies of scale and aggregate usage across all services*

2.133 In his second witness statement Mr Mantzos stated that 'the other potential source of economies of scale would be a fall in aggregate usage across all services (i.e. TI and other services) to which costs are common'.[245] As noted in paragraph 2.67, BT told us that common costs which were allocated to TI would often relate to assets which were only used by a few services of a similar vintage and which were also in decline.[246] In his witness statement on behalf of BT Mr Morden made specific reference to TI services sharing a 'platform' with PSTN voice services, which he said were 'sharply declining'.[247]

2.134 Mr Mantzos said that his understanding was that the major driver for common cost allocation for PSTN services was the total number of local access fixed lines,[248] and said—by reference to forecasts made in the context of LLU/WLR reviews—that 'the available evidence does not seem to support the suggestion that the number of copper fixed lines is showing any material reduction, let alone a sharp decline'.[249] Mr Mantzos went on to say, on the basis of an illustrative calculation, that—in any

[242] BT hearing transcript, p19, lines 15 & 16.
[243] Ofcom hearing transcript, p39, lines 14–16.
[244] NoA, EWS, Adam Mantzos, fn26: 'Costs which are fixed with respect to changes in the volume of TI services but which would be avoided by the cessation of TI services in their entirety.'
[245] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.21.
[246] BT hearing transcript, p20, lines 11 & 12.
[247] BT, SoI, W/S John Morden, ¶39.
[248] NoA EWS, Adam Mantzos, ¶6.26.
[249] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.27.

event—the reduction in total usage for other services would have to be significant before the migration-based reallocation actually considered by Ofcom was no longer broadly consistent with BT's usage method.[250]

2.135 A significant difficulty with Mr Mantzos's illustrative calculation is that it relies on the assumption that the level of relevant TI usage is 'low': it was assumed to be 7.4 per cent, as in his first statement, with this being his assessment of the share of 'access duct' that had been allocated to the TI basket.[251] However, BT referred to assets being used by 'a few' services of a similar vintage. As part of its response to a question from us, BT showed the allocation of costs for the SDH[252] transmission platform as being shared between four sets of services, with the TI share of those costs as having been [✂] per cent in 2007/08,[253] and to have fallen to [✂] per cent in 2011/12.[254] 'PSTN Calls' were shown as having been allocated [✂] per cent of the relevant costs in both those years. These relative shares would imply a different impact of changes in TI volumes on TI costs than was shown in the illustrative calculation of Mr Mantzos.

2.136 BT noted that some common costs were common across a large number of services but others were common to a much smaller number of services and that TI shared some common costs with other services that were also declining (paragraph 2.67). This implies that these common costs, although they are common to more than TI alone, would be unlikely to remain constant on a unit basis as TI volume changed.

2.137 In their response to the provisional determination, the appellants pointed to evidence from Mr Harding in relation to economies of scale.[255] Mr Harding did not comment directly on economies of scale in his first statement, and we did not find that the remarks in that statement that the appellants pointed us to[256] raised any material additional points. He noted that not all common costs were common between the same products, a point that we found consistent with the evidence from Ofcom and BT. In his first statement, Mr Harding also said that Ofcom had found that the largest share of capital costs associated with TI services related to assets that were not specific to TI services, such as cable, duct, land and building.[257] This point was consistent with Ofcom's assessment in the LLCC Consultation document, but that assessment treated a significant portion of capital costs as TI-specific, and given this—as was highlighted above in relation to the comments of Mr Mantzos—assumed a significant increase in TI unit costs.

2.138 In his second statement, Mr Harding said that it was not clear that the decline in TI volumes would drive a significant increase in unit costs due to economies of scale.[258] Mr Harding appeared to consider—consistent with the views of Ofcom and BT—that increases in unit operating costs would be expected.[259] However, he said that, given the age of TI transmission equipment: 'it is quite possible that capital costs will fall faster than volumes if equipment is becoming fully depreciated'.[260] Mr Harding appeared to consider that TI unit operating costs would rise as volumes fell, but that

---

[250] NoA, EWS, Adam Mantzos, ¶6.28.
[251] ibid, ¶6.4.2.
[252] Synchronous digital hierarchy.
[253] It is notable that Verizon/Vodafone Core Submission 2nd WS, Nicholas Scott Harding, ¶12, is consistent with this evidence from BT: Mr Harding said that SDH equipment was 'shared with some other services but a high proportion is likely to be in the TI market'.
[254] BT response to written question 2, 26 September 2013.
[255] NoA, WS, Nicholas Harding, ¶¶50–56, Verizon/Vodafone Core Submission 2nd WS, Nicholas Scott Harding ¶¶8–17 & ¶47.
[256] NoA, WS, Nicholas Harding, ¶¶50–56.
[257] ibid, ¶51.
[258] Verizon/Vodafone Core Submission 2nd WS, Nicholas Scott Harding, ¶12.
[259] ibid.
[260] ibid.

this effect could be offset, as it was possible that unit capital costs might fall. We found that this did not provide a sufficient basis upon which to challenge Ofcom's assessment.

2.139 Mr Harding also said that even if Ofcom were correct that there would be a rise in unit costs as volumes fell because of economies of scale, this did not mean that TI prices should rise relative to inflation, as prices were already significantly above the level that Ofcom would set at the end of a glide-path-based charge control.[261] He stated that BT had made 'excess profit' in the WBA[262] market over the period 2006 to 2012 and that this implied that 'BT may already have been gearing up for the decline of TI by pricing WBA services to enable it to recover some common costs'.[263] We did not find the comments on these points to be of assistance in our consideration of the appropriateness of Ofcom's assessment of TI costs. In relation to the first point, we note that while, in principle, an identified rise in unit costs need not necessarily have resulted in TI prices rising relative to inflation, Ofcom's assessment of the level of TI costs in the final year of the 2013/14 to 2015/16 charge control did result in such a rise, given the prevailing level of TI prices in 2012/13. The prevailing level of TI prices in 2012/13 was covered by the previous charge control arrangements, which were in place ahead of those that are subject to this appeal (which relate to the period 2013/14 to 2015/16). In relation to the second point, we did not consider that Mr Harding had shown that his tentative comment (that BT 'may' have already been gearing up for the decline of TI) should have affected the assessment of the appropriate level of TI costs in 2015/16. The comment related to BT's measured returns over the period 2006 to 2012 in a market subject to a separate Ofcom market review process.

2.140 Mr Harding also drew a comparison with an Ethernet service, WES, for which volumes were expected to decline significantly during the course of the charge control, as customers move to a newer Ethernet product, EAD. Mr Harding argued that Ofcom's approach to WES—which was subject to an RPI-RPI (ie constant nominal prices) sub-cap—was inconsistent with its position on economies of scale in relation to TI services. We note that when explaining its approach to WES products in the BCMR, Ofcom explicitly highlighted its view that the unit costs of WES products were expected to increase.[264] Ofcom considered that there would be a loss of economies of scale associated with WES products as volumes fell, an assessment that—in general terms, at least—is consistent with Ofcom's view in relation to TI services. Ofcom's assessment of how to reflect expectations with respect to unit costs in terms of the WES sub-cap that it put in place could have been influenced by a number of factors. Mr Harding provided no further explanation as to why Ofcom's approach to WES products should be understood as inconsistent with its approach to TI services, or why any such inconsistency should be understood as inappropriate.

2.141 The issues concerning the assessment of changes in different cost allocations to TI have not been the subject of detailed submissions. Arguments about the (lack of) significance of economies of scale were not raised in the NoA. Later comments have been relatively limited and presented in a largely illustrative manner. This is problematic in terms of the central proposition that the appellants present in terms of the appropriateness of a migration-based approach to common cost allocation. We

---

[261] Ibid, ¶15.
[262] Wholesale Broadband Access.
[263] Ibid, ¶47.
[264] BCMR, ¶20.104 said: 'As WES volumes decline over the charge control period, we anticipate that the unit costs of WES products will increase. We also consider that it is efficient for BT to incentivise migration from legacy products such as WES to new Ethernet products. A sub-cap on WES closer to the overall Ethernet basket would not be consistent with such migration incentives. We therefore consider that a sub-cap of RPI-RPI would strike an appropriate balance between protecting WES customers, whilst allowing BT to set pricing structures consistent with migration to more efficient technologies.'

consider that Ofcom and BT presented plausible qualitative accounts of why a substantial loss of economies of scale would be expected in relation to some cost areas. While the basis for Ofcom's view on economies of scale was not explained fully in the TI Price Control Decision, the view itself was set out. We do not consider that the appellants have provided a basis for rejecting that view, and for concluding that a constant unit costs assumption would have been more appropriate.

2.142 In their response to the provisional determination, the appellants alleged that the CC accepted, without proper scrutiny, assertions made by BT and Ofcom and did not undertake any attempt to quantify the extent of losses of economies of scale. The appellants also stated that the only example cited by the CC of economies of scale across several services was transmission equipment, but this is an extremely small proportion of overall cost.[265]

2.143 In paragraph 1.44 we set out that we considered that the approach we took is consistent with our appellate jurisdiction and were mindful of the Courts' guidance and the CC's Guidelines that our remit in these appeals is not to investigate but to determine whether or not Ofcom erred for the reasons set out in the NoA.

2.144 As regards the appellants' specific point on transmission equipment, the CC noted the evidence of Ofcom showing its estimated breakdown of rise in unit costs that was implied by its CVE/AVE modelling ahead of any reallocation. Ofcom's estimated breakdown showed 'Transmission' as accounting for only [✄] per cent of the forecast rise in unit costs, consistent with the view presented by the appellants that transmission equipment represents a small proportion of overall costs. However, Ofcom's analysis also showed that operating costs accounted for the largest portion ([✄] per cent) of the estimated unit cost increase, and that the main driver of this was equipment at the local exchange (paragraph 2.61). Even where the capital costs directly associated with transmission equipment are relatively small, that does not imply that such equipment is not a significant driver of operating costs: Ofcom said that it was, and that operating costs (including—for example—maintenance, power and motor transport costs (related to engineer visits to fix equipment)) would not fall directly in relation to volume. BT's evidence was consistent with this (paragraph 2.68).

- *Historical evidence of the relationship between migration and common cost allocations*

2.145 In his second statement, Mr Mantzos made some brief observations on an assessment in Mr Morden's statement[266] that provided estimates of non-marginal costs for TI and for AI services over the period 2007/08 to 2011/12. Mr Mantzos noted that he did not have the underlying details of BT's analysis and so could not comment on the reliability of the figures, but he went on to comment on what the information that Mr Morden had provided 'might suggest in terms of background context'.[267] He considered that the data lent some support to the suggestion, in his first report, that a reallocation in line with migration out of a set of services was broadly consistent with BT's usage method, and that it suggested that reallocation in line with migration out of TI services might be a conservative estimate of the likely future reduction in common cost allocation.[268]

[265] Verizon/Vodafone Response to provisional determination, ¶40.
[266] Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.29.
[267] ibid, ¶6.30.
[268] ibid, ¶¶6.31 & 6.32.

2.146 Mr Mantzos did, however, caveat his comments as follows: 'I am also cautious in placing great reliance in extrapolations from historical experience to future forecasts, because it is often difficult to control for differences in circumstances across time.'[269]

2.147 Mr Harding[270] also pointed to historical evidence in his second statement. He said that the volume of TI services had already fallen significantly from its peak, but that TI basket costs suggested that unit costs had decreased in real terms over the period 2007/08 to 2011/12. We noted that this type of comparison can be highly sensitive to a range of measurement assumptions, and that the potential significance of such assumptions was not considered by Mr Harding.[271]

2.148 We subsequently received information from both BT and Ofcom on TI costs and volumes over time, and comments from the parties on this information. We note that the cautious view of Mr Mantzos on such data was echoed by Ofcom in a response to a written question from us. Ofcom contrasted this with its CVE/AVE approach:

> In our modelling we have used cost volume relationships which have been derived on a component basis. We have applied these data on a component basis, i.e. in a manner consistent with their derivation. We have deconstructed the costs of the services into the underlying components they use, e.g. land and buildings, cable, duct, transmission assets etc. Modelling on a cost component basis reflects the actual drivers of underlying costs, namely the components of BT's network. The relationship between volumes and changes in components can be expected to be relatively stable. This is because the component volume relationships are calculated and applied across multiple services.
>
> We consider that the historic cost volume data of total costs/total circuit volumes ... has limited relevance for cost volume relationships.[272]

2.149 Ofcom pointed, among other things, to the impact of a range of accounting changes that could impact on such comparisons and changes in product mix. Given comments—including, as highlighted above, from the appellants (paragraph 2.146)—on the likely difficulties associated with interpreting historic relationships, and the fact that detailed evidence on how such relationships should be interpreted properly has not been provided, we have not found the evidence presented to us on these issues to provide material assistance to the consideration of the appropriateness of a constant unit cost assumption.

- *Conclusion of economies of scale issues*

2.150 We note that the appellants—when commenting on the Ofcom hearing—said that:

> In particular, the relevant question is not whether it is possible that there could be some unquantified increase in unit cost. It is, whether there is available evidence to suggest that losses of economies of scale might be significant enough to prevent the full reallocation actually considered

[269] ibid, ¶6.30.
[270] Verizon/Vodafone Core Submission 2nd WS, Nicholas Scott Harding, ¶11.
[271] We also note that the fall in the volume of TI local ends used by Mr Harding in his comparison (30%) is different to that used by Mr Mantzos in relation to the same period ([✂]): Verizon/Vodafone Core Submission, 2nd EWS, Adam Mantzos, ¶6.32.
[272] Ofcom response to written question 2, 25 September 2013.

by Ofcom in the Statement being broadly consistent with BT's usage method.[273]

2.151 We do not consider that the appellants have characterized 'the relevant question' in an appropriate way in this context. The starting point for Ofcom's assessment was not an assumption that non-marginal costs should be reallocated away from TI in line with all forecast migration, such that unit costs would remain constant. The starting point was Ofcom's CVE/AVE-based modelling, which is a standard approach that it uses across a range of markets, and is directly concerned with seeking to forecast how costs can be expected to change with changing volumes. As was highlighted earlier, this approach involves the identification and use of cost-volume relationships for a relatively disaggregated set of cost components. The appellants did not challenge the use of this approach as a starting point.

2.152 Given this starting point, Ofcom identified reasons why some reallocation of non-marginal costs would be appropriate and Ofcom's use of migration needs to be understood within this context. Ofcom explicitly recognized limitations in terms of the information that was available for this assessment, and set out in the TI Price Control Decision that it considered that the reallocation it made was consistent with what it considered to be the loss of economies of scale that would be associated with the sharp forecast decline in TI volumes. As was highlighted in paragraph 2.141, this view—concerning the loss of economies of scale—was not directly challenged in the NoA. We have not found the arguments and evidence put by the appellants to be sufficient to show that Ofcom's assessment was inappropriate.

Conclusions

2.153 As was highlighted above, all of the grounds rely on the proposition that there is a divergence between the reallocation decision that Ofcom took and what the appellants characterized as the 'correct' approach and which the appellants said followed from the conclusion and principles that Ofcom adopted and which were themselves said to be common ground. Our view is that this proposition does not hold. We have not found there to be any compelling evidence of a divergence between the level at which the charge control was actually set, and what should be understood as the 'correct' level. Ofcom's decision was in line with what it considered to be the correct approach given its regulatory objectives. We do not consider that the appellants have shown that there was a better measure of TI costs which Ofcom should have preferred to the level that it actually used to set the TI charge control. We therefore have not found Ofcom to have identified an inappropriate level of TI costs when setting the TI price control.

2.154 Ofcom's forecasting of TI costs followed what it referred to as its usual approach in a range of markets. Final year costs were forecast by applying an identified set of cost-volume relationships (CVEs and AVEs), that had been identified for a relatively disaggregated set of cost components. Ofcom considered the evidence to support some adjustment to the TI cost level that this modelling generated, and the appellants do not challenge that.

2.155 Ofcom did not have an established methodology for determining what the appropriate scale of this adjustment should have been. Ofcom's consideration of TI cost conditions led it to believe that, for some cost components, its CVE/AVE approach was likely to overstate TI costs, but, importantly, for others, it was not. In particular, Ofcom considered there to be good reasons why there would be some increase in

[273] Appellants' letter of 9 October, Attachment A, p2.

unit costs associated with the sharp forecast decline in TI volumes, and we have not found the appellants to have shown this view to be incorrect.

2.156 Ofcom had discretion in terms of how it exercised its judgement. The appellants have given us no reason to believe that the reallocation of 29 per cent of non-marginal costs away from the TI basket was wrong, or should be understood as having resulted in an excessive TI price. The appellants have not demonstrated that Ofcom should have gone beyond this level of reallocation. Therefore, we have not found there to have been any ‘excess common costs’ that should have been allocated away from the TI basket.

2.157 We did not find the 29 per cent reallocation to be an inappropriate estimation of the costs to be reallocated given the complexities of estimating the impact of volume changes on costs. It generated an outcome that Ofcom regarded as consistent with certain important considerations that it believed it should take into account in setting the TI Price Control. These considerations were identified in the Decision, in Ofcom’s Defence and by Ofcom in the hearing (though not in identical terms in each case) and related to the protection of TI customers, efficient migration incentives, and allowing BT the opportunity to recover its efficiently incurred costs (see paragraphs 2.46, 2.56 and 2.111).

2.158 There were some inconsistencies in the way in which Ofcom explained the TI Price Control Decision.[274] The appellants have taken some statements in the BCMR, read in isolation, to imply that, absent cost recovery concerns, it would have been appropriate to have allocated all non-marginal costs away from TI services in line with all forecast migration. Such statements, so construed and taken in isolation, would be inconsistent with Ofcom’s ultimate decision on the TI charge control, and with the proposal that Ofcom had consulted on (which also assumed that TI unit costs would increase). They would be at odds with Ofcom’s consistently stated view that the decline in TI services would be expected to be associated with a loss of economies of scale. While the basis for and implications of this view were explained in only a limited way in the TI Price Control Decision, the appellants have not shown Ofcom’s assessment—that TI unit cost would be expected to increase to some extent given the significant forecast decline in TI volumes—to have been inappropriate.

2.159 The appellants argued that those parts of the BCMR that referred to Ofcom striking the appropriate balance between allowing efficient pricing signals and protecting customers were not from the section of the BCMR against which they were appealing, and thus could not assist Ofcom in its Defence.[275] We do not agree with this. The decision under appeal is Ofcom’s decision on the level of the TI price control: Reference Questions 1 to 3 all concern whether the *TI price control was set at an inappropriate* level. Those questions require consideration of reasons presented in the NoA as to why it may be that the price had been set at an inappropriate level, but in order for the appeal to succeed it must be shown that the price was set at an inappropriate level for one of the reasons set out in the Grounds of Appeal.

2.160 As set out in paragraph 2.104, we consider a view on economies of scale to be integral to the assessment of the appropriate TI price control, and we believe this was set out in the TI Price Control Decision. In our view, the appellants have provided only a limited challenge to Ofcom’s consideration of economies of scale in

---

[274] Most notably in BCMR, ¶19.353.
[275] Verizon/Vodafone Core Submission, Volume 2, ¶17.2.

setting the TI price control—their evidence has not shown that Ofcom set the TI price control at an inappropriate level.

2.161 As we highlighted in paragraph 1.31 (including by reference to the Court of Appeal in its judgment), the appeal is against the decision, not Ofcom's reasons for the decision. There were some inconsistencies in Ofcom's reasoning in terms of how it justified its approach to reallocating costs. But the appellants have not shown that those inconsistencies resulted in Ofcom identifying an inappropriate allocation of costs to TI services when setting the TI price control.

2.162 As noted in paragraph 2.156 the appellants have given us no reason to believe that the reallocation of 29 per cent of non-marginal costs away from the TI basket was wrong, or had resulted in an excessive TI price. In view of this it is unnecessary for us to address in this determination a number of the other arguments raised by the appellants in their NoA. We considered all the submissions and evidence put before us. However, for the purposes of this determination we have only set out in detail the pleadings and evidence of specific relevance to our determination that the price control was not set an inappropriate level. Having determined this issue of primary importance to the Reference Questions, the other arguments set out in the NoA fall away for the reasons set out in the answers to the Reference Questions.

3. Determinations on the Reference Questions

3.1 The Reference Questions are listed in Appendix A. Our response to each is set out below.

Reference Question 1

3.2 Reference Question 1 is whether the price control on TI services has been set at a level which is inappropriate because Ofcom erred in law deciding not to allocate common costs away from TI services in proportion to all forecast customer migration, rather only in proportion to forecast customer migration from TI services to Ethernet services for the reasons set out at paragraphs 74 to 78 of the NoA.

3.3 In paragraphs 74 to 76 of the NoA, the appellants argued that Ofcom misdirected itself and committed an error of law. The appellants have summarized this argument as being that Ofcom had asked itself the wrong question:[276] it should not have been concerned with whether BT could recover the 'Excess Common Costs' from services other than leased lines in the context of setting the LLCC, when it had already determined that those costs should not be allocated to TI services.

3.4 However, as was set out in paragraphs 2.153 to 2.162 above, we have not found the reallocation approach that Ofcom adopted in the TI Price Control Decision to have provided for an inappropriate forecast of TI costs, for any of the reasons set out by the appellants. We have not found there to have been an inappropriate allocation of costs to TI services (and therefore have not found there to have been any 'Excess Common Costs' that should have been allocated away from the TI basket). This conclusion is not dependent on Ofcom's consideration of BT's ability to recover additional common costs from other services as a result of migration away from TI services.

[276] Verizon/Vodafone Core Submission, Volume 1, ¶3.11.1.

3.5 In their response to the provisional determination, the appellants acknowledged that Ground 1 relied upon the premise that Ofcom considered that a reallocation in line with migration was appropriate, but argued that this was not necessarily identical to holding unit costs constant, and that whether the two approaches were identical depended upon the precise approach used.[277]

3.6 We do not consider that the observation that other approaches could be adopted that did not involve holding unit costs constant, affects the finding set out in paragraph 3.4. We have not found the appellants to have shown there to be a divergence between the level at which Ofcom set the TI charge control and what should be understood as the correct level. That is, in addition to disagreeing with the appellants' view as to the correct approach to cost allocation, we have made the broader conclusion that the appellants have not shown there to be any 'Excess Common Costs'.

3.7 As noted in paragraph 2.26*(a)*, in paragraph 77 of the NoA the appellants argued that Ofcom breached its legal duties of: proportionality; regulatory consistency; equal treatment and technological neutrality; and regulatory restraint, and, in paragraph 78, argued that Ofcom also failed to promote its statutory duties in relation to: distortion of competition and investment; and failure to promote the interests of citizens, users and consumers. We have considered all the submissions and evidence put before us in relation to paragraphs 77 and 78 of the NoA. Since we have not found there to have been an inappropriate allocation of costs to TI services we have not found that Ofcom has breached its legal duties or has failed to promote its statutory duties.

3.8 Our determination on Reference Question 1 is that the price control on TI services has not been set at a level which is inappropriate because Ofcom erred in law in deciding not to allocate common costs away from TI services in proportion to all forecast customer migration, rather only in proportion to forecast customer migration from TI services to Ethernet services for the reasons set out in paragraphs 74 to 78 of the NoA.

Reference Question 2

3.9 Reference Question 2 is whether the price control on TI services has been set at a level which is inappropriate because Ofcom erred in fact for the reasons set out at paragraphs 79 to 90 of the NoA.

3.10 In paragraph 79 of the NoA, the appellants argued that Ofcom erred in fact in concluding that, if the Excess Common Costs were not allocated to TI services, BT would not be able to recover those common costs from other services. This is what the appellants described as the 'essence' of Ground 2: that even if Ofcom were correct to have asked itself whether BT could recover the 'Excess Common Costs' from particular other services, Ofcom got the answer to that question wrong.[278]

3.11 As was set out in paragraphs 2.153 to 2.162 above, we have not found the reallocation approach that Ofcom adopted in the TI Price Control Decision to have provided for an inappropriate forecast of TI costs, for any of the reasons set out by the appellants. We have not found there to have been an excessive allocation of costs to TI services (and therefore have not found there to have been any 'Excess Common Costs' that should have been allocated away from the TI basket). This conclusion is not dependent on Ofcom's consideration of BT's ability to recover

[277] Verizon/Vodafone, Response to provisional determination, ¶13.
[278] Verizon/Vodafone Core Submission, Volume 1, ¶5.1.

additional common costs from other services as a result of migration away from TI services. That is, this conclusion is not dependent on the correctness of Ofcom's assessment of the facts in relation to the recovery of common costs from services other than leased lines.

3.12 In their response to the provisional determination, the appellants said that our criticisms of the premises of their arguments (even if correct) would not provide any basis to ignore Ground 2.[279] They said that Ground 2 plainly could not be said to rely on any assumption that Ofcom did not actually make, it simply took seriously the factual question which Ofcom set itself to answer and contended that Ofcom got its facts wrong.

3.13 In their response to the provisional determination the appellants also argued that the provisional determination did not give any proper justification for failing to engage with the factual arguments that had been presented in support of Ground 2. In particular, the appellants pointed to evidence in the statements of Mr Harding as being relevant to the consideration of issues of economies of scale. This evidence was considered in paragraphs 2.137 to 2.140 and at paragraph 2.147.

3.14 Ground 2 was that Ofcom erred in fact in concluding that, if the 'Excess Common Costs' were not allocated to TI services, BT would not be able to recover those common costs from other services. We found that for this ground to have substantive content (and to potentially have an impact on the level of the charge control), there had to be 'Excess Common Costs': if there were no 'Excess Common Costs', then there would be no costs to consider in terms of their recovery from other services. We have not found there to have been any 'Excess Common Costs' that should have been allocated away from the TI basket (paragraph 2.156). While we carefully reviewed all of the arguments and evidence submitted by the appellants in relation to Ground 2, we have decided that the correct response to Reference Question 2 was that Ofcom had not erred. In those circumstances, we did not consider that it was appropriate to give further consideration to the points made by the appellants; that would only have been justified in circumstances where this particular ground had not been based on the proposition that there were 'Excess Common Costs' that should have been allocated away from the TI basket, or if we had agreed with the appellants that there were such 'Excess Common Costs'.

3.15 Our determination on Reference Question 2 is that the price control on TI services has not been set at a level which is inappropriate because Ofcom erred in fact for the reasons set out in paragraphs 79 to 90 of the NoA.

Reference Question 3

3.16 Reference Question 3 is whether the price control on TI services has been set at a level which is inappropriate because Ofcom's decision not to allocate common costs away from TI services in proportion to all forecast customer migration is inconsistent with its regulatory objectives and approach and is not justified for the reasons set out in paragraphs 91 to 95 of the NoA.

3.17 Paragraph 92 of the NoA states that Ofcom's own reasoning is that, if aggregate common cost recovery concerns are left to one side, a full reallocation of costs out of the TI basket in line with migration would be appropriate. It states that the only reason advanced by Ofcom for allocating the 'Excess Common Costs' to the TI

[279] Verizon/Vodafone, Response to provisional determination, ¶14.

basket relates to whether BT would be able to recover those costs from ADSL and/or NGA.

3.18 Paragraph 93 states that allocating that ‘Excess Common Costs’ to the TI basket is fundamentally inconsistent with the way in which BT’s usage method allocates common costs, departs from the CCA FAC standard, and is inconsistent with Ofcom’s rejection of demand-side approaches to common cost allocation and its approach to setting base year costs.

3.19 Paragraph 94 argues that Ofcom’s cost recovery concerns are unfounded and cannot justify an allocation which Ofcom otherwise considers to be inappropriate. Paragraph 95 argues that the effect of Ofcom’s decision to allocate the ‘Excess Common Costs’ to TI services is inconsistent with its regulatory objectives.

3.20 As was set out in paragraphs 2.153 to 2.162 above, we have not found the reallocation approach that Ofcom adopted in the TI Price Control Decision to have provided for an inappropriate forecast of TI costs, for any of the reasons set out by the appellants. We have not found there to have been an excessive allocation of costs to TI services. We have not, therefore, found that Ofcom needed to justify an allocation of costs—on cost recovery grounds—that should otherwise be considered inappropriate. We have not found that the level of TI price control was inconsistent with Ofcom’s regulatory objectives for the reasons set out in our comments on Reference Question 1 above.

3.21 Our determination on Reference Question 3 is that the price control on TI services has not been set at a level which is inappropriate because Ofcom’s decision not to allocate common costs away from TI services in proportion to all forecast customer migration is inconsistent with its regulatory objectives and approach and is not justified for the reasons set out in paragraphs 91 to 95 of the NoA.

Reference Question 4

3.22 Reference Question 4 is whether, having regard to the fulfilment by the Tribunal of its duties under section 195 of the Act, and in the event that the CC determines that Ofcom did err in any of the respects set out above, the CC is to include in its determination insofar as reasonably practicable:

(a) clear and precise guidance as to how any such error found should be corrected; and

(b) a determination as to any consequential adjustments to the charge control.

3.23 Given that our determination is that Ofcom did not err under Reference Questions 1, 2 or 3, no guidance or determination in relation to consequential adjustments is necessary.

APPENDIX A

Terms of reference

IN THE COMPETITION APPEAL TRIBUNAL

Case Number: 1210/3/3/13

BETWEEN:

(1) VERIZON UK LIMITED
(2) VODAFONE LIMITED

Appellants

- v -

OFFICE OF COMMUNICATIONS

Respondent

-and-

BRITISH TELECOMMUNICATIONS PLC

Intervener

REFERENCE OF SPECIFIED PRICE CONTROL MATTERS TO THE COMPETITION COMMISSION

---

1. Having regard to:

   (A) the Statement entitled "Business Connectivity Market Review – Review of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments" dated 28 March 2013, issued by the Office of Communications ("OFCOM") ("the Decision"), in particular paragraphs 19.347 to 19.369 and 19.376 thereof;

   (B) the price control imposed on British Telecommunications Plc by Annex 7 to the Decision;

   (C) the Notice of Appeal ("NoA") dated 24 May 2013 lodged by Verizon UK Limited and Vodafone Limited against the Decision;

   (D) the order of the Tribunal dated 24 June 2013, providing for the Tribunal's case management directions in the appeal;

the Tribunal, pursuant to Rule 3(5) of the Competition Appeal Tribunal (Amendment and Communications Act Appeals) Rules 2004 (SI 2004 No. 2068) and section 193 of the Communications Act 2003, hereby refers to the Competition Commission ("CC") for its determination the specified price control questions arising in this appeal.

2. By this reference the Tribunal orders the CC to determine the following questions:

Question 1

Whether the price control on Traditional Interface ("TI") services has been set at a level which is inappropriate because OFCOM erred in law deciding not to allocate common costs away from TI services in proportion to all forecast customer migration, rather only in proportion to forecast customer migration from TI services to Ethernet services for the reasons set out at paragraphs 74 to 78 of the NoA.

Question 2

Whether the price control on TI services has been set at a level which is inappropriate because OFCOM erred in fact for the reasons set out at paragraphs 79 to 90 of the NoA.

Question 3

Whether the price control on TI services has been set at a level which is inappropriate because OFCOM's decision not to allocate common costs away from TI services in proportion to all forecast customer migration is inconsistent with its regulatory objectives and approach and is not justified for the reasons set out at paragraphs 91 to 95.

Question 4

Having regard to the fulfilment by the Tribunal of its duties under section 195 of the Communications Act 2003, and in the event that the CC determines that OFCOM did err in any of the respects set out above, the CC is to include in its determination insofar as reasonably practicable:

a. clear and precise guidance as to how any such error found should be corrected; and

b. a determination as to any consequential adjustments to the charge control.

3. The CC is directed to determine the issues contained in this reference on or before 23 December 2013. The CC shall notify the parties to this appeal of its determination at the same time as it notifies the Tribunal pursuant to section 193(3) of the Communications Act 2003.

4. There be liberty to apply.

Marcus Smith Q.C.
Chairman of the Competition Appeal Tribunal

Made: 22 July 2013
Drawn: 22 July 2013

Glossary

Access Directive	Directive 1002/19/EC of the **CRF** on access to, and inter-connection of, electronic communications networks and associated facilities.
Access network	The part of a telecommunications network that connects an end-user with the local telephone **exchange** from which point lines are connected to the core telecommunications network.
Act	Communications Act 2003.
ADSL	Asymmetric digital subscriber line. Broadband technology that makes use of copper lines in the local **access network**.
AI	Alternative interface. Mainly **Ethernet**, optimized for data traffic and more efficient than **TI**. Provide symmetric bandwidth at 10, 100 Mbit/s and 1 Gbit/s as well as higher.
Appeal	Joint Appeal by **Verizon** and **Vodafone** (Case number 1210/3/3/13) against **Ofcom**'s decision set out in the **BCMR** on the charge control on **TI** services.
AVE	Asset volume elasticity. The percentage increase in capital costs required for a 1 per cent increase in volume.
Backhaul	Carriage of traffic from an **exchange** to a central point: transmission links used to connect local **exchange**s to each other and/or the core network.
Bandwidth	In digital telecommunications systems, the rate measured in bits per second (bit/s), at which information can be transferred.
Basket	**Ofcom** grouping of **BT** services for the purpose of determining a charge control.
BCMR	Business connectivity market review. Review of retail **leased line**s, wholesale symmetric broadband origination and wholesale trunk segments.
BSkyB	British Sky Broadcasting Limited.
BT	BT Group plc (which includes British Telecommunications plc). **Openreach** is an operating division of British Telecommunications plc.
BT Wholesale	Operating division of **BT**. BT Wholesale provides wholesale tele-communications services to businesses and other **CP**s.
CC	Competition Commission.
CCA	Current Cost Accounting. An accounting convention, where assets are valued and depreciated according to their current replacement cost whilst maintaining the operating or financial capital of the business entity.

Charge control	A control which sets the maximum price that **CP**s can charge for a particular product or service. Most charge controls are imposed for a defined period.
Common cost	Cost that is common between two or more activities.
CP	Communications provider. An organization that provides electronic communications services.
CPW	Carphone Warehouse Group plc.
CRF	The European Common Regulatory Framework. The legislative framework for the regulation of the telecommunications sector across the EU.
CVE	Cost volume elasticity. The percentage increase in operating costs for a 1 per cent increase in volume.
CWW	Cable and Wireless Worldwide. Acquired by **Vodafone** in 2012.
DAM	Detailed Attribution Methodology. Part of **BT** cost allocation methodology.
'Decision'	**TI** price control decision in the **BCMR** (the subject of the appeal).
Duct	A facility of one or more buried tubes through which cables can be routed. Ducts are the infrastructure, eg pipes, in the ground in which cables containing copper and/or fibre are run.
EAD	Ethernet access direct. A wholesale **Ethernet** product which offers permanently connected, point-to-point high speed data circuits that provide a secure and uncontended access service for communications providers.
EE	Everything Everywhere Limited.
Ethernet	A packet-based technology originally developed for and still widely used in Local Area Networks. Ethernet networking protocols are defined in IEEE 802.3 and published by the Institute of Electrical and Electronic Engineers. Developments of this technology known as Metro Ethernet or Carrier Ethernet are now being used in **CP**s' networks to provide **leased line** and **backhaul** services.
'Excess Common Costs'	Term defined by **Verizon** and **Vodafone** to describe costs which (in their view) should have been reallocated from the **TI** basket in line with forecast migration away from **TI** services, but which were not reallocated.
Exchange	The building and equipment located within the exchange area and to which all customers are connected via the **access network**.
Exponential-e	Telecommunications company.

FAC	Fully allocated cost. An accounting approach under which all the costs of the company are distributed between its various products and services. The FAC of a product or service may therefore include some common costs that are not directly attributable to the service.
Framework Directive	Directive 2002/21/EC of the **CRF** on the common regulatory framework for electronic communication networks and services.
Gbit/s	Gigabits per second (1 Gigabit = 1,000,000,000 bits) A measure of bandwidth in a digital system.
Glide-path	An approach that involves a **charge control** being set so as to bring about a gradual convergence of prices and unit costs over the period of the control.
H3G	Hutchison 3G.
Infrastructure	General term used to refer to all the equipment and plant used to provide connectivity and services to customers.
ISDN30	A digital multiline telephone service conforming to the ISDN Primary Rate Access standard as defined by the ITU.
June 2013 Consultation	Consultation document published by **Ofcom** in June 2013 setting out its provisional findings on **BCMR** issues, including proposals there should be an **LLCC** covering a defined set of **TI** and **Ethernet** services.
July 2013 LLCC Consultation	Consultation document published by **Ofcom** in July 2013, setting out specific proposals on how the **LLCC** should be applied.
Leased line	A permanently connected communications link between two premises dedicated to the customer's exclusive use, providing dedicated transmission capacity between customer sites, which can be used to carry voice, data and video traffic.
Legacy service	Declining service using older technology.
Local loop	The access network connection between the customer's premises and the local serving exchange, usually comprised of two copper wires twisted together.
LLCC	Leased Lines Charge Control.
LLU	Local loop unbundling. The process by which providers take control (in whole or part) of the copper loop connecting a customer's premises to the local telephone exchange. The provider is given access to the exchange to install its own equipment to connect the customer to the provider's own network.
LLU Model	Modelling approach used by **Ofcom** in March 2012 **LLU/WLR Statement** to calculate costs for LLU services.
LLU/WLR Statement	Charge Control Review for **LLU** and **WLR** services, 7 March 2012, published by **Ofcom**.

Local end	The dedicated link that connects the third party customer premises and **BT**'s local exchange. This can be provided using either copper or fibre pairs depending on the distance and speed required by the customer.
MB	Megabyte.
MBNL	Mobile Broadband Network Limited. Joint venture company owned by Three UK and **EE**.
Mbps	Megabit per second.
MCP	Mobile communications provider (and a reference to the four national MCPs is a reference to those MCPs which operate a fully-deployed national mobile network, including both a radio access network and elements of core network: **EE**, O_2, Three and **Vodafone**).
MCT	Mobile call termination. The service provided by an **MCP** to allow an originating **CP** to connect a caller with the intended mobile call recipient on that **MCP**'s network.
Migration	Movement of customers from one type of service to another.
MTR	Mobile termination rate. The wholesale charge levied by **MCP**s for **MCT**.
NGA	Next generation access. A new or upgraded access network capable of supporting much higher capacity broadband services than traditional copper access networks. Generally an access network that employs optical fibre cable in whole or in part.
NoA	Notice of Appeal.
NRA	National Regulatory Authority.
Ofcom	Office of Communications.
Openreach	An operating division of British Telecommunications plc, Openreach provides wholesale telecommunications services to **CP**s.
Operating expenditure	Costs reflected in the profit and loss account associated with administering a business on a day-to-day basis, excluding items such as depreciation and financing costs.
PSTN	Public Switched Telephone Network. The worldwide collection of public telephone networks designed primarily for voice traffic.
Reference	Tribunal Order, *Reference of Specified Price Control Matters to the Competition Commission* dated 22 July 2013.
RFS	Regulatory Financial Statements. Audited financial statements that BT is required to produce and publish each year to comply with its regulatory obligations.

RPI	Retail prices index. A measure of inflation published monthly by the Office for National Statistics. It measures the change in the cost of a basket of retail goods and services.
RPI-X	A general term referring to a common method of regulating prices where prices are regulated to move by the Retail Price Index minus a percentage defined by X.
SDH	Synchronous Digital Hierarchy. A digital transmission standard that is widely used in communications networks and for **leased line**s.
SMP	Significant market power.
SoI	Statement of Intervention.
Symmetric Transmission Capacity	A service that allows signals to be transmitted and received at the same **bandwidth**.
TalkTalk	TalkTalk Telecom Group plc.
Telefónica	Telefónica O2 Limited.
TI	Traditional interface, makes use of **TDM** or analogue. Most common bandwidth is 2 Mbit/s—ranges from 64 kbit/s to 155 Mbit/s.
Time Division Multiplexing	A method of combining multiple data streams for transmission over a shared channel by means of time-sharing. The multiplexor shares the channel by repeatedly allowing each data stream in turn to transmit data for a short period.
TI Price Control Decision	**Ofcom** decision in the **BCMR** concerning the **TI** price control.
Tribunal	Competition Appeal Tribunal.
Verizon	Verizon UK Limited. Supplier of **leased line**s services and joint appellant.
Vodafone	Vodafone Limited. Supplier of **leased line**s services and joint appellant.
WACC	Weighted average cost of capital. The rate that a company is expected to pay on average to all its security holders to finance its assets.
WBA	Wholesale broadband access.
WECLA	Western, Eastern, Central and East London Area. The geographic market defined by **Ofcom** in this market review.
WES	Wholesale extension service. A **BT** wholesale **Ethernet** product that can be used to link a customer premise to a node in a communications network.

WLR	Wholesale Line Rental. An **Openreach** product whereby the provider (eg **TalkTalk**) rents a line from **Openreach** and resells the line to the end-customer. WLR provides a voice-only service.