Annex 14

Sources of Evidence

- A14.1 We have noted throughout the document the evidence we have relied upon for our analysis and how we have relied upon that evidence. This annex provides a list of the main sources of evidence used and where available the web links where the evidence used is published online. We also list all respondents to our stakeholder workshops, consultation and formal information requests.
- A14.2 While the annex lists the main evidence we have relied upon, the list is for convenience only and is not intended to be exhaustive.

List of respondents to our October 2013 stakeholder workshop

- A14.3 On 23 October 2013, we held a stakeholder workshop to advise industry that we were commencing this review and allow stakeholders an early opportunity to discuss this process and input into our preliminary thinking. The workshop covered the background leading to this review, the process and milestones and Ofcom's preliminary views and questions for stakeholders. Slides presented by Ofcom during the workshop are available at: http://stakeholders.ofcom.org.uk/consultations/mobilecallterm/workshop2015-2018/
- A14.4 We received five written responses to our workshop from the following stakeholders:
 - BT
 - H3G
 - EE
 - Telefonica
 - Virgin Media
- A14.5 Non-confidential responses have been published and are available at <u>http://stakeholders.acmpub.intra.ofcom.local/telecoms/policy/mobile-policy/mobile-call-termination-review-2015-2018/</u>

List of respondents to our January 2014 stakeholder workshop

- A14.6 On 23 January 2014 we held a workshop that was specific to our cost modelling of MTRs and provided stakeholders with an early opportunity to comment on the direction of modelling. Slides presented by Ofcom during the workshop are available at: <u>http://stakeholders.ofcom.org.uk/telecoms/policy/mobile-policy/mobile-call-termination-review-2015-2018/mct-review-2015-18-january2014/</u>
- A14.7 We received three written responses to our workshop from the following stakeholders:
 - BT

- EE
- H3G
- A14.8 Non-confidential responses have been published and are available at <u>http://stakeholders.ofcom.org.uk/telecoms/policy/mobile-policy/mobile-call-termination-review-2015-2018/responses-jan-2014/</u>

List of respondents to our June 2014 Consultation

- BT
- CFL Communications Ltd
- Communication Consumer Panel and ACOD
- Core Communication Services Ltd
- EE
- [×]
- H3G
- Isle of Man Communications Commission
- Manx Telecom Trading
- [×]
- Telefonica
- Verizon
- Virgin Media
- Vodafone
- [×]
- A14.9 Non-confidential responses have been published and are available at <u>http://stakeholders.ofcom.org.uk/consultations/mobile-call-termination-</u> <u>14/?showResponses=true</u>.

Information gathering using statutory powers under section 135 of the Act

- A14.10 During this market review, we issued a series of notices under section 135 of the Act requiring various CPs to provide specified information as set out in the notice. These information requests are listed below:
 - Information requests of 8 November 2013, 14 February 2014 and 18 March 2014 regarding the provision of data to inform our cost modelling for the 2014 MCT model. Further information requests of 19 September 2014 (in order to refresh

the data obtained by means of the notices of 8 November 2013, 14 February 2014 and 18 March 2014), 3 October 2014 and 4 November 2014 in order to carry out our cost modelling for the 2015 MCT cost model. These requests were addressed to, and responses were received from:

- EE
- H3G
- Telefonica
- Vodafone
- A14.11 Information requests to identify MCPs which hold mobile number ranges for which they provide mobile voice call termination services and for which they set an MTR, for the purposes of our market definition and SMP analysis. The information request was sent to all companies registered as having been allocated a mobile number range by Ofcom. The requests were sent in several tranches to the MCPs listed below.
 - Information request of 21 November 2013 this information request was sent also for the purposes of an Ofcom own-initiative enforcement programme into compliance by MCPs with SMP conditions M1 and M4 set out in Annex 1 to the 2011 MCT Statement. Requests addressed to and, except where otherwise indicated, responses received from:
 - o 24 Seven Communications Ltd
 - o BT Plc
 - o Callax Ltd¹
 - o Cheers International Sales Ltd
 - o Core Telecom Ltd
 - Euro Thai Exchange Process Company Ltd²
 - o Icron Network Ltd
 - o IV Response Ltd
 - o Lycamobile UK Ltd
 - o Magrathea Telecommunications Ltd
 - o Mars Communications Ltd
 - o Mundio Mobile Ltd

¹ As explained in the June 2014 Consultation, paragraph A8.9 of Annex 8, we did not receive a response from this MCP.

² Euro Thai Exchange Process Company Ltd provided the information requested in our draft section 135 request on a voluntary basis.

- o Nationwide Telephone Assistance Ltd
- o Oxygen8 Communications UK Ltd
- o QX Telecom Ltd
- Resilient Networks Plc
- o Sky Telecom Ltd
- o Sound Advertising Ltd
- o Stour Marine Ltd
- o Subhan Universal Ltd
- o Swiftnet Ltd
- o Teledesign Ltd
- o Telephony Services Ltd
- TG Support Ltd
- o Truphone Ltd
- Information requests of 29 November 2013, 2 December 2013, 3 December 2013, 6 December 2013, 12 February 2014, 26 February 2014, and 9 April 2014. Requests addressed to and, except where otherwise indicated, responses received from the following MCPs:
 - o 08Direct Ltd
 - Ace Call Ltd
 - o Airwave Solutions Ltd
 - Alliance Technologies LLC³
 - o Andrews & Arnold Ltd
 - o (AQ) Ltd
 - o Bellingham Telecommunications Ltd
 - o BT Onephone Ltd
 - o CFL Communications Ltd
 - o Citrus Telecommunications Ltd
 - o Cloud9 Communications Ltd

³ As explained in the June 2014 Consultation, paragraph A8.9 of Annex 8, we did not receive a response from this MCP.

- o Compatel Ltd
- o Confabulate Ltd
- o Core Communication Services Ltd
- o Eclipse Tel Ltd
- o Edge Telecom Ltd
- o Equiinet Ltd
- o Esendex Ltd
- o FleXTel Ltd
- o Globecom International Ltd
- o Guernsey Airtel Ltd
- o Hay Systems Ltd
- o Interact Solutions Ltd
- o Invomo Ltd
- o IPV6 Ltd
- o Jersey Airtel Ltd
- o JSC Ingenium (UK) Ltd
- o JT (Guernsey) Ltd
- o JT (Jersey) Ltd
- LegendTel LLC⁴
- o Lifecycle Software Ltd
- o Limitless Mobile Ltd
- o Lleidanetworks Serveis Telematics Ltd
- o Manx Telecom Ltd
- o Marathon Telecom Ltd
- o Moonshado Inc⁵

⁴ As explained in the June 2014 Consultation, paragraph A8.9 of Annex 8, we did not receive a response from this MCP.

⁵ As explained in the June 2014 Consultation, paragraph A8.9 of Annex 8, we did not receive a response from this MCP.

- o Netfuse Telecom Ltd
- o Nextgen Mobile Ltd
- Nodemax Ltd
- o Orca Digital Ltd
- o Premium O Ltd
- o Premium Routing GmbH
- o Proton Telecom Ltd
- o Rexcom Tech Ltd
- o Spacetel UK Ltd
- o SSE Energy Supply Ltd
- o Sure (Guernsey) Ltd
- o Sure (Isle of Man) Ltd
- o Sure (Jersey) Ltd
- o Synectiv Ltd
- o TalkTalk Communications Ltd
- o Telecom2 Ltd
- o Telecom North America Mobile Inc
- o Teleena UK Ltd
- o Telesign Mobile Ltd
- o Teleware Plc
- Test2date BV⁶
- o Tismi BV
- o Titanium Ltd
- o UK Broadband Ltd
- o Virgin Mobile Telecoms Ltd
- o Voicetec Systems Ltd

⁶ As explained in the June 2014 Consultation, paragraph A8.9 of Annex 8, we did not receive a response from this MCP.

- o Vortex Telecom Ltd
- o Voxbone SA
- o Wavecrest (UK) Ltd
- o Zap Communications Ltd
- Information requests of 6 March 2014 regarding the provision of data to inform our consideration of what the relevant cost standard would be in the event that significant market power is found in the relevant markets and a charge control is considered an appropriate remedy. Requests addressed to and responses received from:
 - o ASDA Stores Ltd
 - Core Communication Services Ltd
 - o EE
 - o Giffgaff Ltd
 - o H3G
 - o Lycamobile UK Ltd
 - o Mundio Mobile Ltd
 - o TalkTalk Communications Ltd
 - o Telefonica
 - o Tesco Mobile Ltd
 - o Truphone Ltd
 - o Virgin Media
 - o Vodafone
- Information requests of 30 September 2014, 1 October 2014, 2 October 2014, 8 October 2014, 9 October 2014, 21 October 2014, 23 October 2014, and 20 November 2014, to update the information from MCPs that hold mobile number ranges, provide mobile voice call termination services, and set an MTR, for the purposes of our market definition and SMP analysis. Requests addressed to and, except where otherwise indicated, responses received from:
 - o 08Direct Ltd
 - o 24 seven Communications Ltd
 - o Ace Call Ltd
 - o Airwave Solutions Ltd

- Alliance Technologies LLC⁷
- o Andrews & Arnold Ltd
- AQL Wholesale Ltd (previously Telephony Services Ltd)
- o (AQ) Ltd
- o Bellingham Telecommunications Ltd
- o BT Plc
- o BT Onephone Ltd
- o Callax Ltd
- o CFL Communications Ltd
- o Cheers International Sales Ltd
- o Citrus Telecommunications Ltd
- o Cloud9 Communications Ltd
- o Compatel Ltd
- o Confabulate Ltd
- Core Communication Services Ltd
- o Core Telecom Ltd
- o Eclipse Tel Ltd
- o Edge Telecom Ltd
- o Esendex Ltd
- Euro Thai Exchange Process Company Ltd⁸
- o FleXTel Ltd
- Fogg Mobile AB
- Fonix Ltd (previously Orca Digital Ltd)
- o Hay Systems Ltd
- o Icron Network Ltd
- o Invomo Ltd

⁷ As explained in paragraph A4.12 of Annex 4, we did not receive a response from this MCP. ⁸ As explained in paragraph A4.15 of Annex 4, we did not receive a response from this MCP.

- o IPV6 Ltd
- o IV Response Ltd
- o JSC Ingenium (UK) Ltd
- o JT (Jersey) Ltd
- LegendTel LLC⁹
- o Limitless Mobile Ltd
- Lleidanetworks Serveis Telematics Ltd
- o Lycamobile UK Ltd
- o Magrathea Telecommunications Ltd
- o Marathon Telecom Ltd
- o Mars Communications Ltd
- Moonshado Inc¹⁰
- Mundio Mobile Ltd
- o Nationwide Telephone Assistance Ltd
- Netfuse Telecom Ltd
- o Nextgen Mobile Ltd
- o Nodemax Ltd
- o Oxygen 8 Ltd
- o Premium O Ltd
- o Premium Routing GmbH
- o Proton Telecom Ltd
- o QX Telecom Ltd
- o Resilient Plc (previously Resilient Networks Plc)
- o Rexcom Tech Ltd
- Simwood eSMS Ltd
- o Sky Telecom Ltd

⁹ As explained in paragraph A4.12 of Annex , we did not receive a response from this MCP. ¹⁰ As explained in paragraph A4.12 of Annex 4, we did not receive a response from this MCP.

- o Sound Advertising Ltd
- o Spacetel UK Ltd
- SSE Energy Supply Ltd
- o Stour Marine Ltd
- o Swiftnet Ltd
- o Synectiv Ltd
- o TalkTalk Communications Ltd
- o Telecom2 Ltd
- Telecom North America Mobile Inc¹¹
- o Teleena UK Ltd
- o Telesign Mobile Ltd
- o Teleware Plc
- o Test2date BV
- o TG Support Ltd
- o Tismi BV
- o Titanium Ltd
- o Truphone Ltd
- o UK Broadband Ltd
- o Virgin Mobile Telecoms Ltd
- o Voicetec Systems Ltd
- o Vortex Telecom Ltd
- o Voxbone SA
- o Wavecrest (UK) Ltd

Ofcom documents

A14.12 Oftel, Review of the charge control on calls to mobiles, A Statement issued by the Director General of Telecommunications on competition in mobile voice call termination and consultation on proposals for a charge control, 26 September 2001. <u>http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm0901.pdf</u>

¹¹ As explained in paragraph A4.15 of Annex 4, we did not receive a response from this MCP.

- A14.13 Oftel, Economic depreciation in the Long Run Incremental Cost Model, 2001 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/depr0901.htm
- A14.14 Ofcom, Wholesale Mobile Voice Call Termination, statement, 1 June 2004. http://stakeholders.ofcom.org.uk/binaries/consultations/mobile_call_termination/stat ement/Statement_on_Wholesale_Mobi1.pdf
- A14.15 Ofcom, Better Policy Making, Ofcom's approach to Impact Assessment, 21 July 2005. http://stakeholders.ofcom.org.uk/binaries/consultations/better-policymaking/Better_Policy_Making.pdf
- A14.16 Ofcom, *Mobile call termination*, statement, 27 March 2007. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/mobile_call_term/statement/statement.pdf</u>
- A14.17 Ofcom, A New Pricing Framework for Openreach, statement, 22 May 2009. http://stakeholders.ofcom.org.uk/binaries/consultations/openreachframework/statement/statement.pdf
- A14.18 Ofcom, *Dispute between Mapesbury Communications and T-Mobile about mobile termination rates*, determination and statement, 20 March 2009. <u>http://www.ofcom.org.uk/consult/condocs/mapesbury_tmobile/statement/mcom_det er.pdf</u>
- A14.19 Ofcom, *Dispute between Cable & Wireless and T-Mobile about mobile termination rates*, final determination and statement, 20 May 2009. <u>http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/closed-cases/all-closed-cases/cw_01004/cwdispute.pdf</u>
- A14.20 Ofcom, Wholesale mobile voice call termination, Preliminary consultation on future regulation, consultation, 20 May 2009. http://stakeholders.ofcom.org.uk/binaries/consultations/mobilecallterm/summary/mobile_call_term.pdf
- A14.21 Ofcom, Wholesale mobile voice call termination, Market Review, Volume 2 Main consultation, consultation, 1 April 2010. http://stakeholders.ofcom.org.uk/binaries/consultations/wmctr/summary/wmvct_consultation.pdf
- A14.22 Ofcom, Determination to resolve a dispute between Stour Marine and O2 about termination rates, final determination, 11 June 2010. <u>http://stakeholders.ofcom.org.uk/consultations/draft_deter_stour_marine_o2/final_determination/</u>
- A14.23 Ofcom, Statement on variation of 900 MHz and 1800 MHz Wireless Telegraphy Act licences, statement, 6 January 2011. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/900-1800mhz-wireless-</u> telegraphy/statement/Statement.pdf.
- A14.24 Ofcom, *Wholesale mobile voice call termination*, statement, 15 March 2011. http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/statement/MCT_stateme nt.pdf

- A14.25 Ofcom, Price controls for wholesale ISDN30 services, Consultation on the form and level of price controls on Openreach wholesale ISDN30 services, consultation, 1 April 2011. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/isdn30-</u> 2011/summary/isdn30-2011.pdf
- A14.26 Ofcom, Wholesale mobile call termination: Guidance on dispute resolution in relation to fair and reasonable charges, statement, 5 April 2011. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/statement/guidance.pdf</u>
- A14.27 Ofcom, Modification of SMP conditions contained in Ofcom's Notification under section 48(1) and 79(4) of the Communications Act 2003 of 15th March 2011, 25 October 2011. http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/MCT_SMP_Modification .pdf
- A14.28 Ofcom, Explanatory Note accompanying Ofcom's Modification of the Mobile Call Termination SMP Conditions, 25 October 2011. http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/MCT_SMP_Modification -note.pdf
- A14.29 Ofcom, *Revised MCT Cost Model accompanying Modification to SMP Conditions*. <u>http://www.ofcom.org.uk/static/wmvct-model/model-2011.html</u>
- A14.30 Ofcom, Mobile call termination, Adoption of revisions to SMP Conditions in accordance with the directions of the Competition Appeal Tribunal of 8 May 2012, 10 May 2012. http://stakeholders.ofcom.org.uk/binaries/consultations/mtr/statement/smp_conditions.pdf
- A14.31 Ofcom, Assessment of future mobile competition and award of 800 MHz and 2.6 GHz, statement, 24 July 2012. http://stakeholders.ofcom.org.uk/binaries/consultations/award-800mhz/statement/statement.pdf
- A14.32 Ofcom, The award of 800 MHz and 2.6 GHz spectrum Annexes, Information Memorandum, 24 July 2012. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/award-</u> <u>800mhz/statement/IM2.pdf</u>
- A14.33 Ofcom, Decision to vary Everything Everywhere's 1800 MHz spectrum licences to allow use of LTE and WiMax technologies, summary, 21 August 2012. http://stakeholders.ofcom.org.uk/consultations/variation-1800mhz-ltewimax/statement
- A14.34 Ofcom, Review of the fixed narrowband services markets, Consultation on the proposed markets, market power determinations and remedies, consultation, 5 February 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/nmr-2013/summary/NMR_Consultation.pdf</u>
- A14.35 Ofcom, Business connectivity market review final statement, 28 March 2013. http://stakeholders.ofcom.org.uk/consultations/business-connectivity-mr/finalstatement/

- A14.36 Ofcom, Statement on the Requests for Variation of 900 MHz, 1800 MHz and 2100 MHz Mobile Licences, statement, 9 July 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/variation-900-1800-</u> 2100/statement/statement.pdf
- A14.37 Ofcom, Fixed access market reviews: Approach to setting LLU and WLR Charge Controls, consultation, 11 July 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-</u> <u>13/summary/LLU_WLR_CC_2014.pdf</u>
- A14.38 Ofcom, Review of the fixed narrowband services markets, Statement on the proposed markets, market power determinations and remedies, statement, 26 September 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/nmr-2013/statement/Final_Statement.pdf</u>
- A14.39 Ofcom, Annual licence fees for 900 MHz and 1800 MHz spectrum, consultation, 10 October 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/900-1800-mhz-fees/summary/900-1800-fees.pdf.</u>
- A14.40 Ofcom, Simplifying non-geographic numbers: Final statement on the unbundled tariff and making the 080 and 116 ranges free-to-caller, statement, 12 December 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/simplifying-non-geo-no/statement/final-statement.pdf</u>
- A14.41 Ofcom, *Draft MCT Model*, 17 January 2014. <u>http://stakeholders.ofcom.org.uk/telecoms/policy/mobile-policy/mobile-call-</u> <u>termination-review-2015-2018/mct-review-2015-18-january2014/draft-MCT-model/</u>
- A14.42 Ofcom, *Price rises in fixed term contracts: Decision to issue Guidance on General Condition 9.6*, updated 22 January 2014, Annex 1 Guidance on "material detriment" under GC9.6 in relation to price rises and notification of contract modifications. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/gc9/statement/GC9_statement</u> <u>nt.pdf</u>
- A14.43 Ofcom, Public Sector Spectrum Release (PSSR): Technical coexistence issues for the 2.3 and 3.4 Ghz award, consultation, 19 February 2014. http://stakeholders.ofcom.org.uk/binaries/consultations/pssr-2014/summary/pssr.pdf
- A14.44 Ofcom, Consultation on future use of the 700 Mhz band: cost-benefit analysis of changing its use to mobile services, consultation, 28 May 2014. http://stakeholders.ofcom.org.uk/binaries/consultations/700MHz/summary/main.pdf
- A14.45 Ofcom, Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 – Volume 2: LLU and WLR Charge Controls, statement, 26 June 2014. http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/fixed-access-market-reviews-2014/statement-june-2014/volume2.pdf
- A14.46 Ofcom, Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Annexes, statement, 26 June 2014.

http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/fixed-access-market-reviews-2014/statement-june-2014/annexes.pdf

- A14.47 Ofcom, Annual Licence Fees for 900 Mhz and 1800 Mhz Spectrum, further consultation, 1 August 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/annual-licence-fees-900-MHz-1800-MHz/summary/condoc.pdf</u>
- A14.48 Ofcom, *Public Sector Spectrum Release (PSSR): Award of the 2.3 Ghz and 3.4 Ghz bands,* consultation, 7 November 2014, http://stakeholders.ofcom.org.uk/binaries/consultations/2.3-3.4-ghz-auctiondesign/summary/2_3_and_3_4_GHz_award.pdf.
- A14.49 Ofcom, Decision to make the 700 MHz band available for mobile data, statement, 19 November 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/700MHz/statement/700-mhz-statement.pdf</u>
- A14.50 Ofcom, *The National Telephone Numbering Plan,* 11 December 2014. <u>http://stakeholders.ofcom.org.uk/binaries/telecoms/numbering/Numbering_Plan_Dec_2013.pdf</u>
- A14.51 Ofcom, *The National Telephone Numbering Plan,* to enter into force 26 June 2015, currently published for information only prior to that date. <u>http://stakeholders.ofcom.org.uk/binaries/telecoms/numbering/Numbering Plan ver</u> <u>sion_26_June_2015.pdf</u>

Competition Commission documents

- A14.52 Vodafone, O2, Orange and T-Mobile Reports on references under section 13 of the Telecommunications Act 1984 on the charges made by Vodafone, O2, Orange and T-Mobile for terminating calls from fixed and mobile networks, Volume 1: Summary and Conclusions, December 2002. http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2003/ctm1.pdf
- A14.53 Competition Commission report: Stansted Airport Ltd Q5 price control review, 'Appendix L: Cost of Capital', 23 October 2008. <u>http://www.caa.co.uk/docs/5/ergdocs/ccstanstedl.pdf</u>
- A14.54 Reference under section 193 of the Communications Act 2003: Hutchison 3G UK Limited v Office of Communications (Case 1083/3/3/07), British Telecommunications plc v Office of Communications (Case 1085/3/3/07), Mobile phone wholesale voice termination charges, Determination, 16 January 2009. <u>http://www.catribunal.org.uk/files/CC Determination 1083 H3G 1085 BT 220109.</u> <u>pdf</u>.
- A14.55 Reference under section 193 of the Communications Act 2003: British Telecommunications plc v Office of Communications (case 1180/3/3/11), Everything Everywhere Limited v Office of Communications (case 1181/3/3/11), Hutchison 3G UK Limited v Office of Communications (case 1182/3/3/11), Vodafone Limited v Office of Communications (case 1183/3/3/11) and Telefónica UK Limited, Determination, 9 February 2012. <u>http://www.catribunal.org.uk/files/1.1180-83 MCT_Determination_Excised_090212.pdf</u>

A14.56 Northern Ireland Electricity Limited price determination, A reference under Article 15 of the Electricity (Northern Ireland) Order 1992, Final determination, 26 March 2014 ('the 2014 NIE Final Determination'). <u>https://assets.digital.cabinet-</u> office.gov.uk/media/535a5768ed915d0fdb000003/NIE_Final_determination.pdf.

Competition Appeal Tribunal judgments

- A14.57 British Telecommunications plc v Office of Communications (case 1180/3/3/11), Everything Everywhere Limited v Office of Communications (case 1181/3/3/11), Hutchison 3G UK Limited v Office of Communications (case 1182/3/3/11), Vodafone Limited v Office of Communications (case 1183/3/3/11) and Telefónica UK Limited ([2012] CAT 11), judgment of the CAT of 3 May 2012. http://www.catribunal.org.uk/files/1180-83 MCT_Judgment_030512.pdf
- A14.58 British Telecommunications plc v Office of Communications (case 1180/3/3/11), Everything Everywhere Limited v Office of Communications (case 1181/3/3/11), Hutchison 3G UK Limited v Office of Communications (case 1182/3/3/11), Vodafone Limited v Office of Communications (case 1183/3/3/11) and Telefónica UK Limited ([2012] CAT 11), order of the CAT of 8 May 2012. http://www.catribunal.org.uk/files/1180-83_MCT_Order_080512.pdf
- A14.59 British Telecommunications plc (Wholesale Broadband Access Charge Control) v Office of Communications (case 1187/3/3/11), judgment of the CAT of 22 June 2012. http://www.catribunal.org.uk/237-7278/1187-3-3-11-British-Telecommunications-plc-Wholesale-Broadband-Access-Charge-Control.html

Court of Appeal judgments

- A14.60 Hutchison 3G UK Limited V Ofcom [2008] CAT 11, 20 May 2008. http://www.catribunal.org.uk/files/Jdg_CAT11_1083_H3G_200508.pdf
- A14.61 Hutchison 3G UK Ltd v Office of Communications [2009] EWCA Civ 683, 16 July 2009. http://catribunal.org/files/CofA_Judgment_1083_H36_16.07.09.pdf
- A14.62 Everything Everywhere Limited v Competition Commission [2013] EWCA Civ 154, 6 March 2013. <u>http://www.catribunal.org.uk/files/1180-</u> <u>83_MCT_Judgment_Of_The_CofA_060313.pdf</u>.

EC documents

- A14.63 Directive 2002/19/EC of the European Parliament and of the Council of 7 March 2002 on access to, and interconnection of, electronic communications networks and associated facilities (as amended by Directive 2009/140/EC), 7 March 2002 ('the Access Directive'). http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:02002L0019-20091219
- A14.64 Directive 2002/21/EC of the European Parliament and of the Council of 7 March 2002 on a common regulatory framework for electronic communications networks and services (as amended by Directive 2009/140/EC), 7 March 2002 ('the Framework Directive').

http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:02002L0021-20091219&qid=1399985618659&from=EN

- A14.65 Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users' rights relating to electronic communications networks and services, 7 March 2002 ('Universal Service Directive'). <u>http://eur-lex.europa.eu/legal-</u> content/EN/TXT/HTML/?uri=CELEX:32002L0022&gid=1398787826393&from=EN
- A14.66 Directive 2009/140/EC of the European Parliament and of the Council of 25 November 2009 amending Directives 2002/21/EC on a common regulatory framework for electronic communications networks and services, 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities, and 2002/20/EC on the authorisation of electronic communications networks and services, 25 November 2009. <u>http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0037:0069:EN:PDF</u>
- A14.67 Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C165/03), 11 July 2002 ('the SMP Guidelines'). <u>http://eur-lex.europa.eu/legal-</u> <u>content/EN/TXT/PDF/?uri=CELEX:52002XC0711(02)&qid=1399986405910&from= EN</u>
- A14.68 Commission Staff Working Document, Explanatory note, Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (Second Edition), 13 November 2007 ('Explanatory Note to the 2007 EC Recommendation'). https://ec.europa.eu/digital-agenda/sites/digital-

agenda/files/sec_2007_1483_2_0.pdf

- A14.69 Commission Recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services (2007/879/EC), 17 December 2007 ('2007 EC Recommendation'). <u>http://eur-lex.europa.eu/legal-</u> content/EN/TXT/PDF/?uri=CELEX:32007H0879&gid=1399986405910&from=EN
- A14.70 Commission Recommendation of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU (2009/396/EC), 7 May 2009 ('2009 EC Recommendation'). <u>http://eurlex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:124:0067:0074:EN:PDF</u>
- A14.71 Commission Staff Working Document accompanying the Commission Recommendation on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU, Explanatory note, 7 May 2009 ('Explanatory note to the 2009 EC Recommendation').

http://ec.europa.eu/governance/impact/ia_carried_out/docs/ia_2009/sec_2009_060 0_en.pdf

- A14.72 Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex-ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services (2014/710/EU), 9 October 2014 ('2014 EC Recommendation'). <u>http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32014H0710&from=EN</u>
- A14.73 Commission Staff Working Document, Explanatory note, Accompanying document to the Commission Recommendation on Relevant Product and Service Markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, 9 October 2014 ('Explanatory Note to the 2014 EC Recommendation')

http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?action=dis play&doc_id=7056

- A14.74 Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators for Electronic Communications (BEREC) and the Office, 25 November 2009 ('the BEREC Regulation'). <u>http://eur-</u> lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0001:0010:EN:PDF
- A14.75 Draft revised EC Recommendation on relevant markets, 24 March 2014. Available at: <u>http://ec.europa.eu/digital-agenda/en/news/commission-requests-berec-opinion-draft-revised-recommendation-relevant-markets</u>
- A14.76 Draft Explanatory note to the EC's Draft Revised Recommendation on Relevant Markets, 24 March 2014. Available at: <u>http://ec.europa.eu/digital-agenda/en/news/commission-requests-berec-opinion-draft-revised-recommendation-relevant-markets</u>
- A14.77 The Treaty on European Union and the Treaty on the Functioning of the European Union (consolidated versions), 30 March 2010. <u>http://eur-</u> lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:FULL:EN:PDF
- A14.78 Judgement of 24 October 1996, Viho v Commission (Case C-73/95 P [1996] ECR I-5447. <u>http://eur-</u> lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:61995CJ0073:EN:PDF

UK Legislation

- A14.79 Communications Act 2003 ('the Act'). http://www.legislation.gov.uk/ukpga/2003/21/contents
- A14.80 Competition Act 1998. http://www.legislation.gov.uk/ukpga/1998/41/contents

- A14.81 Enterprise Act 2002. http://www.legislation.gov.uk/ukpga/2002/40/contents
- A14.82 Equality Act 2010. http://www.legislation.gov.uk/ukpga/2010/15/contents
- A14.83 Electronic Communications and Wireless Telegraphy Regulations 2011. http://www.legislation.gov.uk/uksi/2011/1210/made

Academic literature

- A14.84 Khan, 1993, The Economics of Regulation: Principles and Institutions (5th printing), The MIT Press.
- A14.85 Fama, E.F. and French, K.R., 2002, 'The Equity Premium', Journal of Finance, Vol. LVII, No. 2.
- A14.86 Rochet, J. C. and Tirole, J. (2004), 'Defining two-sided markets', mimeo, University of Toulouse.
- A14.87 Armstrong, M. and Wright, J. (2009) 'Mobile Call Termination', Economic Journal, Royal Economic Society, vol. 119(538).
- A14.88 Genakos, C. and T. Valletti, 2011, 'Testing the "Waterbed" Effect in Mobile Telephony', Journal of the European Economic Association, Vol:9, ISSN:1542-4774, Pages:1114-1142.
- A14.89 Genakos, C. and Valletti T., 2011, 'Seesaw in the Air: Interconnection Regulation and the Structure of Mobile Tariffs', Information Economics and Policy, 23(2), 159-170.
- A14.90 Brealey, Myers and Allen, 2013, Principles of Corporate Finance, 11th Edition.
- A14.91 Jullien, B., Rey, P. and Sand-Zantman, W., 2013, 'Termination fees revisited', International Journal of Industrial Organization, vol. 31(6).
- A14.92 Fernandez, P., Aguirreamalloa, J. and Linares, P., 2013, 'Market Risk Premium and Risk Free Rate used for 51 countries in 2013: a survey with 6,237 Answers', Working paper available at SSRN: <u>http://ssrn.com/abstract=914160</u>.
- A14.93 Genakos, C. and Valletti T., 2014, 'Evaluating a decade of mobile termination rate regulation', December 2013. Working paper available at: <u>ftp://www.ceistorvergata.it/repec/rpaper/RP303.pdf</u>
- A14.94 Harbord, D. and Hoernig, S., 2014, 'Welfare Analysis of Regulating Mobile Termination Rates in the UK', Journal of Industrial Economics.
- A14.95 Hoernig, S., 2014, 'Competition between multiple asymmetric networks: Theory and applications', International Journal of Industrial Organization, 32, 57-69.
- A14.96 Hurkens, S. and López, A. L., 2014, 'Mobile Termination, Network Externalities and Consumer Expectations', The Economic Journal, 124: 1005–1039.
- A14.97 Tangerås, T. P., 2014, 'Network competition with income effects', The RAND Journal of Economics, 45: 645–673.

- A14.98 Hoernig, S., Inderst, R. and Valletti, T., 2014, 'Calling circles: network competition with nonuniform calling patterns', The RAND Journal of Economics, 45: 155–175.
- A14.99 Fernandez, P., Linares, P., Acin, I.F., 2014, 'Market Risk Premium Used in 88 Countries in 2014: A Survey with 8,228 Answers', Working paper available at SSRN: <u>http://ssrn.com/abstract=2450452</u>.

Ofcom research

ex10 2.pdf

A14.100Ofcom, The Communications Market 2007, '4 Telecommunications', 23 August 2007. http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms1.pdf

A14.101 Jigsaw Research (on behalf of Ofcom), 'Mobile Calling Patterns Research', Annex 10.2 of *Wholesale mobile voice call termination* (consultation), 20 May 2009. http://stakeholders.ofcom.org.uk/binaries/consultations/mobilecallterm/annexes/ann

- A14.102 Ofcom, Ofcom Technology Tracker Wave 1 2011 Main Set, published 5 May 2011. http://www.ofcom.org.uk/static/marketdataresearch/statistics/main_set.pdf
- A14.103 Ofcom, *The Consumer Experience of 2011*, published 6 December 2011. <u>http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-11/research_report_of511a.pdf</u>
- A14.104 Ofcom, Ofcom Technology Tracker data tables Wave 3 2011, published January 2012. http://stakeholders.ofcom.org.uk/binaries/research/statistics/2012jan/Ofcom_Techn ology_Tracker_Wa3.pdf
- A14.105 Ofcom, Communications Market Report 2014, published 18 July 2012. <u>ttp://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr12/CMR_UK_2012.pdf</u>
- A14.106 Ofcom, *The Consumer Experience of 2012, Telecoms, internet, digital broadcasting and post,* policy evaluation report, 8 January 2013. <u>http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-12/Consumer_Experience_Policy_1.pdf</u>
- A14.107 Ofcom, Communications Market Report 2013, 1 August 2013. http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr13/2013_UK_CMR.pdf
- A14.108 Ofcom, *Technology Tracker Wave 2 2013*, published September 2013. <u>http://stakeholders.ofcom.org.uk/binaries/research/statistics/2013Sept/Ofcom_Technologyw2-2013.pdf</u>
- A14.109 Ofcom, Infrastructure Report, 2013 Update, 24 October 2013 (updated on 6 December 2013). <u>http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/infrastructure-report/IRU_2013.pdf</u>
- A14.110 Ofcom, 'Bill Shock' in the contract mobile phone market, online research report, November 2013. <u>http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/bill-</u> shock/Ofcom-Billshock-2013.pdf

- A14.111 Ofcom, Ofcom Technology Tracker Wave 3 2013, published January 2014. http://stakeholders.ofcom.org.uk/binaries/research/statistics/2014Jan/Ofcom_Techn ology_Tracker_data_tables_for_publication_Wave_3_2013.pdf
- A14.112 Ofcom, *The Consumer Experience of 2013*, January 2014 <u>http://stakeholders.ofcom.org.uk/binaries/research/consumer-experience/tce-13/TCE_Research_final.pdf</u>
- A14.113 Ofcom, Technology Tracker data tables Wave 1 2014, published April 2014. http://stakeholders.ofcom.org.uk/binaries/research/statistics/2014apr/2014w1.pdf
- A14.114 Ofcom, *Telecommunications market data tables* Q4 2013, 24 April 2014. http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms/Q4-2013.pdf
- A14.115 Ofcom, Communications Market Report 2014, 7 August 2014. http://stakeholders.ofcom.org.uk/binaries/research/cmr/cmr14/2014_UK_CMR.pdf
- A14.116 Ofcom, *Telecommunications market data tables Q1 2014*, 14 August 2014. http://stakeholders.ofcom.org.uk/binaries/research/cmr/telecoms/Q1_2014.pdf.
- A14.117 Ofcom, Ofcom Technology Tracker Wave 2 2014, published September 2014. <u>http://stakeholders.ofcom.org.uk/binaries/research/statistics/2014sep/technology-tracker-wave-2-2014/main_set.pdf</u>
- A14.118 Ofcom, Ofcom Technology Tracker data tables Wave 2 2014, table 27 published September 2014. <u>http://stakeholders.ofcom.org.uk/binaries/research/statistics/2014sep/technology-tracker-wave-2-2014/main_set.pdf</u>
- A14.119 Ofcom, Incidence of unexpectedly high bills, 2014 report, face to face survey (conducted as part of Ofcom's Consumer Concerns Tracker), published September 2014. <u>http://stakeholders.ofcom.org.uk/binaries/research/telecoms-research/billshock/1398439/Bill_shock_chart_pack.pdf</u>
- A14.120 Ofcom, *Telecommunications market data tables* Q2 2014, published 20 November 2014. <u>http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/tables/</u>
- A14.121 Ofcom, Infrastructure Report 2014: Ofcom's second full analysis of the UK's communications infrastructure, 8 December 2014. http://stakeholders.ofcom.org.uk/binaries/research/infrastructure/2014/infrastructure -14.pdf

Website articles

Ofcom

- News Releases, Ofcom announces winners of the 4G mobile auction, http://media.ofcom.org.uk/2013/02/20/ofcom-announces-winners-of-the-4gmobile-auction/
- Telecoms numbering, *Proposed Numbering Withdrawals,* <u>http://stakeholders.ofcom.org.uk/telecoms/numbering/proposed-withdrawals/</u>

- Analyst relations, *Regulated Prices,* <u>http://media.ofcom.org.uk/analysts/regulated-prices/</u>
- Enforcement, Ofcom own initiative enforcement programme into wholesale mobile call termination rates, CW/ 01115/11/13, http://stakeholders.ofcom.org.uk/enforcement/competition-bulletins/opencases/all-open-cases/cw_01115/
- <u>News release 25 May 2011, UK consumers benefit from European telecoms law</u> changes, <u>http://consumers.ofcom.org.uk/news/uk-consumers-benefit-from-</u> <u>european-telecoms-law-changes/</u>

02

- Pay and Go, http://www.o2.co.uk/tariffs/payandgo
- Help and Support: Pay and Go, http://www.o2.co.uk/help/pay-and-go/pay-
- O2 first to switch on new superfast 3G 900 MHz network, http://news.o2.co.uk/?press-release=o2-first-to-switch-on-new-superfast-3g-900mhz-network
- TU Go, http://www.o2.co.uk/apps/tu-go

Orange

• Tiny Top Ups, http://more-from.orange.co.uk/activate/tiny-top-ups/

EE

- Sharer Bundles, http://explore.ee.co.uk/shared-4gee-plans
- Broadband & Call Packages, <u>https://broadband.ee.co.uk/home.do</u>
- *EE Doubling 4G Network speeds and pushing the pace of UK mobile innovation,* <u>https://explore.ee.co.uk/our-company/newsroom/ee-doubling-4g-network-speeds-and-pushing-the-pace-of-uk-mobile-innovation.</u>
- EE launches superfast 4G and fibre for UK consumers and businesses today, <u>http://ee.co.uk/our-company/newsroom/2012/10/30/ee-launches-superfast-4g-and-fibre-for-uk-consumers-and-business</u>.
- EE reaches 7.7 million 4G customers as network expansion continues, <u>http://ee.co.uk/our-company/newsroom/2015/01/09/ee-reaches-7-7-million-4g-customers-as-network-expansion-continues</u>

Vodafone

 Vodafone 4G: Signal and Frequencies Explained, http://blog.vodafone.co.uk/2013/11/05/vodafone-4g-signal-and-frequenciesexplained/

- Vodafone launches 4G in London, <u>http://www.vodafone.co.uk/cs/groups/configfiles/documents/contentdocuments/vft</u> <u>st043609.pdf</u>
- Vodafone UK announces successful voice over 4G (LTE) tests, <u>http://www.vodafone.com/content/index/about/about-us/policy/news-releases/uk-lte-tests.html</u>
- Vodafone to realize US\$130 billion for its 45% interest in Verizon Wireless, press release. <u>http://www.vodafone.com/content/dam/vodafone/investors/verizon/13%2009%20</u> 02%20-%20Verizon%20Wireless%20-%20FINAL.pdf
- Vodafone Group Plc Annual Report 2014, <u>http://www.vodafone.com/content/annualreport/annual_report14/downloads/full_a</u> <u>nnual_report_2014.pdf</u>
- Vodafone Financial results, <u>http://www.vodafone.com/content/index/investors/investor_information/financial_r</u> <u>esults.html</u>

Three

• Skype, http://support.three.co.uk/SRVS/CGI-BIN/WEBISAPI.DLL?Command=New,Kb=Mobile,Ts=Mobile,T=Article,varset_cat =internetapps,varset_subcat=3585,Case=obj(3843)

TalkTalk

- 100 Mobile Minutes Boost, <u>http://sales.talktalk.co.uk/product/boost/11719/100-mobile-minutes-boost</u>
- Unlimited Mobile Minutes Boost, <u>http://sales.talktalk.co.uk/product/boost/11746/unlimited-mobile-minutes-boost</u>
- TalkTalk launch great value mobile calls product in response to Ofcom cuts in Mobile Termination Rates, <u>http://www.talktalkgroup.com/press/press-</u> releases/2011/15-03-2011.aspx

ΒT

BT Home products and services (www.productsandservices.bt.com)

Phone and Calling Plans,
 <u>http://www.productsandservices.bt.com/products/landline/packages</u>

Sky

Sky (<u>www.sky.com</u>)

• Sky Talk, http://www.sky.com/products/broadband-talk/talk/features/

Virgin Media

Virgin Media (www.virginmedia.com)

Home phone talk plans, <u>http://store.virginmedia.com/phone/about-virgin-media-fibre-optic/index.html</u>

Plusnet

Plusnet (<u>www.plus.net</u>)

Call Costs, http://www.plus.net/home-broadband/tariffs/

Post Office

Post Office (www.postoffice.co.uk)

• HomePhone, <u>http://www.postoffice.co.uk/home-phone</u>

WayBack Machine

WayBack Machine (<u>http://archive.org/web/</u>)

- (Virgin Media) *Phone,* http://web.archive.org/web/20110314162017/http://shop.virginmedia.com/phone. html [Archive date 14 March 2011]
- (Plusnet) Broadband & Home Phone, http://web.archive.org/web/20110308145537/http://www.plus.net/residential/bundl es.shtml [Archive date 8 March 2011]
- (Sky) Broadband & Talk, <u>http://web.archive.org/web/20110312095648/http://www.sky.com/shop/broadban</u> <u>d-talk/</u> [Archive date 12 March 2011]
- (Post Office) Home Phone, http://web.archive.org/web/20101227005332/http://www2.postoffice.co.uk/broadb and-phone/home-phone-broadband/home-phone [Archive date 27 December 2010]
- (BT) Home phone features, http://web.archive.org/web/20110322030855/http://www.productsandservices.bt.c om/consumerProducts/displayTopic.do?topicId=31678 [Archive date 22 March 2011]
- (Orange) Orange broadband, <u>http://web.archive.org/web/20110314133157/http://shop.orange.co.uk/broadband/</u> <u>#</u> [Archive date 14 March 2011]

Skype

Skype (<u>www.skype.com</u>)

• Features, http://www.skype.com/en/features/#calling

About.com

About.com (<u>www.about.com</u>)

How many megabytes for one minute of conversation?
 http://voip.about.com/od/voipbandwidth/f/How-Much-Of-My-Mobile-Data-Plan-Does-Voip-Consume.htm

OpenCloud

OpenCloud (<u>www.opencloud.com</u>)

 OpenCloud survey: Mobile users show OTT indifference, http://www.opencloud.com/news/opencloud-survey-mobile-users-show-ottindifference/

Tech Radar

Tech Radar (<u>www.techradar.com</u>)

• Free Facebook Messenger VoIP calls land on UK Android app, report claims, <u>http://www.techradar.com/news/software/applications/free-facebook-messenger-voip-calls-now-hitting-uk-android-app-report-claims-1141221</u>

Google Play

Google Play (<u>https://play.google.com</u>)

• Facebook Messenger, https://play.google.com/store/apps/details?id=com.facebook.orca&hl=en_GB

Reuters

Reuters (<u>www.reuters.com</u>)

 WhatsApp to add voice calls after Facebook acquisition, <u>http://www.reuters.com/article/2014/02/24/us-mobile-world-whatsapp-idUSBREA1N0PT20140224</u>

Appleinsider

Appleinsider (<u>www.appleinsider.com</u>)

 iOS 7 beta: FaceTime Audio brings built-in VoIP, free long distance calling to iPhone, <u>http://appleinsider.com/articles/13/06/11/ios-7-beta-facetime-audio-could-deal-blow-to-telecoms-with-free-long-distance-calling</u>

Companies House

Companies House (<u>http://www.companieshouse.gov.uk/</u>)

Computing.co.uk

• Three UK begins 4G rollout, <u>http://www.computing.co.uk/ctg/news/2317407/three-uk-begins-4g-rollout</u>.

Thomson One

 T-Mobile Brings Voice over LTE to Seattle, <u>http://multimediacapsule.thomsonone.com/t-mobileusa/t-mobile-brings-voice-over-lte-to-seattle</u>

AT&T

AT&T (<u>www.att.com</u>)

- AT&T HD Voice, <u>http://www.att.com/shop/wireless/services/hd-voice.html#fbid=Tx36hSk17_G</u>
- AT&T Completes Acquisition of Leap Wireless, http://about.att.com/story/att_completes_acquisition_of_leap_wireless.html

The Guardian

- The Guardian (<u>www.theguardian.com</u>)
- EE launches UK's first 4G mobile network, <u>http://www.theguardian.com/technology/2012/oct/29/ee-launches-uk-4g-mobile-network</u>

TeleAnalysis

TeleAnalysis (<u>www.teleanalysis.com</u>)

• 40 operators to deploy VoLTE, <u>http://www.teleanalysis.com/uncategorized/40-operators-in-different-stages-of-volte-deployment-4613.html</u>

Bank of England

Bank of England (www.bankofengland.co.uk),

 Monetary Policy Framework <u>http://www.bankofengland.co.uk/monetarypolicy/Pages/framework/framework.asp</u> <u>X</u>

Channel Islands Competition and Regulatory Authorities

Channel Islands Competition and Regulatory Authorities (www.cicra.gg)

 Licensing Framework, <u>http://www.cicra.gg/telecoms/licensee_framework.aspx#Licensees</u>

HMRC

HMRC (www.hmrc.gov.uk)

• Corporation Tax rates, http://www.hmrc.gov.uk/rates/corp.htm

Other documents

Alix Partners UK LLP

A14.122 Alix Partners UK LLP, Response to Ofcom Consultation on Mobile Termination Rates, Final Report Prepared For Telefonica UK, 15 August 2014 ('Alix Partners Report'). <u>http://stakeholders.ofcom.org.uk/binaries/consultations/mobile-call-</u> termination-14/responses/Telefonica_AlixPartners_report.pdf

Analysys Mason

- A14.123 Analysys Mason, *The connected consumer survey: voice and messaging*, June 2013.
- A14.124 Analysys Mason, Wireless network traffic worldwide: forecasts and analysis 2013– 2018, October 2013.
- A14.125 Analysys Mason, *Final report for Ofcom: Assessment of the benefits of a change of use of the 700 MHz band to mobile*, 22 May 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/700MHz/annexes/benefits_7</u> <u>00MHz.pdf</u>
- A14.126 Analysys Mason, *MCT review 2015-2018: Mobile network cost modelling proposals* for model, 4 June 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/mobile-call-termination-</u> <u>14/annexes/analysys-mason-Report_for_Ofcom.pdf</u>

Bank of England

- A14.127 Bank of England, Inflation Report, February 2014. http://www.bankofengland.co.uk/publications/Documents/inflationreport/2014/ir14fe b.pdf
- A14.128 Financial Stability report, June 2014 http://www.bankofengland.co.uk/publications/Pages/fsr/2014/fsr35.aspx

Barclays

A14.129 Barclays, Equity Gilt Study 2014, 2014. (Barclays 2014 EGS).

BEREC

- A14.130 ERG, *Revised ERG working paper on the SMP concept for the new regulatory framework*, ERG (03) 09rev3, September 2005. <u>http://berec.europa.eu/doc/publications/public_hearing_concept_smp/erg_03_09rev_3_smp_common_concept.pdf</u>
- A14.131 ERG, ERG Common Position on Geographic Aspects of Market Analysis (definition and remedies), ERG (08) 20 final CP Geog Aspects 081016, October 2008. <u>http://www.irg.eu/streaming/ERG%20(08)%2020%20final%20CP%20Geog%20Asp</u> <u>ects%20081016.pdf?contentId=545387&field=ATTACHED_FILE</u>
- A14.132 BEREC, BoR (10) 64, *BEREC report on the impact of bundled offers in retail and wholesale market definition*, December 2010.

http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/?doc=2

A14.133 BEREC, Termination Rates Benchmark Snapshot (as of July 2014): Integrated Report on Mobile Termination Rates, and SMS Termination Rates, 4 December 2014.

http://berec.europa.eu/eng/document_register/subject_matter/berec/reports/4794termination-rates-benchmark-snapshot-as-of-july-2014-integrated-report-on-mobiletermination-rates-amp-sms-termination-rates

ΒT

- A14.134 BT, Further BT Submission on Calls to Mobile, 19 November 2014.
- A14.135 BT, Carrier Price List

https://www.btwholesale.com/pages/static/Library/Pricing and Contractual Informa tion/carrier_price_list/cpl_sectionb1telephony.htm

- Section B1 Telephony part no. 102 'Operator Services (BT to OLO)' <u>https://www.btwholesale.com/shared/document/CPL/SectionB1 Telephony/B102</u> <u>10.zip</u>
- Section B1 Telephony part no. 106 'Non Geographic Call Services' <u>https://www.btwholesale.com/shared/document/CPL/SectionB1_Telephony/b1_0</u> <u>6.xls</u>

CFL Communications

A14.136 Email from CFL Communications, to MobileTermination2015@ofcom.org.uk, 6 June 2014 18.31.

Credit Suisse

A14.137 Credit Suisse, Credit Suisse Global Investment Returns Sourcebook 2014 (2014 Sourcebook).

Cullen International

A14.138 Cullen International, *Mobile termination rates - Moving towards pure LRIC?*, 27 February 2014. <u>http://www.cullen-international.com/product/documents/CTTEEU20140049</u>

Deloitte

A14.139 Deloitte, Volume forecasts in the Ofcom MCT model, A report for BT, 8 August 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/mobile-call-</u> termination-14/responses/BT_Deloitte_volume_report.pdf

Ecorys

A14.140 Ecorys, *Future electronic communications markets subject to ex-ante regulation*, 18 September 2013 <u>http://ec.europa.eu/information_society/newsroom/cf/dae/document.cfm?doc_id=31</u> <u>48</u>

EE

A14.141 Mobile call termination market review 2015-2018. EE response to Ofcom's consultation: clarification note, 8 October 2014.

Enders Analysis

A14.142 Enders Analysis, *UK 2G licence fee proposals: Higher and higher*, 16 January 2014. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/900-1800-mhz-fees/responses/Enders_Analysis.pdf</u>

FAB

A14.143 FAB, Performance Plan UK-Ireland FAB, Second reference period (2015-2019), June 2014. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3254</u> 28/uk-ireland-rp2-performance-plan.pdf

FTSE

A14.144 FTSE, Archive of factsheets, http://www.ftse.com/analytics/factsheets/Home/Search

GSMA

A14.145 GSMA, Voice and Video Calls over LTE, http://www.gsma.com/network2020/volte/.

H3G

A14.146 Email from Mark Falcon (H3G) to Brian Potterill (Ofcom), 11 February 2014, 17.22.

HM Treasury

A14.147 HM Treasury, Forecasts for the UK Economy: a comparison of independent forecasts, November 2014. <u>https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/3764</u> <u>13/forecomp_201411.pdf</u>

HSBC

A14.148 HSBC Global Research, Supercollider: European mobile consolidation is a win-win for operators and citizens alike, TMT, February 2014.

ITU

A14.149 ITU (www.itu.int)

- ITU, Report ITU-R M.2134, Requirements related to technical performance for IMT-Advanced radio interface(s), 2008. <u>http://www.itu.int/dms_pub/itu-</u>r/opb/rep/R-REP-M.2134-2008-PDF-E.pdf
- A14.150 ITU, Recommendation ITU-R M.2012-1, Detailed specifications of the terrestrial radio interfaces of International Mobile Telecommunications-Advanced (IMT-Advanced), February 2014. <u>https://www.itu.int/dms_pubrec/itu-r/rec/m/R-REC-M.2012-1-201402-I!!PDF-E.pdf</u>

Kantar Media

A14.151 Kantar Media, Consumer survey commissioned by Ofcom, January and February 2014. http://stakeholders.ofcom.org.uk/binaries/consultations/mobile-call-termination-14/annexes/Annex_18_Consumer_survey.pdf

Office for Budget Responsibility

A14.152 Office for Budget Responsibility, *Economic and fiscal outlook,* December 2014. <u>http://cdn.budgetresponsibility.independent.gov.uk/December_2014_EFO-web513.pdf</u>

Office for National Statistics

A14.153 Office for National Statistics, National Statistician's consultation on options for improving the Retail Prices Index, 14 November 2012. <u>http://www.ons.gov.uk/ons/about-ons/get-involved/consultations/archived-</u> <u>consultations/2012/national-statistician-s-consultation-on-options-for-improving-the-</u> <u>retail-prices-index/index.html</u>

OFGEM

A14.154 OFGEM, *RIIO-ED1: Final determinations for the slow-track electricity distribution companies*, 28 November 2014. <u>https://www.ofgem.gov.uk/ofgem-publications/91564/riio-ed1finaldeterminationoverview.pdf</u>.

OFT

A14.155 Office of Fair Trading, *Market definition, Understanding competition law*, December 2004, OFT403. www.oft.gov.uk/shared_oft/business_leaflets/ca98_guidelines/oft403.pdf

OFWAT

A14.156 OFWAT, Setting price controls for 2015-2020, Final price control determination notice: policy chapter A7 – risk and reward, December 2014. <u>http://www.ofwat.gov.uk/pricereview/pr14/det_pr20141212riskreward.pdf</u>

ONS

- A14.157 ONS, Summary: UK Population Projected to Reach 70 Million by Mid-2027, released 26 October 2011. <u>http://www.ons.gov.uk/ons/rel/npp/national-population-projections/2010-based-projections/sum-2010-based-national-population-projections.html</u>
- A14.158 ONS, International Comparison of the Formula Effect between the CPI and RPI, 20 March 2012. <u>http://www.ons.gov.uk/ons/guide-method/user-guidance/prices/cpi-and-rpi/improving-the-timeliness-of-the-cpi-and-rpi-publication.pdf</u>
- A14.159 ONS, National Statistician's consultation on options for improving the Retail Prices Index, 8 October 2012. <u>http://www.ons.gov.uk/ons/about-ons/get-</u> involved/consultations/archived-consultations/2012/national-statistician-sconsultation-on-options-for-improving-the-retail-prices-index/index.html

- A14.160 ONS, Introducing the new RPIJ measure of Consumer Price Inflation, 12 March 2013. <u>http://www.ons.gov.uk/ons/guide-method/user-guidance/prices/cpi-and-</u> rpi/introducing-the-new-rpij-measure-of-consumer-price-inflation.pdf
- A14.161 ONS, Consumer Price Inflation December 2013, published 14 January 2014. http://www.ons.gov.uk/ons/rel/cpi/consumer-price-indices/december-2013/consumer-price-inflation-reference-tables.xls
- A14.162 ONS, Consumer Price Inflation November 2014, published 16 December 2014, http://ons.gov.uk/ons/rel/cpi/consumer-price-indices/november-2014/consumerprice-inflation-reference-tables.xls.

OECD

A14.163 OECD, "Developments in Mobile Termination", OECD Digital Economy Papers, No. 193, OECD Publishing, February 2012. http://dx.doi.org/10.1787/5k9f97dxnd9r-en

Pure Pricing

A14.164 Pure Pricing, MVNO Pricing Update, December 2011.

A14.165 Pure Pricing, UK Mobile Pricing Database, December 2011.

A14.166 Pure Pricing, MVNO Pricing Update, December 2013.

A14.167 Pure Pricing, UK Mobile Pricing Database, December 2013.

A14.168 Pure Pricing, UK Mobile Pricing Database, September 2014.

Rohlfs, J.H.

A14.169 Rohlfs, J.H., *Response to Competition Commission, Estimates of Targeted Subsidies*, 2002, http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060 http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/ctm_2002/rohlfs060

Smithers & Co

A14.170 Smithers & Co, A study into certain aspects of the cost of capital for the regulated utilities in the UK, 13 February 2003 ('2003 Smithers & Co report'). http://www.ofcom.org.uk/static/archive/oftel/publications/pricing/2003/cofk0203.htm

Telefonica

A14.171 Telefonica, Annual Report 2013. http://annualreport2013.telefonica.com/sites/default/files/documentos/TELEF_Infor me%20Integrado%20ENG%20%2803_07%29.pdf

Towerhouse LLP

A14.172 Towerhouse LLP, Why does Ofcom need to take a conservative approach to setting pure LRIC MTRs? Discussion paper prepared on behalf of Vodafone Limited, 24 October 2014.

UK Statistics Authority

A14.173 UK Statistics Authority, *Retail Prices Index,* statement, 14 March 2013. <u>http://www.statisticsauthority.gov.uk/news/statement---retail-prices-index---14-march-2013.pdf</u>

Virgin Media

A14.174 Virgin Media's response to Ofcom's Consultation on the Approach to setting LLU and WLR Charge Controls, 30 September 2013. <u>http://stakeholders.ofcom.org.uk/binaries/consultations/llu-wlr-cc-</u> <u>13/responses/Virgin_Media.pdf</u>