



Narrowband Market Review - Annexes

Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access markets

Consultation

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Closing Date for Responses: 28 February 2017

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Annex 1

Responding to this consultation

How to respond

- A1.1 Ofcom invites written views and comments on the issues raised in this document, to be made **by 5pm on 28 February 2017**.
- A1.2 We strongly prefer to receive responses via the online form at <http://www.ofcom.org.uk/consultations-and-statements/category-1/narrowband-market-review>. We also provide a cover sheet (<https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>) for responses sent by email or post; please fill this in, as it helps us to maintain your confidentiality, and speeds up our work. You do not need to do this if you respond using the online form.
- A1.3 If your response is a large file, or has supporting charts, tables or other data, please email it to nmr2017@ofcom.org.uk, as an attachment in Microsoft Word format, together with the cover sheet.
- A1.4 Responses may alternatively be posted to the address below, marked with the title of the consultation.
- James King
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
- A1.5 If you would like to submit your response in an alternative format (e.g. a video or audio file), please contact James King on 020 7981 3291, or email nmr2017@ofcom.org.uk
- A1.6 We do not need a paper copy of your response as well as an electronic version. We will acknowledge receipt if your response is submitted via the online web form, but not otherwise.
- A1.7 You do not have to answer all the questions in the consultation if you do not have a view; a short response on just one point is fine. We also welcome joint responses.
- A1.8 It would be helpful if your response could include direct answers to the questions asked in this document, which are listed together at Annex 4. It would also help if you can explain why you hold your views, and what you think the effect of Ofcom's proposals would be.
- A1.9 If you want to discuss the issues and questions raised in this consultation, please contact James King on 020 7981 3291, or email james.king@ofcom.org.uk

Confidentiality

- A1.10 Consultations are more effective if we publish the responses before the consultation period closes. In particular, this can help people and organisations with limited resources or familiarity with the issues to respond in a more informed way. So, in

the interests of transparency and good regulatory practice, and because we believe it is important that everyone who is interested in an issue can see other respondents' views, we usually publish all responses on our website, www.ofcom.org.uk, as soon as we receive them.

- A1.11 If you think your response should be kept confidential, please specify which part(s) this applies to, and explain why. Please send any confidential sections as a separate annex. If you want your name, address, other contact details or job title to remain confidential, please provide them only in the cover sheet, so that we don't have to edit your response.
- A1.12 If someone asks us to keep part or all of a response confidential, we will treat this request seriously and try to respect it. But sometimes we will need to publish all responses, including those that are marked as confidential, in order to meet legal obligations.
- A1.13 Please also note that copyright and all other intellectual property in responses will be assumed to be licensed to Ofcom to use. Ofcom's intellectual property rights are explained further at <https://www.ofcom.org.uk/about-ofcom/website/terms-of-use>

Next steps

- A1.14 Following the end of the consultation period, Ofcom plans to publish a statement in September 2017.
- A1.15 If you wish, you can register to receive mail updates alerting you to new Ofcom publications; for more details please see <https://www.ofcom.org.uk/about-ofcom/latest/email-updates>

Ofcom's consultation processes

- A1.16 Ofcom aims to make responding to a consultation as easy as possible. For more information, please see our consultation principles in Annex 2.
- A1.17 If you have any comments or suggestions on how we manage our consultations, please call our consultation helpdesk on 020 7981 3003 or email us at consult@ofcom.org.uk. We particularly welcome ideas on how Ofcom could more effectively seek the views of groups or individuals, such as small businesses and residential consumers, who are less likely to give their opinions through a formal consultation.

If you would like to discuss these issues, or Ofcom's consultation processes more generally, please contact Steve Gettings, Ofcom's consultation champion:

Steve Gettings
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Tel: 020 7981 3601
Email: steve.gettings@ofcom.org.uk

Annex 2

Ofcom's consultation principles

A2.1 Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

A2.2 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

A2.3 We will be clear about who we are consulting, why, on what questions and for how long.

A2.4 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened Plain English Guide for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

A2.5 We will consult for up to 12 weeks depending on the potential impact of our proposals.

A2.6 A person within Ofcom will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. Ofcom's 'Consultation Champion' will also be the main person to contact with views on the way we run our consultations.

A2.7 If we are not able to follow one of these principles, we will explain why.

After the consultation

A2.8 We think it is important for everyone interested in an issue to see the views of others during a consultation. We would usually publish all the responses we have received on our website. In our statement, we will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 3

Consultation response cover sheet

- A3.1 In the interests of transparency and good regulatory practice, we will publish all consultation responses in full on our website, www.ofcom.org.uk.
- A3.2 We have produced a coversheet for responses (see below) and would be very grateful if you could send one with your response (this is incorporated into the online web form if you respond in this way). This will speed up our processing of responses, and help to maintain confidentiality where appropriate.
- A3.3 The quality of consultation can be enhanced by publishing responses before the consultation period closes. In particular, this can help those individuals and organisations with limited resources or familiarity with the issues to respond in a more informed way. Therefore Ofcom would encourage respondents to complete their coversheet in a way that allows Ofcom to publish their responses upon receipt, rather than waiting until the consultation period has ended.
- A3.4 We strongly prefer to receive responses via the online web form which incorporates the coversheet. If you are responding via email, post or fax you can download an electronic copy of this coversheet from: <https://www.ofcom.org.uk/consultations-and-statements/consultation-response-coversheet>.
- A3.5 Please put any parts of your response you consider are confidential in a separate annex to your response and include your reasons why this part of your response should not be published. This can include information such as your personal background and experience. If you want your name, address, other contact details, or job title to remain confidential, please provide them in your cover sheet only, so that we don't have to edit your response.

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing Name/contact details/job title

Whole response Organisation

Part of the response If there is no separate annex, which parts?

If you want part of your response, your name or your organisation not to be published, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response that Ofcom can publish. However, in supplying this response, I understand that Ofcom may need to publish all responses, including those which are marked as confidential, in order to meet legal obligations. If I have sent my response by email, Ofcom can disregard any standard e-mail text about not disclosing email contents and attachments.

Ofcom seeks to publish responses on receipt. If your response is non-confidential (in whole or in part), and you would prefer us to publish your response only once the consultation has ended, please tick here.

Name

Signed (if hard copy)

Annex 4

Consultation questions

Question 4.1: Do you agree with our provisional conclusion regarding market definition for WFAEL? Please provide reasons and evidence in support of your views.

Question 4.2: Do you agree with our provisional conclusion regarding the three-criteria test for WFAEL? Please provide reasons and evidence in support of your views.

Question 4.3: Do you agree with our provisional conclusion regarding market definition for WCO? Please provide reasons and evidence in support of your views.

Question 4.4: Do you agree with our provisional conclusion regarding the three-criteria test for WCO? Please provide reasons and evidence in support of your views.

Question 5.1: Do you agree with our provisional conclusion regarding market definition for wholesale ISDN30? Please provide reasons and evidence in support of your views.

Question 5.2: Do you agree with our provisional conclusion regarding the three-criteria test for wholesale ISDN30? Please provide reasons and evidence in support of your views.

Question 5.3: Do you agree with our provisional conclusion regarding market definition for wholesale ISDN2? Please provide reasons and evidence in support of your views.

Question 5.4: Do you agree with our provisional conclusion regarding the three-criteria test for wholesale ISDN2? Please provide reasons and evidence in support of your views.

Question 6.1: Do you agree with our provisional conclusion that, during the period covered by this market review, BT and KCOM will have SMP in the WFAEL markets? Please provide reasons and evidence in support of your views.

Question 6.2: Do you agree with our provisional conclusion that, during the period covered by this market review, BT and KCOM will have SMP in the WCO markets? Please provide reasons and evidence in support of your views.

Question 6.3: Do you agree with our provisional conclusion that, during the period covered by this market review, BT and KCOM will have SMP in the wholesale ISDN30 markets? Please provide reasons and evidence in support of your views.

Question 6.4: Do you agree with our provisional conclusion that, during the period covered by this market review, BT and KCOM will have SMP in the wholesale ISDN2 markets? Please provide reasons and evidence in support of your views.

Question 7.1: Do you agree with the remedies that we propose for BT in the WFAEL, WCO, wholesale ISDN30 and wholesale ISDN2 markets? Please provide reasons and evidence in support of your views.

Question 8.1: Do you agree with our charge control proposals for BT in the wholesale ISDN30 and ISDN2 markets? Please provide reasons and evidence in support of your views.

Question 9.1: Do you agree with our quality of service proposals for BT in the WFAEL, wholesale ISDN30 and wholesale ISDN2 markets? Please provide reasons and evidence in support of your views.

Question 10.1: Do you agree with the remedies that we propose for KCOM in the WFAEL, WCO, wholesale ISDN30 and wholesale ISDN2 markets? Please provide reasons and evidence in support of your views.

Question 11.1: Do you agree with our provisional conclusion regarding market definition for WCT? Please provide reasons and evidence in support of your views.

Question 11.2: Do you agree with our provisional conclusion that each CP has SMP in the defined market for fixed geographic call termination applicable to that CP? Please provide reasons and evidence in support of your views.

Question 12.1: Do you agree with the remedies that we propose for CPs with SMP (other than BT) in the WCT markets? Please provide reasons and evidence in support of your views.

Question 12.2: Do you agree with the remedies that we propose for BT in the WCT market? Please provide reasons and evidence in support of your views.

Question 13.1: Do you agree with our proposal to apply a charge control to all designated CPs with SMP in the WCT markets? Please provide reasons and evidence in support of your views.

Question 13.2: Do you agree with our proposal to apply the WCT charge control to all calls terminated in the UK irrespective of where the call was originated? Please provide reasons and evidence in support of your views.

Question 15.1: Do you agree with our proposals regarding modelling and setting the WCT charge control? Please provide reasons and evidence in support of your views.

Question 16.1: Do you agree with our approach to the regulation of interconnection? Please provide reasons and evidence in support of your views.

Question 17.1: Do you agree with the remedies we propose in relation to BT's interconnect circuits? Please provide reasons and evidence in support of your views.

Question 17.2: Do you agree with the remedies we propose in relation to KCOM's interconnect circuits? Please provide reasons and evidence in support of your views.

Question 18.1: Do you agree with our charge controls proposals for BT's interconnect circuits? Please provide reasons and evidence in support of your views.

Question 19.1: Do you agree with our proposals for BT and KCOM's regulatory financial reporting? Please provide reasons and evidence in support of your views.

Annex 5

Glossary

2005 EC Recommendation: European Commission Recommendation (2005/698/EC) of 19 September 2005 on accounting separation and cost accounting under the regulatory framework for electronic communications⁴ has provided a framework for the consistent application of the specific provisions concerning cost accounting and accounting separation, with a view to improving the transparency of regulatory accounting systems, methodologies, auditing and reporting processes to the benefit of all parties involved. Published in the Official Journal of the European Union, 11.10.2005, L 266, pages 64-69 at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32005H0698>

2007 EC Recommendation: European Commission Recommendation (2007/879/EC) 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. Published in the Official Journal of the European Union, 28.12.2007, L 344, pages 65-69 at <http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32007H0879>

2009 EC Recommendation: European Commission, Recommendation (2009/396/EC) of 7 May 2009 on the Regulatory Treatment of Fixed and Mobile Termination Rates in the EU. Published in the Official Journal of the European Union, 20.5.2009, L 124, pages 67-74 at <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:124:0067:0074:EN:PDF>

2011 F&R Statement: Ofcom, *Fair and reasonable charges for fixed geographic call termination: Statement and final guidance*, April 2011.
<https://www.ofcom.org.uk/consultations-and-statements/category-1/fair-reasonable-charges/statement>

2013 F&R Guidance: Ofcom, *Guidance in the setting of fair and reasonable fixed termination rates*, Annex 10 of the 2013 NMR Statement.
https://www.ofcom.org.uk/data/assets/pdf_file/0014/50720/final_statement.pdf

2013 NMR Statement: Ofcom, *Review of the fixed narrowband services markets*, September 2013.
https://www.ofcom.org.uk/data/assets/pdf_file/0014/50720/final_statement.pdf

2013 NCC model: The model used in the 2013 NMR Statement that is published at <http://stakeholders.ofcom.org.uk/consultations/nmr-13/>

2014 EC Recommendation: European Commission Recommendation (2014/7174/EC) 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 communications networks and services.
<http://eur-lex.europa.eu/JOHtml.do?uri=OJ:L:2014:295:SOM:EN:HTML>

2014 FAMR Statement: Ofcom, *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30*, June 2014.
<http://stakeholders.ofcom.org.uk/binaries/telecoms/ga/fix-ed-access-market-reviews-2014/statement-june-2014/volume2.pdf>

2014 WBA Statement: Ofcom, *Review of the wholesale broadband access markets*, Statement, 2016 June 2014.
https://www.ofcom.org.uk/data/assets/pdf_file/0021/57810/WBA-Final-statement.pdf

2016 LLCC Statement: Ofcom, *Business Connectivity Market Review – Volume 2: Review of competition in the provision of leased lines*, Statement, 28 April 2016.
https://www.ofcom.org.uk/data/assets/pdf_file/0015/72312/bcmr-final-statement-volume-two.pdf

2016 WCT model: The fixed call termination LRIC model that is published alongside this consultation document.

21CN: BT's next generation network upgrade. The elements of the upgrade related to migrating voice services onto 21CN were postponed.

Access Directive: Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities.

Access network: The part of the network that connects directly to customer premises from the local telephone exchange.

The Act: Communications Act 2003.

Artificial Inflation of Traffic (AIT) process: The AIT process is set out in Annex E of the SIA. Its purpose is to deal with artificially generated or prolonged traffic for the purpose of creating financial benefit. Among other things, it defines the roles and responsibilities of the different parties and includes a dispute resolution procedure.

Ancillary services: Services of an ancillary nature in markets in which BT has been found to have SMP.

APCC: Average porting conveyance charges.

APCC Dispute: Ofcom, *Disputes between BT and each of Gamma and Vodafone in relation to BT's average porting conveyance charges: final determination*, 11 November 2015,
http://stakeholders.ofcom.org.uk/binaries/enforcement/competition-bulletins/open-cases/all-open-cases/cw_01161/Final_Determination.pdf

A-Z Telephony Event Charging (AZTEC): BT's system for charging calls to/from its network.

Bandwidth: In digital telecommunications systems, the rate measured in bits per second (bit/s), at which information can be transferred.

Basket: A set of services where the charge control is applied to the total revenue from those services in a given year, subject to a specified compliance formula.

Benchmark FTR: BT's FTR (which until 30 September 2016 was subject to a charge control).

BEREC: Body of European Regulators of Electronic Communications, a body of the European Union.

BT: British Telecommunications plc.

BT Wholesale & Ventures: The division of BT which provides wholesale services to communications providers.

BU: Bottom-up.

Caller Display (Caller ID): A service that allows the retail customer to see the caller's number before answering the call, provided they have suitable equipment.

Capital expenditure (capex): The firm's level of investment in fixed assets over the course of the financial year.

CBP: Countervailing buyer power.

CFI: Call for inputs of April 2015.

Charge control: A control that sets the maximum price that a communication provider can charge for a particular product or service. Most charge controls are imposed for a defined period.

Calling Line Identification (CLI): Data about the calling party, in particular the telephone number that has initiated the call.

CMR: Communications Market Report.

Colt: Colt Technology Services S.A.

Common costs: Costs that are shared across multiple services supplied by a firm.

Communications Provider (CP): An organisation that provides electronic communications services.

Cost orientation: The principle that the price charged for the provision of a service should reflect the underlying costs incurred in providing that service.

Consumer Price Index (CPI): The official measure of inflation of consumer prices in the UK.

CPL: BT's Carrier Price List available at: <https://www.btwholesale.com/pages/static/help-and-support/pricing/carrier-price-lists.htm>

Calling Party Pays (CPP): An arrangement where the calling party (and not the called party) pays a charge when a call is made.

Carrier Pre-Selection (CPS): A facility offered to customers which allows them to choose for certain call types to be carried by an operator other than their access provider (that they select in advance) without having to dial a routing prefix.

Customer Sited Interconnect (CSI): A type of interconnect circuit. BT builds a link to the CP's site and uses it to provide individual 2Mbit/s interconnect as required. It is used in conjunction with IBCs.

Current Cost Accounting Fully Allocated Cost (CCA FAC): An approach used to measure a company's costs.

Dampening factor: A divisor applied to a growth rate in order to reduce growth year-on-year, in order to slow down three-year trends to ensure that they are consistent with plausible and stable long-run levels.

Digital Local Exchange (DLE): The telephone exchange to which customers are directly connected via a remote concentrator unit.

Distributed Long Run Incremental Cost (DLRIC): The LRIC of the individual service with a share of some costs which are common to other services over BT's core network.

Distributed Stand Alone Cost (DSAC): An accounting approach estimated by adding to the DLRIC a proportionate share of the inter-increment common costs. Rather than all common costs shared by a service being allocated to the service under consideration, the common costs are instead allocated amongst all the services that share the network increment.

EC: European Commission.

Economic Depreciation (ED): An approach to depreciation that considers costs over the entire economic life of the network and attempts to match the profile of cost recovery of an asset to the profile of that asset's utilisation. This differs from accounting depreciation that allocates some fixed proportion of costs to each year of use without accounting for changes in utilisation in different years.

Element Based Charging (EBC): An approach to charging for telephony calls where the total charge is calculated by adding together charges for the use of individual network elements. This approach was used by BT and has been replaced by AZTEC.

EE: Everything Everywhere Limited, now part of BT plc.

EEA: European Economic Area.

EIA: Equality impact assessment.

End-user: The final consumer of a product or service.

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

FAMR: Fixed Access Market Reviews.

FCS: Federation of Communication Services.

F&R: Fair and reasonable.

FTR: Fixed termination rate - the wholesale charge levied by fixed CPs for WCT.

FAEL: Fixed analogue exchanges lines.

Fibre To The Cabinet (FTTC): An access network structure in which optical fibre extends from the exchange to a flexibility point in the BT network known as a cabinet. The cabinet is usually located a few hundred metres from the subscriber's premises. The remaining part of

the access network from the cabinet to the customer is usually copper wire but could use another technology, such as wireless.

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

Framework Directive: Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services.

General Condition (GC): One of the General Conditions of Entitlement imposed under the Act, which apply to all communications providers or all communications providers of a particular type. See <https://www.ofcom.org.uk/phones-telecoms-and-internet/information-for-industry/telecoms-competition-regulation/general-authorisation-regime>.

Generic Ethernet Access (GEA): BT's wholesale product providing CPs with access to broadband products provided over its FTTC and FTTP networks.

Herfindahl-Hirschman Index (HHI): A measure of the concentration within a market. It is the sum of the squares of the market shares of operators, with a lower value on the index indicating that market share is spread across more operators and a higher value indicating that few operators account for most of the market share.

Historic Cost Accounting (HCA): A method of accounting under which assets and liabilities are recorded at the values at which they were first acquired.

Hull Area: The area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under Section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc (KCOM).

Indirect Access (IA): A facility that allows a customer to choose for calls to be carried by an operator other than the operator providing the customer's access connection, on a call by call basis, by dialling a routing prefix (a four-digit number).

Interconnection Extension Circuit (IEC): A type of interconnect circuit. IECs build out from a POC provided via ISI and allow CPs to extend their interconnection network beyond the building to which they have built their own network. IECs are provided at 2Mb/s capacity and are used in conjunction with IBCs.

Incremental costs: Those costs which are directly caused by the provision of that service in addition to the other services which the firm also produces. Another way of expressing this is that the incremental costs of a service are the difference between the total costs in a situation where the service is provided and the costs in another situation where the service is not provided.

Interconnection: The linking (whether directly or indirectly by physical or logical means) of one network and another, enabling end-users of different networks to communicate with one another and to access services provided on a different network.

Interconnect circuits: Physical infrastructure to connect exchanges (switches) of two CPs to allow traffic to pass.

Interconnect services: Services that BT has developed with industry to provide access to its interconnect circuits.

Internet Protocol (IP): Packet data protocol used for routing and carriage of messages across the internet and similar networks.

IPEX: BT's IP Exchange.

Interconnect Services Basket (ISB): The ISB is a set of 11 interconnection products as listed in Annex to Condition [5D] – Services subject to the interconnect circuits charge control. In the ISB we account only for the interconnect circuits connected at BT terminating or originating switches, this is, in general, the DLEs.

Intra Building Circuit (IBC): A 2Mbit/s connection between the BT's transmission infrastructure and BT's switch, in a BT Exchange building. An IBC is not ordered separately by customers; it is included with a CSI, an IEC or ISI circuit ordered;

ISDN: Integrated Services Digital Network. A digital telephone line service that supports telephony and switched data services.

ISDN2: Provides an ISDN service with two channels, plus one signalling channel over a common digital bearer circuit.

ISDN30: Provides an ISDN service with up to 30 channels, plus one signalling channel over a common digital bearer circuit. It is primarily used by larger businesses.

In-Span Interconnection (ISI): A type of interconnect circuit to provide ISI, a CP builds its own network up to a Point of Connection (POC), generally located just outside a BT exchange. BT then connects its network to the POC. Individual interconnect circuits of 2Mb/s capacity are then provided via the ISI link. An Intra Building Circuit (IBC) is required at each end of this 2Mb/s circuit to provide connection onto the interconnecting switches.

Internet service provider (ISP): A company that provides customers with Internet access.

Kbit/s: Kilobits per second.

KCOM: KCOM Group plc, formerly Kingston Communications Limited.

Key Performance Indicator (KPI): A measure of performance of an important aspect of a service or operational process. In this context, used in relation to the direction requiring BT to provide interconnection circuits KPIs.

Local loop: The access network connection between the customer's premises and the local serving exchange, usually two copper wires twisted together (known as a twisted copper pair).

Local Loop Unbundling (LLU): A process by which a dominant provider's local loops are physically disconnected from its network and connected to a competing provider's networks, enabling other providers to use the local loop to provide services.

Long-run Incremental Costs (LRIC): Only those costs which are caused by the provision of a defined increment or service – i.e. those costs that would not be incurred if that service was not provided, while all other services and products are still produced.

LRIC+: The long run (average) incremental costs plus a mark-up for the recovery of shared and common costs (often in the form of an equi-proportionate mark-up). LRIC+ should be taken to mean the same as LRAIC+ (a term used by some other NRAs).

LTC: Local-tandem conveyance.

Main Distribution Frame (MDF): A piece of equipment in a BT local exchange that allows local loops to be connected to network equipment within the exchange building.

Mbit/s: Megabits per second.

Mean Capital Employed (MCE): The average net assets during the year.

Metallic Path Facility (MPF): The provision of access to the copper wires from the customer premises to a BT MDF that covers the full available frequency range, including both narrowband and broadband channels, allowing a competing provider to provide the customer with both voice and/or data services using the dominant provider's local loop.

Mobile Call Termination (MCT): A wholesale service provided by a mobile communications provider (MCP) to connect a call to a recipient on its network.

Mobile Termination Rate (MTR): The wholesale charge levied by mobile communications providers (MCPs) for MCT.

Narrowband access markets: A collective term used to refer to the WFAEL, ISDN2 and ISDN30 markets.

NCC: Network Charge Controls.

Network Interoperability Consultative Committee (NICC): A technical forum for the UK communications sector that develops interoperability standards for public communications networks and services in the UK. It is an independent organisation owned and run by its members, which include Ofcom.

NGCS: Non-geographic call services, which are services provided using numbers that are not linked to a specific location (03,05, 07, 08, 09, 116 and 118 numbers).

NGS: Next Generation Switches.

Next Generation Access (NGA): A new or upgraded access network capable of supporting much higher capacity broadband services than traditional copper access networks, generally using optical fibre.

Next Generation Network (NGN): A network that uses IP technology to provide multiple services over a single platform.

NMR: Narrowband Market Review.

National Regulatory Authority (NRA): The relevant communications regulatory body for each country in the EU. Ofcom is the NRA for the United Kingdom

Nominated In-Span Interconnect (Nominated ISI): Similar to an ISI connection, except that BT builds out its network some way in order to meet the CP's network. The CP pays for this extension from the BT exchange to the nominated POC.

NTS: Number Translation Services.

Originating Communications Provider (OCP): The CP of the end-user making a call, i.e. the CP from which the call originates.

OBR: Office of Budget Responsibility.

Ofcom: The Office of Communications.

Office of the Telecommunications Adjudicator (OTA2): An independent body that facilitates discussion between CPs on operational issues related to new and existing telecoms products and services.

ONS: The Office of National Statistics.

Openreach: The access division of BT established by Undertakings in 2005.

Operating expenditure (opex): Costs reflected in the profit and loss account excluding depreciation financing costs such as interest charges.

OSS/BSS: Operations and Business Support Systems.

Over the top (OTT): A service that allows End-Users to make and receive voice calls using an internet connection where the service is provided independently of the provision of the internet connection.

Point of Connection (POC): The demarcation point between two CPs' networks.

Pol: Point for interconnection.

Ppm: Pence per minute.

Product Management, Policy and Planning (PPP): Overheads associated with marketing activities, customer service management, billing and finance activities directly related to the regulated service.

Public Switched Telephony Network (PSTN): The telephony network used to provide telephone calls using (or emulating) circuit-switching and using telephone numbers to identify subscribers or called locations, allowing all customers connected to the network to call all other customers.

Rate of Return (RoR): The ratio of money gained or lost (whether realised or unrealised) on an investment relative to the amount of money invested.

Regulatory Asset Value (RAV): The value ascribed by Ofcom to the capital employed in the relevant business.

Regulatory Financial Statements (RFS): The financial statements that BT is required by Ofcom to prepare, have audited and publish.

Reference Offer (RO): The terms and condition on which the Dominant Provider is willing to enter into an Access Agreement.

RoBT: Rest of BT.

Return On Capital Employed (ROCE): The ratio of accounting profit to capital employed. The measure of capital employed can be either Historic Cost Accounting (HCA) or Current Cost Accounting (CCA).

Retail Price Index (RPI): 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.

SDH: Synchronous Digital Hierarchy.

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

SIA: Revised Standard Interconnection Agreement - BT's standard terms and conditions for the provision of interconnection and related services.

Sky: British Sky Broadcasting Ltd.

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

SMP Guidelines: EC 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).

SSNIP: Small but Significant Non-Transitory Increase in Price.

Service Platform (SP): An individual or organisation using a non-geographic number to provide a service to consumers and who is the recipient of the non-geographic call from the consumer wishing to access that service.

Superfast broadband: A broadband connection that can support a maximum download speed of 30Mbps or greater.

TalkTalk: TalkTalk Telecom Group plc

TI: Traditional Interface for leased lines.

Time Division Multiplex (TDM): A method of putting multiple data streams in a single signal by separating the signal into many segments, each having a very short duration. Each individual data stream is reassembled at the receiving end based on the timing.

Time of day: The variation in call charge rates across daytime, evening and weekend calls.

UK: United Kingdom - when referring to the United Kingdom this excludes Hull except when referring to United Kingdom wide data.

Verizon: Verizon UK Ltd.

Very high data rate Digital Subscriber Line (VDSL): A digital technology that allows the use of a standard telephone line to provide very high speed data communications, which is used in fibre-to-the cabinet deployments.

Virtual Interconnect Circuits (VICs): VICs require interconnection to a tandem exchange using ISI or CSI. A 'virtual' circuit is then provided. The virtual circuit provides capacity to the CP using the existing BT network to connect to another BT exchange (e.g. a DLE). This virtual circuit is charged for as if it were an IEC (i.e. the IEC charges apply). The CP then pays the rates for conveyance that would be charged by BT as if there was a physical interconnection at the DLE – i.e. the call origination or termination rate without a charge for LTC. VICs are essentially capacity based charges, although the capacity is restricted by the underlying BT infrastructure, i.e. the CP can only connect to DLEs that have a direct route to the tandem exchanges to which the CP is interconnected.

Virgin Media: Virgin Media plc.

Vodafone: Vodafone UK and Cable & Wireless Worldwide Ltd.

VoIP: Voice over Internet Protocol – the traffic method of carrying voice calls on fixed and mobile networks by packetizing speech and carrying it using IP.

Virtual Unbundled Local Access (VULA): The remedy imposed on BT in the 2014 FAMR to require it to provide access to its FTTC and FTTP deployments. BT provides the GEA product (via its Openreach division) to meet this obligation.

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

WCO: Wholesale fixed geographic call origination services.

WCT: Wholesale fixed geographic call termination services.

WCT review period: The review period from 1 October 2016 to 30 September 2019 that is the subject of the proposals in this consultation.

Wholesale Fixed Analogue Exchange Lines (WFAEL): A narrowband analogue access connection between a customer's premises and a local exchange.

Wholesale Line Rental (WLR): The service offered by BT to other UK communications providers to enable them to offer retail line rental services in competition with BT's own retail services. Line rental is offered along with calls (and other service elements, such as broadband) to retail customers.

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

WLR+SMPF Simultaneous Connections: The simultaneous provision of either of the products in the WLR Connections basket and SMPF New Provide.

WLR+SMPF Simultaneous Migration: The simultaneous provision of WLR Conversion and SMPF New Provide.

Draft legal instruments

Proposals for SMP services conditions

NOTIFICATION OF PROPOSALS UNDER SECTIONS 48A AND 80A OF THE COMMUNICATIONS ACT 2003

Proposals for identifying markets, making market power determinations and setting SMP services conditions in relation to BT, KCOM and specified communications providers providing termination services under section 45 of the Communications Act 2003

Background

1. On 26 September 2013, Ofcom published a statement entitled *Review of the fixed narrowband services markets – Statement on the proposed markets, market power determinations and remedies*, (“**2013 NMR Statement**”). Among other fixed services narrowband markets, the 2013 NMR Statement identified:
 - (a) the market for wholesale call origination on a fixed narrowband network in the United Kingdom outside the Hull Area and determined that BT has significant market power in relation to such market;
 - (b) the market for wholesale call origination on a fixed narrowband network in the Hull Area and determined that KCOM has significant market power in relation to such market; and
 - (c) 172 separate markets for wholesale call termination services provided by BT and each of the 171 communications providers (CPs) listed to another CP for the termination of voice calls to United Kingdom geographic numbers in the area served by that CP and determined that BT and each of the 171 listed persons have significant market power in relation to the relevant market in which that person operates.
2. As a result of these significant market power determinations, the 2013 NMR Statement imposed certain SMP services conditions which, together with provisions modifying and revoking certain SMP services conditions previously imposed, are contained in notifications dated 26 September 2013 (“**2013 NMR Notifications**”).
3. On 20 May 2014, Ofcom published a policy statement entitled *Regulatory Financial Reporting: Final Statement* (“**2014 RFR Statement**”)¹ which set out (among other things) Ofcom’s conclusions on the regulatory financial reporting policy that it considered should be applied to BT.
4. On 26 June 2014, Ofcom published statements entitled *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Statement on the markets, market power determinations and remedies* and *Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Volume 2: LLU and WLR Charge Controls* (together

¹ <http://stakeholders.ofcom.org.uk/binaries/consultations/bt-transparency/statement/financial-reporting-statement-may14.pdf>

the “**2014 FAMR Statement**”).² Among other fixed access markets identified, the 2014 FAMR Statement identified markets for:

- wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area and determined that BT has SMP in relation to such market;
 - wholesale fixed analogue exchange line services in the Hull Area and determined that KCOM has SMP in relation to such market;
 - wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area and determined that BT has SMP in relation to such market; and
 - wholesale ISDN30 exchange line services in the Hull Area and determined that KCOM has SMP in relation to such market;
 - wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area and determined that BT has SMP in relation to such market; and
 - wholesale ISDN2 exchange line services in the Hull Area and determined that KCOM has SMP in relation to such market.
5. As a result of these significant market power determinations, the 2014 FAMR Statement imposed certain SMP services conditions which, together with provisions modifying and revoking certain SMP services conditions previously imposed, are contained in a notification dated 26 June 2014 (the “**2014 FAMR Notification**”).

Markets not affected by this review

6. The existing market definitions, market power determinations and conditions in relation to the following markets defined and reviewed in the 2014 FAMR Statement are not considered in this Notification and will remain in force until further notice:
- The supply of copper loop-based, cable-based and fibre-based wholesale local access at a fixed location in the United Kingdom excluding the Hull Area; and
 - The supply of copper loop-based, cable-based and fibre-based wholesale local access at a fixed location in the Hull Area.

Proposals in relation to the United Kingdom excluding the Hull Area

Proposals for market identifications and market power determinations

7. Ofcom is proposing to identify the following markets listed in Column 1 of **Table A** below for the purpose of making a determination that the person specified in the corresponding row in Column 2 of that Table has significant market power in that identified services market.

Table A: Market identifications and market power determinations in the United Kingdom excluding the Hull Area

² <http://stakeholders.ofcom.org.uk/telecoms/ga-scheme/specific-conditions-entitlement/market-power/fixed-access-market-reviews-2014/statement/>

Column 1: Market identification	Column 2: Market power determination
(a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area	BT
(b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area	BT
(c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area	BT
(d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area	BT

Proposals to set and apply, modify and revoke SMP services conditions

8. Ofcom is proposing to set, in relation to each of the services markets in which Ofcom is proposing to make the market power determinations as listed in **Table A** above, the SMP conditions as set out in **Schedule 1** to this Notification to be applied to BT to the extent specified in that Schedule, which SMP conditions shall, unless otherwise is stated in that Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this Notification.
9. Ofcom is (to the extent still extant) proposing to revoke the SMP conditions applied to BT as set out in the 2013 NMR Notifications and the 2014 FAMR Notification in so far as they apply to the markets set out in **Table A** above on the date of publication of any subsequent notification under section 48(1) and 79(4) of the Act adopting the proposals set out in this Notification. It is proposed that section 16 of the Interpretation Act 1978 shall apply as if this revocation were a repeal of an enactment by an Act of Parliament.

Proposals in relation to the Hull Area

Proposals for market identifications and market power determinations

10. Ofcom is proposing to identify the following markets listed in Column 1 of **Table B** below for the purpose of making a determination that the person specified in the corresponding row in Column 2 of that Table has significant market power in that identified services market.

Table B: Market identifications and market power determinations in the Hull Area

Column 1: Market identification	Column 2: Market power determination
(a) Wholesale fixed analogue exchange line services in the Hull Area	KCOM
(b) Wholesale ISDN30 exchange line services in the Hull Area	KCOM
(c) Wholesale ISDN2 exchange line services in the Hull Area	KCOM
(d) Wholesale call origination on a fixed narrowband network in the Hull Area	KCOM

Proposals to set and apply, modify and revoke SMP services conditions

11. Ofcom is proposing to set, in relation to each of the services markets in which Ofcom is proposing to make the market power determinations as listed in **Table B** above, the SMP conditions as set out in **Schedule 2** to this Notification to be applied to KCOM to the extent specified in that Schedule, which SMP conditions shall, unless otherwise stated in that Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this Notification.
12. Ofcom is (to the extent still extant) proposing to revoke the SMP conditions applied to KCOM as set out in the 2013 NMR Notifications and the 2014 FAMR Notification in so far as they apply to the markets set out in **Table B** above on the date of publication of any subsequent notification under section 48(1) and 79(4) of the Act adopting the proposals set out in this Notification. It is proposed that section 16 of the Interpretation Act 1978 shall apply as if this revocation were a repeal of an enactment by an Act of Parliament.

Proposals in relation to the United Kingdom

13. Ofcom is proposing to identify 315 separate markets in the United Kingdom for the purpose of considering market power determinations.
14. These are the markets for wholesale call termination services which are provided by BT, KCOM and each of the 313 communications providers listed in the Annex to Schedule 3 to this Notification (CP) to another communications provider, for the termination of voice calls to United Kingdom geographic numbers in the area served by that CP.
15. Ofcom is proposing to determine that BT, KCOM and each of the persons listed in the Annex to Schedule 3 to this Notification have significant market power in relation to the relevant market in which that person operates and is proposing setting the following SMP conditions:
 - (a) On BT, the SMP conditions set out in Schedule 1 to this Notification to the extent set out in such Schedule;

- (b) On KCOM, the SMP conditions set out in Schedule 2 to this Notification to the extent set out in such Schedule; and
 - (c) On each of the persons listed in the Annex to Schedule 3 to this Notification, the SMP conditions set out in such Schedule.
16. It is proposed that those SMP conditions shall apply, in the case of each person on whom they are set, in respect of the relevant market on which that person operates.
17. It is proposed that those SMP conditions shall, unless otherwise stated in that Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this Notification.
18. Ofcom is (to the extent still extant) proposing to revoke the SMP conditions applied, in the 2013 NMR Notifications, to BT and each of the 171 communications providers (including KCOM) listed in Annex A to Schedule 3 to the 2013 NMR Notifications in so far as they apply to the markets set out in paragraph 14 above on the date of publication of any subsequent notification under section 48(1) and 79(4) of the Act adopting the proposals set out in this Notification. It is proposed that section 16 of the Interpretation Act 1978 shall apply as if this revocation were a repeal of an enactment by an Act of Parliament.

Proposals in relation to Interconnect Circuits

19. As a result of the proposed SMP determinations in relation to BT as set out at **(d)** in **Table A** of **paragraph 7** and in **paragraph 15(a)**, above and in relation to KCOM as set out at **(d)** in **Table B** of **paragraph 10** above, Ofcom is proposing to set the SMP conditions in relation to Interconnect Circuits as set out in Schedule 1 to this Notification (in relation to BT) to the extent set out in such Schedule and in Schedule 2 to this Notification (in relation to KCOM) to the extent set out in such Schedule, which SMP conditions shall, unless otherwise stated in either Schedule, take effect from the date of any notification under sections 48(1) and 79(4) of the Act adopting the proposals set out in this Notification.
20. Ofcom is (to the extent still extant) proposing to revoke the SMP conditions applied to BT and KCOM as set out in the 2013 NMR Notification in so far as those conditions apply to Interconnect Circuits on the date of publication of any subsequent notification under section 48(1) and 79(4) of the Act adopting the proposals set out in this Notification. It is proposed that section 16 of the Interpretation Act 1978 shall apply as if this revocation were a repeal of an enactment by an Act of Parliament.

Proposals in relation to regulatory financial reporting

BT

21. The proposals referred to in **paragraphs 8, 15(a)**, and **19** above include proposals to set regulatory accounting SMP conditions.
22. The proposals referred to in **paragraphs 9, 18** and **20** above include proposals (to the extent still extant) to revoke the SMP conditions which were set out in the July 2004 (BT) Notification contained in the July 2004 Statement and which were applied to BT as set out in the 2013 NMR Notifications in so far as they apply to the markets identified at **(d)** in **Table A** and **paragraph 18** above, and in relation to Interconnect Circuits provided by

BT. For the avoidance of doubt, the 2014 FAMR Notification revoked these SMP conditions in so far as they applied to the markets listed at **(a)**, **(b)** and **(c)** in **Table A** above.

KCOM

23. Ofcom is also proposing to set, in relation to each of the services markets in which Ofcom is proposing to make the market power determinations as listed in **Table B** above, the SMP conditions OB1 to OB27 and OB31 to OB33 to be applied to KCOM set out in the July 2004 (KCOM) Notification contained in the July 2004 Statement, but as read in light of the modifications to that notification set out in **paragraph 24** below. Those SMP conditions shall, unless otherwise is stated in that Schedule, take effect from the date of publication of this notification and shall have effect until the publication of a notification under section 48(1) of the Act revoking those conditions
24. Ofcom is also modifying the July 2004 (KCOM) Notification as follows:
- (a) in paragraph 4(a)(i), by adding “1, 4, 5 and 6” after “numbered”;
 - (b) in paragraph 4(a)(iii), by removing “1, 4, 5 and 6”; and
 - (c) substituting in the Column entitled ‘Date’ in Part 1 (entitled ‘Wholesale Markets’) of Schedule 1 “[the date of publication of the final statement]” for the date specified in relation to paragraph 1 and for the words “As above” in paragraphs 4, 5 and 6;

Ofcom’s duties and legal tests

25. The effect of, and Ofcom’s reasons for making, the proposals for identifying the markets, making the market power determinations and determinations in relation to SMP conditions referred to in this Notification are set out in the consultation document accompanying this Notification.
26. In identifying and analysing the markets referred to in this Notification, and in considering whether to make the corresponding proposals set out in this Notification, Ofcom has, in accordance with section 79 of the Act, taken due account of all applicable guidelines and recommendations which have been issued or made by the European Commission in pursuance of an EU instrument, and which relate to market identification and analysis or the determination of what constitutes SMP. In so doing, pursuant to Article 3(3) of Regulation (EC) No 1211/2009, Ofcom has also taken the utmost account of any relevant opinion, recommendation, guidelines, advice or regulatory practice adopted by the Body of European Regulators for Electronic Communications (BEREC).
27. Ofcom considers that the proposed SMP conditions comply with the requirements of sections 45 to 47, 87 and 88 of the Act, as appropriate and relevant to each such SMP condition.
28. In making all of the proposals referred to in this Notification, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act and the six Community requirements in section 4 of the Act. In accordance with section 4A of the Act, Ofcom has also taken due account of all applicable recommendations issued by the European Commission under Article 19(1) of the Framework Directive.

Making representations

29. Representations may be made to Ofcom about any of the proposals set out in this Notification and the accompanying consultation document by no later than 28 February 2017.
30. Copies of this Notification and the accompanying consultation document will be sent to the Secretary of State in accordance with sections 48C(1) and 81(1) of the Act.

Interpretation

31. For the purpose of interpreting this Notification (which for the avoidance of doubt includes the Schedules):
- (a) except in so far as the context otherwise requires, words or expressions have the meaning assigned to them in paragraph 32 below, and otherwise any word or expression has the same meaning as it has in the Act;
 - (b) headings and titles shall be disregarded;
 - (c) expressions cognate with those referred to in this Notification shall be construed accordingly; and
 - (d) the Interpretation Act 1978 (c. 30) shall apply as if this Notification were an Act of Parliament.
32. In this Notification:
- (a) “**2004 RFR Statement**” means the statement described in paragraph 3 above;
 - (b) “**2013 NMR Notifications**” means the notifications described in paragraph 2 above;
 - (c) “**2013 NMR Statement**” means the statement described in paragraph 1 above;
 - (a) “**2014 FAMR Notification**” means the notification described in paragraph 5 above;
 - (b) “**2014 FAMR Statement**” means the statements described in paragraph 4 above;
 - (c) “**Act**” means the Communications Act 2003 (c. 21);
 - (d) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006;
 - (e) “**Framework Directive**” means 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;
 - (f) “**Hull Area**” means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communication (Hull) plc, (now known as KCOM);
 - (g) “**July 2004 (BT) Notification**” means the notification at Annex 2 of the July 2004 Statement, as subsequently amended;
 - (h) “**July 2004 (KCOM) Notification**” means the notification at Annex 3 of the July 2004 Statement, as subsequently amended;

- (i) **“July 2004 Statement”** means Ofcom’s statement entitled *The regulatory financial reporting obligations on BT and Kingston Communications Final statement and notification – Accounting separation and cost accounting: Final Statement and notification*, published on 22 July 2004
- (j) **“KCOM”** means KCOM Group plc, whose registered company number is 02150618, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006;
- (k) **“Ofcom”** means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002;
- (l) **“United Kingdom”** has the meaning given to it in the Interpretation Act 1978 (1978 c30).

33. The Schedules to this Notification shall form part of this Notification.

Signed



Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

SCHEDULE 1: Proposed SMP Conditions (BT)

Part 1: Application

1. The SMP conditions in Part 3 of this Schedule 1, except where specified otherwise, apply to the Dominant Provider in each of the relevant markets and area listed in Column 1 of **Table 1** below to the extent specified in Column 2 of **Table 1**. Save as otherwise specified in any condition, each condition will enter into force on the date of publication of [*date of final notification*] and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.

Table 1: Relevant markets and area for the purposes of this Schedule 1

Column 1: Relevant market or area	Column 2: Applicable SMP condition as set out in Part 3 of this Schedule 1
Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area	Conditions 1A (except 1A.2B, 1A.2C, 1A.3), 2, 3, 4, 6 (except 6.2B1, 6.2B2, 6.2C1, 6.2C2), 7 (except 7.2B, 7.3B, 7.4B, 7.4C, 7.4D, 7.5B, 7.6B), 9 (except 9.1B, 9.1C, 9.3) and 10 (except 10.31B).
Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area	Conditions 1B, 1C (except 1C.1B), 2, 3, 4, 5A, 6 (except 6.2A, 6.2C1, 6.2C2), 7 (except 7.2B, 7.3B, 7.4A, 7.4C, 7.4D, 7.5B, 7.6B), 9 (except 9.1A, 9.1C, 9.2A, 9.2B, 9.3) and 10 (except 10.31B).
Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area	Conditions 1B, 1C (except 1C.1A), 2, 3, 4, 5B, 6 (except 6.2A, 6.2B1, 6.2B2), 7 (except 7.2B, 7.3B, 7.4A, 7.4C, 7.4D, 7.5B, 7.6B), 9 (except 9.1A, 9.1C, 9.2A, 9.2B, 9.3) and 10 (except 10.31B).
Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area	Conditions 1A (except 1A.2A, 1A.2C, 1A.3, 1A.6), 6 (except 6.2A, 6.2B1, 6.2B2, 6.2C1, 6.2C2, 6.3, 6.9), 7 (except 7.2A, 7.3A,

	7.4A, 7.4B, 7.4C, 7.5A, 7.6A, 7.7) and 10 (except 10.31A, 10.35).
Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers in the area served by the Dominant Provider	Conditions 1A (except 1A.2A, 1A.2B, 1A.6), 3, 5C, 6 (except 6.2A, 6.2B1, 6.2B2, 6.2C1, 6.2C2), 8 and 10 (except 10.31B).
Interconnect Circuits in the United Kingdom excluding the Hull Area	Conditions 1A (except 1A.2A, 1A.2B, 1A.6), 3, 5D, 6 (except 6.2A, 6.2B1, 6.2B2, 6.2C1, 6.2C2), 7 (except 7.2B, 7.3B, 7.4A, 7.4B, 7.4D, 7.5B, 7.6B), 9 (except 9.1A, 9.1B, 9.2A, 9.2B) and 10 (except 10.31B).

The Conditions referred to in Column 2 of **Table 1** are entitled as follows—

Condition 1	Network access on reasonable request
Condition 2	Specific forms of network access
Condition 3	No undue discrimination
Condition 4	Equivalence of Inputs basis
Condition 5	Charge controls
Condition 6	Publication of a Reference Offer
Condition 7	Notification of charges
Condition 8	Price transparency
Condition 9	Quality of service
Condition 10	Regulatory Financial Reporting

Part 2: Interpretation

1. In addition to the definitions set out above in this Notification and in each condition below (where relevant), in this Schedule 1—
 - a) “**Access Agreement**” means an agreement entered into between the Dominant Provider and a Third Party for the provision of network access in accordance with Condition 1A, 1B or 1C (as applicable) and, in relevant cases, Condition 2;
 - b) “**Call Termination Charge**” means the charge made by the Dominant Provider to terminate a call;
 - c) “**Call**” means a voice call which is terminated to a United Kingdom geographic number in the area served by the Dominant Provider;
 - d) “**Consumer Prices Index**” means the index of prices compiled by an agency or a public body on behalf of Her Majesty’s Government or a governmental department (which is the Office for National Statistics at the time of publication of this Notification) from time to time in respect of all items;
 - e) “**CSI**” means customer sited interconnect;
 - f) “**Dominant Provider**” means BT;
 - g) “**Exchange Line**” means apparatus comprised in the Dominant Provider’s electronic communications network and installed for the purpose of connecting a telephone exchange run by the Dominant Provider to a Network Termination Point comprised in Network Termination and Testing Apparatus installed by the Dominant Provider for the purpose of providing electronic communications services at the premises at which the Network Termination and Testing Apparatus is located;
 - h) “**Existing ISDN2 Rental**” means the rental of an ISDN2 Exchange Line as at the date Condition 1C enters into force;
 - i) “**Existing ISDN30 Rental**” means the rental of an ISDN30 Exchange Line as at the date Condition 1C enters into force;
 - j) “**Fault**” means a degradation or problem with network access that is identified by the Dominant Provider or a Third Party and which is registered on the Dominant Provider’s operational support system;

- k) **“First Relevant Year”** means the period beginning on [1 October 2017] and ending on [30 September 2018];
- l) **“IEC”** means interconnection extension circuits;
- m) **“Interconnect Circuits”** mean any and all of the following specific services provided by the Dominant Provider in accordance with Condition 1A:
- (i) standard CSI connection;
 - (ii) standard CSI rental – fixed;
 - (iii) standard CSI rental – per km;
 - (iv) high performance CSI connection;
 - (v) high performance CSI rental – fixed;
 - (vi) high performance CSI rental – per km;
 - (vii) ISI connection;
 - (viii) ISI rental per 100m;
 - (ix) IEC connection;
 - (x) IEC rental – fixed;
 - (xi) IEC rental per km;
 - (xii) intra-building circuits connection;
 - (xiii) intra-building circuits rental;
 - (xiv) rearrangements;
 - (xv) path protection connection per 34Mbit/s;
 - (xvi) path protection connection per 140Mbit/s;
 - (xvii) path protection rental per 34Mbit/s; and
 - (xviii) path protection rental per 140Mbit/s;
- n) **“ISDN2 Exchange Line”** means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Basic Rate Access standard as defined by the International Telecommunications Union, providing two digital channels with a bandwidth of 64 kbit/s each plus a control channel of 16kbit/s over a common digital bearer circuit;

- o) **“ISDN30 Exchange Line”** means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Primary Rate Access standard as defined by the International Telecommunications Union, providing up to 30 digital channels with a bandwidth of 64 kbit/s per channel plus a control channel of 64 kbit/s;
- p) **“ISDN”** means the integrated services digital network which is an electronic communications network that provides for digital end-to-end connectivity to support a wide range of public electronic communications services, including voice and non-voice services, to which end-users have access by a limited set of standard multipurpose customer interfaces;
- q) **“ISI”** means in-span interconnect links;
- r) **“Network Termination and Testing Apparatus”** means an item of apparatus comprised in an electronic communications network installed in a fixed position on served premises which enables:
- i. approved apparatus to be readily connected to, and disconnected from, the network;
 - ii. the conveyance of signals between such approved apparatus and the network;
 - iii. the due functioning of the network to be tested, but the only other functions of which, if any, are:
 - A. to supply energy between such approved apparatus and the network;
 - B. to protect safety or security of the operation of the network; or
 - C. to enable other operations exclusively related to the running of the network to be performed or the due functioning of any system to which the network is or is to be connected to be tested (separately or together with the network);
- s) **“Network Termination Point”** means the physical point at which a Relevant Subscriber is provided with access to a public electronic communications network;
- t) **“Ordinary Maintenance”** means maintenance which is part of the service provided by the Dominant Provider in consideration of the charge for an Exchange Line, an ISDN30 Exchange Line or an

ISDN2 Exchange Line and includes normal fault repair, as defined in the Dominant Provider's standard terms and conditions;

- u) **"Point of Connection"** means a point at which the Dominant Provider's electronic communications network and a Third Party's electronic communications network are connected;
- v) **"Reference Offer"** means the terms and conditions on which the Dominant Provider is willing to enter into an Access Agreement;
- w) **"Relevant Subscriber"** means any person who is party to a contract with a provider of public electronic communications services for the supply of such services;
- x) **"Relevant Year"** means each of the following three periods:
 - (1) the First Relevant Year;
 - (2) the Second Relevant Year; and
 - (3) the Third Relevant Year;
- y) **"Second Relevant Year"** means the period of 12 months beginning on [1 October 2018] and ending on [30 September 2019];
- z) **"Third Party"** means a person providing a public electronic communications service or a person providing a public electronic communications network;
- aa) **"Third Relevant Year"** means the period of 12 months beginning on [1 October 2019] and ending on [30 September 2020];
- bb) **"Wholesale Analogue Line Rental"** means an electronic communications service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an analogue Exchange Line;
- cc) **"Wholesale ISDN2 Line Rental"** means an electronic communications service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an ISDN2 Exchange Line;
- dd) **"Wholesale ISDN30 Line Rental"** means an electronic communications service provided by the Dominant Provider to a

Third Party for the use and Ordinary Maintenance of an ISDN30 Exchange Line;

- ee) **“Wholesale Line Rental”** means network access comprising of any and all of the following provided by the Dominant Provider:
- (a) Wholesale Analogue Line Rental;
 - (b) Wholesale ISDN30 Line Rental; and
 - (c) Wholesale ISDN2 Line Rental;
- ff) **“Wholesale Line Rental Charge”** means the annual charge levied by the Dominant Provider for Wholesale Analogue Line Rental including packages containing a line rental charge and any included levels of service sold as part of a single marketed product;

34. For the purpose of interpreting this Schedule, except in so far as the context otherwise requires, the terms or descriptions of products and/or services used in this Schedule shall be construed as having the same meaning as those provided by the Dominant Provider on its website for definitions and explanations of its products in addition to future product updates. These are as at 30 November 2016 found as follows:

- For WLR product information, please refer to:
<http://www.openreach.co.uk/orpg/home/products/wlr3/wlr3.do>
- For assurance information including care levels, please refer to the Service Products section of the Openreach website:
http://www.openreach.co.uk/orpg/home/products/serviceproducts/service_products.d
[o](#)

Part 3: Conditions (BT)

Condition 1A – Network access on reasonable request

- 1A.1**
**(WFAEL,
WCO, WCT,
Interconnect)** The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1A.2A**
(WFAEL) The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party (and, in any event, in accordance with Condition 9); and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1A.2B**
(WCO) The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1A.2C**
**(WCT,
Interconnect)** Except where Condition 1A.3 applies, the provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1A.3**
**(WCT,
Interconnect)** Where Condition 5C or 5D applies, the provision of network access by the Dominant Provider in accordance with this Condition must:

- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
- (b) be on:
 - (i) fair and reasonable terms and conditions (excluding charges); and
 - (ii) such terms and conditions (excluding charges) as Ofcom may from time to time direct.

**1A.4
(WFAEL,
WCO, WCT,
Interconnect)**

The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.

**1A.5
(WFAEL,
WCO, WCT,
Interconnect)**

The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

**1A.6
(WFAEL)**

The direction dated 20 March 2008 concerning service level agreements, as published on the same day at Annex 1 of the statement entitled "*Service level guarantees: incentivising performance*", given by Ofcom under condition AA1(a).2, shall have force until such time as it is modified or withdrawn, as if it has been given under Condition 1A.2A from the date that this condition enters into force and that direction must be read accordingly.

Condition 1B – Network access on reasonable request

(in force [1 October 2017 to 30 September 2018])

- 1B.1
(ISDN30 &
ISDN2)** The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1B.2
(ISDN30 &
ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) such terms, conditions and charges as Ofcom may from time to time direct.
- 1B.3
(ISDN30 &
ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.
- 1B.4
(ISDN30 &
ISDN2)** The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.
- 1B.5
(ISDN30 &
ISDN2)** The direction dated 20 March 2008 concerning service level agreements, as published on the same day at Annex 1 of the statement entitled “*Service level guarantees: incentivising performance*”, given by Ofcom under condition AA1(a).2, shall have force until such time as it is modified or withdrawn, as if it has been given under Condition 1B.2 from the date that this condition enters into force and that direction must be read accordingly.

Condition 1C – Network access on reasonable request

(in force from [1 October 2018])

- 1C.1A (ISDN30)** Where a Third Party purchases Existing ISDN30 Rental, the Dominant Provider must provide network access to that Third Party where that Third Party, in writing, reasonably requests it in respect of an Existing ISDN30 Rental.
- 1C.1B (ISDN2)** Where a Third Party purchases Existing ISDN2 Rental, the Dominant Provider must provide network access to that Third Party where that Third Party, in writing, reasonably requests it in respect of an Existing ISDN2 Rental.
- 1C.2 (ISDN30 & ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1C.3 (ISDN30 & ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.
- 1C.4 (ISDN30 & ISDN2)** The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.
- 1C.5 (ISDN30 & ISDN2)** The direction dated 20 March 2008 concerning service level agreements, as published on the same day at Annex 1 of the statement entitled “*Service level guarantees: incentivising performance*”, given by Ofcom under condition AA1(a).2, shall have force until such time as it is modified or withdrawn, as if it has been given under Condition 1C.2 from the date that this condition enters into force and that direction must be read accordingly.

Condition 2 – Specific forms of network access

2.1
(WFAEL,
ISDN30 &
ISDN2) Without prejudice to the generality of Conditions 1A, 1B and 1C the provision of network access under those Conditions must include, where the Third Party, in writing, reasonably requests, Wholesale Line Rental including such WLR Ancillary Services as may be reasonably necessary for the use of Wholesale Line Rental.

2.2
(WFAEL,
ISDN30 &
ISDN2) In this Condition 2:

- (a) **“WLR Ancillary Services”** mean an associated facility or services associated with an electronic communications network and/or an electronic communications service which enable and/or support the provision of Wholesale Line Rental via that network and/or service or have the potential to do so.

Condition 3 – No undue discrimination

3.1 The Dominant Provider must not unduly discriminate against particular persons or against a particular description of persons in relation to the provision of network access in accordance with Conditions 1A, 1B, 1C or 2, as applicable.
(WFAEL, ISDN30, ISDN2, WCT & Interconnect)

3.2 Without prejudice to the generality of Condition 3.1, in this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place one or more Third Parties at a competitive disadvantage in relation to activities carried on by the Dominant Provider.
(WFAEL, ISDN30, ISDN2, WCT & Interconnect)

Condition 4 – Equivalence of Inputs basis

- 4.1 (WFAEL, ISDN30 & ISDN2)** Subject to Condition 4.2, the Dominant Provider must provide network access in accordance with Conditions 1A, 1B, 1C or 2 (as applicable) on an Equivalence of Inputs basis.
- 4.2 (WFAEL, ISDN30 & ISDN2)** The obligation in Condition 4.1 to provide network access on an Equivalence of Inputs basis shall not apply to—
- (a) network access which the Dominant Provider was not providing on an Equivalence of Inputs basis as at the date that this Condition enters into force; and
 - (b) such provision of network access as Ofcom may from time to time otherwise consent in writing.
- 4.3 (WFAEL, ISDN30 & ISDN2)** Without prejudice to the generality of Condition 4.1, the Dominant Provider must not provide (or seek to provide) network access for its own services (including for those of its retail divisions, subsidiaries or partners), unless at the same time the Dominant Provider provides and/or offers to provide such network access to Third Parties (other than its retail divisions, subsidiaries or partners) on an Equivalence of Inputs basis.
- 4.4 (WFAEL, ISDN30 & ISDN2)** For the avoidance of doubt, the obligations set out in this Condition 4 apply in addition to the obligations set out in Condition 3.
- 4.5 (WFAEL, ISDN30 & ISDN2)** In this Condition 4:
- “Equivalence of Inputs basis”** means that the Dominant Provider must provide, in respect of a particular product or service, the same product or service to all Third Parties and itself on the same timescales, terms and conditions (including price and service levels) by means of the same systems and processes, and includes the provision to all Third Parties and itself of the same Relevant Commercial Information about such products, services, systems and processes as the Dominant Provider provides to its own divisions, subsidiaries or partners. In particular, it includes the use by the Dominant Provider of such systems and processes in the same way as Third Parties and with the same degree of reliability and performance as experienced by Third Parties.
- In this definition “the same” means exactly the same subject only to:
- (A) trivial differences;
 - (B) differences relating to:
 - (i) credit vetting procedures,

- (ii) payment procedures,
 - (iii) matters of national and crime-related security (which for the avoidance of doubt includes for purposes related to the Regulation of Investigatory Powers Act 2000), physical security, security required to protect the operational integrity of the network,
 - (iv) provisions relating to the termination of a contract, or
 - (v) contractual provisions relating to requirements for a safe working environment;
- (C) differences relating to the provision of Relevant Commercial Information by the Dominant Provider to its own divisions, subsidiaries or partners where this is necessary for purposes other than relating to the provision of network access to those own divisions, subsidiaries or partners; and
- (D) such other differences as Ofcom may from time to time consent to in writing.

For the avoidance of any doubt, unless seeking Ofcom's consent, the Dominant Provider may not rely on any other reasons in seeking to objectively justify the provision in a different manner.

- (b) **"Relevant Commercial Information"** means information of a commercially confidential nature relating to products and/or services to which this Condition 4 applies, and which relates to any or all of the following in relation thereto—
- i. product development;
 - ii. pricing;
 - iii. marketing strategy and intelligence;
 - iv. product launch dates;
 - v. cost;
 - vi. projected sales volumes; or
 - vii. network coverage and capabilities;

save for any such information in relation to which Ofcom consents in writing is to be treated as falling outside this definition.

Condition 5A – Wholesale ISDN30 services charge control

5A.1A (ISDN30) In the First Relevant Year the Dominant Provider must not charge more than:

- (a) £755.00 for the ISDN30 Connection Services New Installation;
- (b) £0.81 for the ISDN30 Direct Dial Inward Connection Service;
- (c) £81.57 for the ISDN30 Transfer Services; and
- (d) £1.04 for the ISDN30 Direct Dial Inward Rental Service.

5A.1B (ISDN30) In the Second Relevant Year and the Third Relevant Year the Dominant Provider must not charge more than:

- (a) £81.57 for the ISDN30 Transfer Services; and
- (b) £1.04 for the Existing ISDN30 Direct Dial Inward Rental Service.

5A.2A (ISDN30) The Dominant Provider must take all reasonable steps to secure that, at the end of the First Relevant Year, the Percentage Change (determined in accordance with Condition 5A.3 and 5A.4, as applicable) in:

(a) the aggregate of charges for:

- i. ISDN30 Rental Services;
- ii. ISDN30 Connection Services per channel; and
- iii. ISDN30 SML 3 and 4;

(b) the charge for ISDN30 Connection Services per channel; and

(c) the aggregate of charges for ISDN30 SML 3 and 4, is not more than the Controlling Percentage (determined in accordance with Condition 5A.5).

5A.2B (ISDN30) The Dominant Provider must take all reasonable steps to secure that, at the end of the Second Relevant Year and the Third Relevant Year, the Percentage Change (determined in accordance with Condition 5A.3 and 5A.4, as applicable) in:

(a) the aggregate of charges for:

- i. Existing ISDN30 Rental Services;
- ii. Existing ISDN30 Connection Services per channel; and
- iii. Existing ISDN30 SML 3 and 4;

(b) the charge for Existing ISDN30 Connection Services per channel; and

(c) the aggregate of charges for Existing ISDN30 SML 3 and 4,

is not more than the Controlling Percentage (determined in accordance with Condition 5A.5).

5A.3 (ISDN30) The Percentage Change for the purposes of the products and/or services specified in Conditions 5A.2A(a) or 5A.2B(a), as applicable, and 5A.2A(c) and 5A.2B(c), as applicable, respectively (each of which is known as a “Basket”)

shall be calculated for the purposes of complying with Condition 5A.2A or 5A.2B, as applicable, by employing the following formula:

$$C_t = \frac{\sum_{i=1}^n \left[R_i \frac{(\bar{p}_{i,t} - \bar{p}_{i,t-1})}{\bar{p}_{i,t-1}} \right]}{\sum_{i=1}^n R_i}$$

Where:

C_t is the Percentage Change in the aggregate of charges for the services in the Basket for Relevant Year t ;

○
 n is the number of individual services in the Basket;

i is a number from 1 to n for each of the n individual services in the Basket;

R_i is the Total Revenue accrued during the Prior Year in respect of the individual service i that forms part of the Basket;

t refers to the Relevant Year;

$t-1$ refers to the Prior Year;

$\bar{p}_{i,t}$ is the Relevant Year Weighted Average Charge made by the Dominant Provider for the individual service i that forms part of the Basket during the Relevant Year, excluding any discounts offered by the Dominant Provider:

○
 Where such Relevant Year Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t} = \sum_{j=1}^m (w_{i,j,t} p_{i,j,t})$$

Where:

m is the number of time periods for which there are distinct charges during the Relevant Year;

j is a number from 1 to m for each of the m time periods during which a distinct charge is in effect;

$w_{i,j,t}$ is the proportion of the Relevant Year in which each charge, $p_{i,j,t}$, is in effect, calculated by the number of days during which the charge is in effect and dividing
 (1) for the First Relevant Year, by 365;
 (2) for the Second Relevant Year, by 365; and
 (3) for the Third Relevant Year, by 366.

$p_{i,j,t}$ is the charge for the specified period, j , during the Relevant Year t , for the individual service, i ;

$\bar{p}_{i,t-1}$ is the Prior Year Weighted Average Charge made by the Dominant Provider for the individual service i that forms part of the Basket during the Prior Year, excluding any discounts offered by the Dominant Provider;

Where such Prior Year Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t-1} = \sum_{j=1}^m (w_{i,j,t-1} p_{i,j,t-1})$$

Where:

m is the number of time periods for which there are distinct charges during the Prior Year;

j is a number from 1 to m for each of the m time periods during which a distinct charge is in effect;

$w_{i,j,t-1}$ is the proportion of the Prior Year in which each charge, $p_{i,j,t-1}$, is in effect, calculated by the number of days during which the charge is in effect and dividing:

- (1) for the First Relevant Year, by 365;
- (2) for the Second Relevant Year, by 365;
- (3) the Third Relevant Year, by 365;

$p_{i,j,t-1}$ is the charge for the individual period, j , during the Prior Year, $t-1$, for the individual service, i .

5A.4 (ISDN30)

The Percentage Change for the purposes the services specified in Conditions 5A.2A(b) or 5A.2B(b), as applicable, (referred to in this Condition as a “single charge category”) shall be calculated, for the purposes of complying with Condition 5A.2A or 5A.2B, as applicable, by employing the following formula:

$$C_t = \frac{(\bar{p}_t - \bar{p}_{t-1})}{\bar{p}_{t-1}}$$

Where:

C_t is the Percentage Change in charges for the specific product and/or service in the single charge category in question for the Relevant Year t ;

t refers to the Relevant Year;

$t-1$ refers to the Prior Year;

\bar{p}_t shall be calculated by employing the formula set out in Condition 5A.3 above for the Relevant Year Weighted Average Charge, excluding any discounts offered by the Dominant Provider, and its references to individual

service *i* shall be treated as references to charges for the specific product and/or service in the single charge category in question; and

\bar{p}_{t-1} shall be calculated by employing the formula set out in Condition 5A.3 above for the Prior Year Weighted Average Charge, excluding any discounts offered by the Dominant Provider, and its references to individual service *i* shall be treated as references to charges for the specific product and/or service in the single charge category in question.

**5A.5
(ISDN30)**

- a) Subject to Conditions 5A.5(b) to 5A.5(d) below, the Controlling Percentage in relation to any Relevant Year for each of the categories of products and/or services specified in Conditions 5A.2A(a) to (c) or 5A.2B(a) to (c), as applicable, shall be calculated by employing the following formula:

$$CP_t = X$$

Where:

CP_t is the Controlling Percentage for Relevant Year *t*;

X means:

- i. for the category of products and/or services specified in Condition 5A.2A(a) or Condition 5A.2B(a), as applicable, 0 (zero) percentage points;
 - ii. for the category of products and/or services specified in Condition 5A.2(b) or Condition 5A.2B(b), as applicable, 5 percentage points; and
 - iii. for the category of products and/or services specified in Condition 5A.2(c) or Condition 5A.2B(c), as applicable, 0 percentage points.
- b) For each of the categories of products and/or services specified in Conditions 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, where the Percentage Change at the end of either the First Relevant Year or the Second Relevant Year is less than the Controlling Percentage (“Deficiency”), then the Controlling Percentage for the following Relevant Year shall be determined in accordance with Condition 5A.5(d) below.
- c) For each of the categories of products and/or services specified in Condition 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, where the Percentage Change at the end of either the First Relevant Year or the Second Relevant Year is more than the Controlling Percentage (“Excess”), then the Controlling Percentage for the following Relevant Year shall also be determined in accordance with Condition 5A.5(d) below.
- d) For each of the categories of products and/or services specified in Condition 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, in the case of Deficiency or Excess, the Controlling Percentage will be calculated by employing the following formula:

$$CP_t = [(100\% + X)(100\% + CP_{t-1}) / (100\% + C_{t-1})] - 100\%$$

Where:

CP_t is the Controlling Percentage for the Second Relevant Year (in the case of Deficiency or Excess in the First Relevant Year) or for the Third Relevant Year (in the case of Deficiency or Excess in the Second Relevant Year);

CP_{t-1} is the Controlling Percentage for the First Relevant Year (in the case of Deficiency or Excess in the First Relevant Year) or for the Second Relevant Year (in case of Deficiency or Excess in the Second Relevant Year);

C_{t-1} is the Percentage Change in the Charge for the category of products and/or services specified in Condition 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, during the First Relevant Year (in the case of Deficiency or Excess in the First Relevant Year) or for the Second Relevant Year (in the case of Deficiency or Excess in the Second Relevant Year), calculated in accordance with the formula for C_t set out in Condition 5A.3 or 5A.4 above, as applicable; and

X is as set out in Condition 5A.5(a) above.

- e) For each of the categories of products and/or services specified in Condition 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, where the Percentage Change in any Relevant Year is more than the Controlling Percentage, the Dominant Provider shall, to the extent reasonably possible, and as soon as reasonably practicable, repay the Relevant Excess Revenue to the relevant Affected Communications Provider.

**5A.6
(ISDN30)**

Where:

- a. the Dominant Provider makes a material change (other than to a Charge) to any Charge Controlled Service for which a Charge is made; or
- b. the Dominant Provider makes a change to the date on which its financial year ends,

Conditions 5A.1 to 5A.5 shall have effect subject to such reasonable adjustment to take account of the change as Ofcom may direct to be appropriate in the circumstances. For the purposes of this Condition 5A.6, a material change to the Charge Controlled Service includes (but is not limited to) the introduction of a new product and/or service wholly or substantially in substitution for an existing Charge Controlled Service or a change as to the billing practice for the Charge Controlled Service.

**5A.7
(ISDN30)**

The Dominant Provider must record, maintain and supply to Ofcom in an electronic format, no later than three months after the end of each Relevant Year, the data necessary for Ofcom to monitor compliance of the Dominant Provider with this Condition 5A. The data must include:

- a. pursuant to Condition 5A.3 and 5A.4, as applicable, the calculated Percentage Change relating to each category of services specified in Conditions 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable;
- b. all relevant data the Dominant Provider used in the calculation of the Percentage Change as set out in Conditions 5A.3 and 5A.4 above, including for each specific service, *i* in a Basket;
- c. all charges, excluding any discounts, published by the Dominant Provider from time to time during the Relevant Year and the Prior Year, including the dates and time periods during which they were in force;
- d. the Relevant Year Weighted Average Charges and the Prior Year Weighted Average Charges for all of the services for which Conditions 5A.3 and/or 5A.4 apply, as applicable, and calculations thereof;
- e. other data necessary for monitoring compliance with the charge control; and
- f. such data as Ofcom may from time to time direct.

All relevant revenues in respect of a specific service in a Basket shall be provided to at least the nearest £1,000.

5A.8 (ISDN30) Conditions 5A.1A to 5A.7 shall not apply to such extent as Ofcom may direct.

5A.9 (ISDN30) The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition 5A.

5A.10 (ISDN30) In this Condition 5A:

- a. **“Affected Communications Provider”** means each communications provider to whom the Dominant Provider has provided any of the services and/or products listed in Conditions 5A.2A(a) to (c) or Condition 5A.2B(a) to (c), as applicable, of this Condition 5A during the Relevant Year;
- b. **“Basket”** shall be construed in accordance with Condition 5A.3;
- c. **“Charge”** means the charge (being in all cases the amounts offered or charged by the Dominant Provider), excluding any discounts offered by the Dominant Provider, to a communications provider for the Charge Controlled Service;
- d. **“Charge Controlled Service”** means a service or Basket of services listed in Conditions 5A.1A and/or 5A.2A or Conditions 5A.1B and/or 5A.2B;
- e. **“Controlling Percentage”** is to be determined in accordance with Condition 5A.5;

- f. **“DDI”** means Direct Dial Inward;
- g. **“Excess Revenue”** means
- (1) where Condition 5A.2A applies, the difference between (i) the revenue which the Dominant Provider earned in the First Relevant Year from providing the services listed in Conditions 5A.2A(a) to (c), and (ii) the revenue the Dominant Provider would have earned in the First Relevant Year from providing the services listed in Conditions 5A.2A(a) to (c) if it had complied with Condition 5A.2A; or
- (2) where Condition 5A.2B applies, the difference between (i) the revenue which the Dominant Provider earned in the Relevant Year from providing the services listed in Conditions 5A.2B(a) to (c), and (ii) the revenue the Dominant Provider would have earned in the Relevant Year from providing the services listed in Conditions 5A.2B(a) to (c) if it had complied with Condition 5A.2B;
- h. **“Existing ISDN30 Connection Services per channel”** means ISDN30 Connection Services per channel provided in respect of an Existing ISDN30 Rental;
- i. **“Existing ISDN30 Direct Dial Inward Rental Service”** means an ISDN30 Direct Dial Inward Rental Service provided in respect to an Existing ISDN30 Rental;
- j. **“Existing ISDN30 SML 3 and 4”** means ISDN30 SML 3 and 4 provided in respect to an Existing ISDN30 Rental"
- k. **“Existing ISDN30 Rental Services”** means ISDN30 Rental Services provided in respect to an Existing ISDN30 Rental;
- l. **“ISDN30 Connection Services New Installation”** means the provision of the service ‘New Installation Charge (Charged once per end user on a single installation basis) (Charged where suitable spare ‘BT’ 2Mb digital line plant does not exist at the end user’s address)’ (which shall be construed as having the same meaning as provided by the Dominant Provider on its website for definitions and explanations of its products) where this is reasonably necessary for the use of ISDN30 Services;
- m. **“ISDN30 Connection Services per channel”** means the provision of the service ‘Installation per Channel (Minimum 8 channels) at the End User Premises (on a single installation basis)’ (which shall be construed as having the same meaning as provided by the Dominant Provider on its website for definitions and explanations of its products) where this is reasonably necessary for the use of ISDN30 Services;
- n. **“ISDN30 Direct Dial Inward Connection Service”** means the connection of a DDI number at a DDI installation;
- o. **“ISDN30 Direct Dial Inward Rental Service”** means the annual rental service per number at a DDI installation;

- p. **"ISDN30 Direct Dial Inward Services"** means the ISDN30 Direct Dial Inward Connection Service and the ISDN30 Direct Dial Inward Rental Service or the Existing ISDN30 Direct Dial Inward Rental Service, giving recipients of the services the capability to allow incoming calls to be routed directly rather than routing via a central switchboard number;
- q. **"ISDN30 SML 3 and 4"** means the products described as "Service Maintenance Level 3" and "Service Maintenance Level 4" in Openreach's price list correct at the date of this statement, or any such product that, from time to time, wholly or partially replaces those products;
- r. **"ISDN30 Rental Services"** means the rental of an ISDN30 access channel for control and billing purposes;
- s. **"ISDN30 Services"** means the following services provided by the Dominant Provider in the market for wholesale ISDN30 exchange line services:
 - i. ISDN30 Rental Services or Existing ISDN30 Rental Services, as applicable;
 - ii. ISDN30 Transfer Services
 - iii. ISDN30 SML 3 and 4 or Existing ISDN30 SML 3 and 4, as applicable;
 - iv. ISDN30 Connection Services New Installation;
 - v. ISDN30 Connection Services per channel or Existing ISDN30 Connection Services per channel, as applicable; and
 - vi. ISDN30 Direct Dial Inward Services;
- t. **"ISDN30 Transfer Services"** means the services for the transfer of control of an ISDN30 line levied per 30 channel access bearer and does not include charges for pre-validation of transfer order for wholesale ISDN30 installation types;
- u. **"Percentage Change"** has the meaning given to it in Condition 5A.3 and 5A.4, as applicable;
- v. **"Prior Year"** means, in relation to:
 - i. the First Relevant Year, the 1 April 2016 to 31 March 2017;
 - ii. the Second Relevant Year, the First Relevant Year; and
 - iii. the Third Relevant Year, the Second Relevant Year;
- w. **"Prior Year Weighted Average Charge"** is to be determined in accordance with the relevant formula in Condition 5A.3;
- x. **"Relevant Excess Revenue"** means the Excess Revenue earned from charging the Affected Communications Provider;
- y. **"Relevant Year Weighted Average Charge"** is to be determined in accordance with the relevant formula in Condition 5A.3;
- z. **"Total Revenue"** means the total revenue from communications providers (including, for the avoidance of doubt, from the Dominant

Provider to itself), in relation to the services and/or products subject to this Condition 5A, excluding any discounts offered by the Dominant Provider.

Condition 5B – Wholesale ISDN2 services charge control

5B.1 (ISDN2) In the First Relevant Year the Dominant Provider must not charge more than:

- (a) £26.49 for ISDN2 Rental Services;
- (b) £9.00 per line for any of the ISDN2 Transfer Services;
- (c) £120.00 for ISDN2 Connection Services.

For the avoidance of doubt, a reference to 'per line' in this Condition 5B means to two channels.

5B.2 (ISDN2) In the Second Relevant Year and the Third Relevant Year, the Dominant Provider must not charge more than:

- (a) £26.49 for Existing ISDN2 Rental Services;
- (b) £9.00 per line for any of the ISDN2 Transfer Services.

5B.3 (ISDN2) Where the Dominant Provider makes a material change (other than to a Charge) to any Charge Controlled Service for which a Charge is charged, Conditions 5B.1 to 5B.2 shall have effect subject to such reasonable adjustment to take account of the change as Ofcom may direct to be appropriate in the circumstances. For the purposes of this Condition 5B.3, a material change to the Charge Controlled Service includes (but is not limited to) the introduction of a new product and/or service wholly or substantially in substitution for an existing Charge Controlled Service or a change as to the billing practice for the Charge Controlled Service.

5B.4 (ISDN2) The Dominant Provider must record, maintain and supply to Ofcom in an electronic format, no later than three months after the end of each Relevant Year, the data necessary for Ofcom to monitor compliance of the Dominant Provider with this Condition 5B.

5B.5 (ISDN2) Conditions 5B.1 to 5B.4 shall not apply to such extent as Ofcom may direct.

5B.6 (ISDN2) The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition 5B.

5B.7 In this Condition 5B:

- a) “**Charge**” means the charge (being in all cases the amounts offered or charged by the Dominant Provider) excluding any discounts offered by the Dominant Provider, to a communications provider for the Charge Controlled Service;
- b) “**Charge Controlled Service**” means a service in Conditions 5B.1 and 5B.2;
- c) “**Existing ISDN2 Rental Services**” means ISDN2 Rental Services provided in respect of an Existing ISDN2 Rental;
- d) “**ISDN2 Connection Services**” means the charges for the connection of a new ISDN2 Exchange Line to a premises;

- e) “**ISDN2 Rental Services**” means the rental (per quarter) of an ISDN2 access channel for control and billing purposes;
- f) “**ISDN2 Transfer Services**” means any of the following ISDN2 transfer services:
 - a. transfer of BT ISDN2e Standard to Digital Standard (BT to gaining communications provider);
 - b. transfer of BT ISDN2e System to Digital System (BT to gaining communications provider) (For transfer pricing purposes, system installations are classed as one line);
 - c. transfer of Digital Standard to Digital Standard (communications provider 1 to gaining communications provider 2);
 - d. transfer of Digital System to Digital System (communications provider 1 to gaining communications provider 2) (For transfer pricing purposes, system installations are classed as one line).

Condition 5C – wholesale call termination charge control

5C.1 (WCT) During the Transitional Period, the Dominant Provider shall take all reasonable steps to ensure that the revenue-weighted average of Call Termination Charges (the “RWA Charge”) for all of the services listed in the Annex to this Condition 5C.1 (all such services together referred to as the “Basket”) does not exceed [0.029] pence per minute.

5C.2 (WCT) For the purposes of Condition 5C.1, the RWA Charge for the services in the Basket during the Transitional Period shall be calculated by employing the following formula:

$$C = \frac{\sum_{i=1}^n R_i \bar{p}_{i,t}}{\sum_{i=1}^n R_i}$$

Where:

C is the RWA Charge for the services in the Basket during the Transitional Period;

n is the number of services in the Basket;

i is a service numbered from 1 to **n** for each of the **n** services in the Basket;

R_i is the Total Revenue accrued over the period from 1 October 2016 to 30 November 2016 in respect of service, **i**;

$\bar{p}_{i,t}$ is the Transitional Period Weighted Average Charge made by the Dominant Provider for service, **i**;

Where such Transitional Period Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t} = \sum_{j=1}^m (w_{i,j,t} p_{i,j,t})$$

Where:

m is the number of time periods for which there are distinct Charges during the Transitional Period;

j is a number from 1 to **m** for each of the **m** time periods during which a Charge is in effect;

w_{i,j,t} is the proportion of the Transitional Period in which each Charge, **p_{i,j,t}**, is in effect, calculated by the number of days during which the Charge is in effect and dividing by 61.

p_{i,j,t} is the Charge for the specified time period, **j**, during the Transitional Period, **t**, for the specific service, **i**;

5C.3 (WCT) From [1 December 2017], the Dominant Provider must ensure that for each Call on any day, during any Relevant Period, the Call Termination Charge (which shall be expressed in pence per minute) does not exceed the Charge Ceiling.

5C.4 (WCT) For the purposes of Condition 5C.3, the Charge Ceiling is³ –

1. for any Call on a day in the First Relevant Period, [0.024] pence per minute;
2. for any Call on a day in the Second Relevant Period and Third Relevant Period-

a. an amount equal to –

- i. the charge ceiling, expressed in pence per minute (rounded to three decimal places), in the Relevant Period preceding the Relevant Period in which the Call was made; multiplied by,
- ii. the sum of CPI and the Controlling Percentage for the Relevant Period in which the Call was made

Where:

CPI means the amount of the change in the Consumer Prices Index in the period of twelve months ending on 31 August immediately before the beginning of the relevant period, expressed as a percentage (rounded to one decimal place); and

Controlling Percentage is:

- a. for the Second Relevant Period, [-8.5%]
- b. for the Third Relevant Period, [-9.3%]

and is

- b. expressed as being pence per minute and rounded to three decimal places.

5C.5 (WCT) Without prejudice to Ofcom’s statutory information gathering powers, the Dominant Provider must provide to Ofcom in writing any information reasonably required by Ofcom for the Dominant Provider to demonstrate compliance with this Condition at any time upon reasonable notice.

5C.6 (WCT) The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

5C.7 (WCT) In this Condition 5C,
a) “**pence per minute**” means the sum in pence charged for a minute of a Call;

³ These are the base case values expressed in nominal terms (using our estimate of inflation) for the range on which we are consulting.

- b) **“Relevant Period”** means any of the following:
- a. the period of ten months beginning on [1 December 2017] and ending on [30 September 2018] (the “First Relevant Period”);
 - b. the period of twelve months beginning on [1 October 2018] and ending on [30 September 2019] (the “Second Relevant Period”);
 - c. the period of twelve months beginning on [1 October 2019] and ending on [30 September 2020] (the “Third Relevant Period”);
- c) **“Transitional Period”** means the period beginning on [1 October 2017] and ending on [30 November 2017].

Annex to Condition 5C – Services subject to the charge control in Condition 5C.1

- i) External Wholesale call termination local exchange segment – Day
- ii) External Wholesale call termination local exchange segment – Evening
- iii) External Wholesale call termination local exchange segment – Weekend
- iv) External Wholesale call termination local exchange segment (ISDN) – Day
- v) External Wholesale call termination local exchange segment (ISDN) – Evening
- vi) External Wholesale call termination local exchange segment (ISDN) – Weekend
- vii) External Wholesale call termination local exchange stick – Day
- viii) External Wholesale call termination local exchange stick – Evening
- ix) External Wholesale call termination local exchange stick – Weekend
- x) External Wholesale call termination local exchange stick (ISDN) – Day
- xi) External Wholesale call termination local exchange stick (ISDN) – Evening
- xii) External Wholesale call termination local exchange stick (ISDN) – Weekend

Condition 5D – Interconnect circuits charge control

5D.1 (Interconnect) The Dominant Provider must take all reasonable steps to secure that, at the end of each Relevant Year, the Percentage Change, C_t , (as determined in accordance with Condition 5D.2) in the aggregate of Charges for all of the services listed in the Annex to this Condition 5D (all such services together referred to as the “Basket”) is not more than the Controlling Percentage, CP_t , (as determined in accordance with Condition 5D.3, or Condition 5D.6 if the circumstances in Condition 5D.4 or 5D.5 prevail).

5D.2 (Interconnect) The Percentage Change for the purpose of the Basket specified in Condition 5D.1 shall be calculated by employing the following formula:

$$C_t = \frac{\sum_{i=1}^n \left[R_i \frac{(\bar{p}_{i,t} - \bar{p}_{i,t-1})}{\bar{p}_{i,t-1}} \right]}{\sum_{i=1}^n R_i}$$

Where:

C_t is the Percentage Change in the aggregate of Charges for the services in the Basket during the Relevant Year, t ;

n is the number of services in the Basket;

i is a service numbered from 1 to n for each of the n services in the Basket;

R_i is the External Revenue accrued during the Prior Financial Year in respect of service, i ;

t , refers to the Relevant Year;

$t-1$, refers to the Prior Year;

$\bar{p}_{i,t}$ is the Relevant Year Weighted Average Charge made by the Dominant Provider for service, i ;

Where such Relevant Year Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t} = \sum_{j=1}^m (w_{i,j,t} p_{i,j,t})$$

Where:

m is the number of time periods for which there are distinct Charges during the Relevant Year;

j is a number from 1 to m for each of the m time periods during which a Charge is in effect;

$w_{i,j,t}$ is the proportion of the Relevant Year in which each Charge, $p_{i,j,t}$, is in effect, calculated by the number of days during which the Charge is in effect and dividing

- (1) for the First Relevant Year, by 365;
- (2) for the Second Relevant Year, by 365;
- and
- (3) for the Third Relevant Year, by 366.

$p_{i,j,t}$ is the Charge for the specified time period, j , during the Relevant Year, t , for the specific service, i ;

$\bar{p}_{i,t-1}$ is the Prior Year Weighted Average Charge made by the Dominant Provider for service, i :

Where such Prior Year Weighted Average Charge shall be calculated by employing the following formula:

$$\bar{p}_{i,t-1} = \sum_{j=1}^m (w_{i,j,t-1} p_{i,j,t-1})$$

Where:

m is the number of time periods for which there are distinct Charges during the Prior Year;

j is a number from 1 to m for each of the m time periods during which a Charge is in effect;

$w_{i,j,t-1}$ is the proportion of the Prior Year in which each Charge, $p_{i,j,t-1}$, is in effect, calculated by the number of days during which the Charge is in effect and dividing by 365; and

$p_{i,j,t-1}$ is the Charge for the specified time period, j , during the Prior Year, $t-1$, for the specific service, i ;

5D.3 (Interconnect) Subject to Conditions 5D.4, 5D.5 and 5D.6, the Controlling Percentage, CP_t , in relation to any Relevant Year is [zero ("0"); CPI+5%].

5D.4 (Interconnect) Where the Percentage Change in either the First Relevant Year or the Second Relevant Year is less than the Controlling Percentage (the "Deficiency"), then the Controlling Percentage for the following Relevant Year shall be determined in accordance with Condition 5D.6.

5D.5 (Interconnect) Where the Percentage Change in either the First Relevant Year or the Second Relevant Year is more than the Controlling Percentage (the "Excess"), then the Controlling Percentage for the following Relevant Year shall also be determined in accordance with Condition 5D.6.

5D.6 (Interconnect) In the case of Deficiency (defined in Condition 5D.4 above) or Excess (defined in Condition 5D.5 above), the Controlling Percentage will be calculated by employing the following formula:

$$CP_t = [(100\% + CPI + X)(100\% + CP_{t-1}) / (100\% + C_{t-1})] - 100\%$$

Where:

CP_t is the Controlling Percentage for the Second Relevant Year (in case of Deficiency or Excess in the First Relevant Year) or for the Third Relevant Year (in case of Deficiency or Excess in the Second Relevant Year);

C_{t-1} is the Percentage Change in the aggregate of Charges for the services in the Basket during the First Relevant Year (in case of Deficiency or Excess in the First Relevant Year) or for the Second Relevant Year (in case of Deficiency or Excess in the Second Relevant Year), calculated in accordance with the formula for C_t set out in Condition 5D.2.

X is [-CPI; 5%].

5D.7 (Interconnect) Where the Percentage Change in any Relevant Year is more than the Controlling Percentage, the Dominant Provider must, to the extent reasonably possible, and as soon as reasonably practicable, repay the Relevant Excess Revenue to every Affected Communications Provider.

5D.8 (Interconnect) The Dominant Provider must also and, in any event, take all reasonable steps to secure that, at the end of each Relevant Year, the Percentage Change in the Charge for each and every service listed in the Annex to this Schedule 2 is not more than $CPI+X+Y$, where Y is [5%; 10%].

For the purpose of this Condition 5D.8, the Percentage Change shall be calculated by employing the following formula:

$$C_i = \frac{(\bar{p}_{i,t} - \bar{p}_{i,t-1})}{\bar{p}_{i,t-1}}$$

Where

C_i is the Percentage Change for the Relevant Year for each service, i ; and

$\bar{p}_{i,t}$ and $\bar{p}_{i,t-1}$ are as defined in Condition 5D.2 above.

5D.9 (Interconnect) Where

- (1) the Dominant Provider makes a material change (other than to a Charge) to any service which is subject to this Condition 5D; or
- (2) the Dominant Provider makes a change to the date on which its financial year ends,

Conditions 5D.1 to 5D.8 shall have effect subject to such reasonable adjustment to take account of the change as Ofcom may direct to be appropriate in the circumstances.

For the purposes of this paragraph, a material change to any service which is subject to this Condition 5D includes the introduction of a new service wholly or substantially in substitution for that existing service.

5D.10 (Interconnect) The Dominant Provider must record, maintain and supply to Ofcom in an electronic format, no later than three months after the end of each Relevant Year, the data necessary for Ofcom to monitor compliance of the Dominant Provider with the price control. The data shall include:

- i. pursuant to Condition 5D.2, the calculated Percentage Change relating to the aggregate of Charges for all of the services in the Basket;
- ii. all relevant data the Dominant Provider used in the calculation of the Percentage Change including for each specific service;
- iii. all Charges published by the Dominant Provider from time to time during the Relevant Year and the Prior Year, including the dates and time periods during which they were in force;
- iv. the Relevant Year Weighted Average Charges and the Prior Year Weighted Average Charges for all of the services in the Basket and calculations thereof;
- v. other data necessary for monitoring compliance with the charge control; and
- vi. such data as Ofcom may from time to time direct.

All relevant revenues in respect of a specific service in the Basket are to be provided to at least the nearest £1,000.

5D.11 (Interconnect) The Dominant Provider must take such steps as Ofcom may from time to time direct to comply with its obligations under this Condition 5D.

5D.12 (Interconnect) Condition 5D.1 to 5D.10 shall not apply to such extent as Ofcom may direct.

5D.13 (Interconnect) In this Condition 5D:

- a) **“Affected Communications Provider”** means each communications provider to whom the Dominant Provider has provided any of the services listed in the Annex to this Condition 5D during the Relevant Year;
- b) **“Basket”** has the meaning as described in Condition 5D.1;
- c) **“Charge”** means, the published charge rounded to the nearest penny (being the amount offered or charged by the Dominant Provider, excluding any discounts), to a communications provider for a unit of any of the services subject to this Condition 5D;

- d) “**Controlling Percentage**” is to be determined in accordance with Condition 5D.3 or Condition 5D.6 if the circumstances in Condition 5D.4 or Condition 5D.5 prevail;
- e) “**CPI**” means the amount of the change in the Consumer Prices Index in the period of twelve months ending on 30 June immediately before the beginning of the Relevant Year, expressed as a percentage (rounded to one decimal place) of that Consumer Prices Index as at the beginning of that first mentioned period;
- f) “**Excess Revenue**” means the difference between the revenue which the Dominant Provider earned in the Relevant Year from providing the services listed in the Annex to this Schedule and the revenue the Dominant Provider would have earned in the Relevant Year from providing the services listed in the Annex to this Condition 5D if it had complied with Condition 5D.1;
- g) “**External Revenue**” means revenue from communications providers, other than the Dominant Provider, in relation to the services subject to this Condition 5D, accounting only for the interconnect circuits connected at BT terminating or originating switches, this is, in general, the DLEs;
- h) “**Percentage Change**” is to be determined in accordance with Condition 5D.2;
- i) “**Prior Financial Year**” means the period of 12 months ending on 31 March immediately preceding the Relevant Year in question;
- j) “**Prior Year**” means each of the following three years:
 - a. In relation to the First Relevant Year, the period beginning 1 October 2015 and ending 30 September March 2016 (the “**First Prior Year**”);
 - b. In relation to the Second Relevant Year, the period beginning [1 October 2017] and ending [30 September 2018] (the “**Second Prior Year**”); and
 - c. In relation to the Third Relevant Year, the period beginning [1 October 2018] and ending [30 September 2019] (the “**Third Prior Year**”);
- k) “**Prior Year Weighted Average Charge**” is to be determined in accordance with the relevant formula in Condition 5D.2;
- l) “**Relevant Excess Revenue**” means the Excess Revenue earned from charging the Affected Communications Provider;
- m) “**Relevant Year Weighted Average Charge**” is to be determined in accordance with the relevant formula in Condition 5D.2.

Condition 6 – Publication of a Reference Offer

- 6.1** Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish a Reference Offer in relation to the provision of network access pursuant to Conditions 1A, 1B, 1C and 2 (as applicable) and comply with the requirements set out below.
- 6.2** Subject to Condition 6.8 below, the Dominant Provider must ensure that a Reference Offer in relation to the provision of network access pursuant to Conditions 1A, 1B, 1C and 2 (as applicable) includes, where applicable, at least the following:
- (a) a description of the network access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of network access);
 - (b) the locations at which network access will be provided;
 - (c) any relevant technical standards for network access (including any usage restrictions and other security issues);
 - (d) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);
 - (e) any ordering and provisioning procedures;
 - (f) relevant charges, terms of payment and billing procedures;
 - (g) details of interoperability tests;
 - (h) details of traffic and network management;
 - (i) details of maintenance and quality as follows:
 - (i) specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, for provision of support services (such as fault handling and repair);
 - (ii) service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
 - (iii) the amount of compensation payable by one party to another for failure to perform contractual commitments;
 - (iv) a definition and limitation of liability and indemnity; and

- (v) procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;
- (j) details of measures to ensure compliance with requirements for network integrity;
- (k) details of any relevant intellectual property rights;
- (l) a dispute resolution procedure to be used between the parties;
- (m) details of duration and renegotiation of agreements;
- (n) provisions regarding confidentiality of the agreements;
- (o) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts);
- (p) the standard terms and conditions for the provision of network access;

**6.2A
(WFAEL)**

Subject to Condition 6.8, the Dominant Provider must ensure that a Reference Offer made in relation to the provision of Wholesale Analogue Line Rental pursuant to Conditions 1A and 2 (as applicable) includes–

- (a) Service Level Commitments in respect of at least the following aspects of that service:
 - (i) availability of an appointment for the provision of the service;
 - (ii) attending appointments for the provision of the service;
 - (iii) completion of the provision of the service;
 - (iv) completion of the transfer of the service;
 - (v) disconnections made in error;
 - (vi) fault repair times; and
 - (vii) attending fault repair appointments; and
- (b) Service Level Guarantees in respect of the Service Level Commitments specified in Condition 6.2A(a)(i) to (a)(vii) above.

**6.2B1
(ISDN30)**

Subject to Condition 6.8, the Dominant Provider must ensure that a Reference Offer made in relation to the provision of Wholesale ISDN30 Line Rental pursuant to Conditions 1B and 2 (as applicable) includes–

- (a) Service Level Commitments in respect of at least the following aspects of that service:
 - (i) attending appointments for the provision of the service;
 - (ii) completion of the provision of the service;
 - (iii) completion of the transfer of the service;
 - (iv) disconnections made in error;
 - (v) fault repair times; and
 - (vi) attending fault repair appointments; and
- (b) Service Level Guarantees in respect of the Service Level Commitments specified in Condition 6.2B1(a)(i) to (a)(vi) above.

**6.2B2
(ISDN30)**

Subject to Condition 6.8, the Dominant Provider must ensure that a Reference Offer made in relation to the provision of Wholesale ISDN30 Line Rental pursuant to Conditions 1C and 2 (as applicable) includes—

- (i) completion of the Transfer of the service;
- (ii) disconnections made in error;
- (iii) fault repair times; and
- (iv) attending fault repair appointments; and
- (b) Service Level Guarantees in respect of the Service Level Commitments specified in Condition 6.2B2(a)(i) to (a)(iv) above.

**6.2C1
(ISDN2)**

Subject to Condition 6.8, the Dominant Provider must ensure that a Reference Offer made in relation to the provision of Wholesale ISDN2 Line Rental pursuant to Conditions 1B and 2 (as applicable) includes—

- (a) Service Level Commitments in respect of at least the following aspects of that service:
 - (i) availability of an appointment for the provision of the service;
 - (ii) attending appointments for the provision of the service;
 - (iii) completion of the provision of the service;
 - (iv) completion of the transfer of the service;

- (v) disconnections made in error;
 - (vi) fault repair times; and
 - (vii) attending fault repair appointments; and
- (b) Service Level Guarantees in respect of the Service Level Commitments specified in Condition 6.2C1(a)(i) to (a)(vii) above.

**6.2C2
(ISDN2)**

Subject to Condition 6.8, the Dominant Provider must ensure that a Reference Offer made in relation to the provision of Wholesale ISDN2 Line Rental pursuant to Conditions 1C and 2 (as applicable) includes–

- (i) completion of the Transfer of the service;
 - (ii) disconnections made in error;
 - (iii) fault repair times; and
 - (iv) attending fault repair appointments; and
- (b) Service Level Guarantees in respect of the Service Level Commitments specified in Condition 6.2C2(a)(i) to (a)(iv) above.

**6.3
(WFAEL, ISDN30,
ISDN2, WCT,
Interconnect)**

To the extent that the Dominant Provider provides to itself network access that:

- (a) is the same, similar or equivalent to that provided to any other Third Party; or
- (b) may be used for a purpose that is the same, similar or equivalent to that provided to any other Third Party,

in a manner that differs from that detailed in a Reference Offer in relation to network access provided to any other Third Party, the Dominant Provider must ensure that it publishes a Reference Offer in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Condition 6.2.

6.4

The Dominant Provider must, on the date that this Condition enters into force, publish a Reference Offer in relation to any network access that it is providing as at the date that this Condition enters into force.

6.5

The Dominant Provider must as soon as reasonably practicable update and publish the Reference Offer in relation to any amendments or in relation to any further network access provided after the date that this Condition enters into force.

- 6.6 Publication referred to above shall be effected by placing a copy of the Reference Offer on any relevant publicly accessible website operated or controlled by the Dominant Provider.
- 6.7 The Dominant Provider must send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts as have been requested).
- 6.8 The Dominant Provider must make such modifications to the Reference Offer as Ofcom may direct from time to time.
- 6.9 (WFAEL, ISDN30, ISDN2, WCT & Interconnect) The Dominant Provider must provide network access at the charges, terms and conditions in the relevant Reference Offer and must not depart therefrom either directly or indirectly.
- 6.10 The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.
- 6.11 In this Condition 6,
- (a) "**Service Level Commitment**" means the quality standards that the Dominant Provider must meet when performing its obligations;
 - (b) "**Service Level Guarantees**" means a commitment specifying the amount payable by the Dominant Provider to a Third Party for a failure to adhere to a Service Level Commitment.

Condition 7 – Notification of charges

- 7.1**
(WFAEL, ISDN30, ISDN2, WCO & Interconnect) Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish charges and act in the manner set out in this Condition.
- 7.2A**
(WFAEL, ISDN30, ISDN2 & Interconnect) Where it proposes an Access Charge Change, the Dominant Provider must send to every person with which it has entered into an Access Agreement pursuant to Conditions 1A, 1B, 1C and 2 (as applicable), an Access Charge Change Notice.
- 7.2B**
(WCO) Where it proposes a Standard Access Charge Change, the Dominant Provider must send to every person with which it has entered into an Access Agreement pursuant to Condition 1A and 2 (as applicable), a Standard Access Charge Change Notice.
- 7.3A**
(WFAEL, ISDN30, ISDN2 & Interconnect) The obligation in Condition 7.2A will not apply where the Access Charge Change is directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or required by a notification or enforcement notification issued by Ofcom under sections 96A or 96C of the Act.
- 7.3B**
(WCO) The obligation in Condition 7.2B will not apply where the Standard Access Charge Change is directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or required by a notification or enforcement notification issued by Ofcom under sections 96A or 96C of the Act.
- 7.4A**
(WFAEL) An Access Charge Change Notice must-
- (a) in the case of an Access Charge Change relating to the Wholesale Line Rental Charge and subject to conditions (b) and (c) below, be sent not less than 90 days before any such amendment comes into effect;
 - (b) in the case of an Access Charge Change relating solely to a reduction in the price of the Wholesale Line Rental Charge, (including, for the avoidance of doubt, a Special Offer), be sent not less than 28 days before any such amendment comes into effect;
 - (c) in the case of an Access Charge Change relating to the end of a temporary price reduction to the Wholesale Line Rental Charge in accordance with the terms of a Special Offer, be sent not less than 28 days before any such amendment comes into effect; and
 - (d) in the case of any other Access Charge Change, not less than 28 days before any such amendment comes into effect.
- 7.4B**
(ISDN30 & ISDN2) An Access Charge Change Notice must in the case of an Access Charge Change involving network access pursuant to Condition 1B or 1C (as applicable), be sent not less than 28 days before any such amendment comes into effect.

7.4C (Interconnect) An Access Charge Change Notice must in the case of an Access Charge Change involving network access pursuant to Condition 1A must be sent not less than 56 days before any such amendment comes into effect.

7.4D (WCO) A Standard Access Charge Change Notice must in the case of a Standard Access Charge Change involving network access pursuant to Condition 1A must be sent not less than 56 days before any such amendment comes into effect.

7.5A (WFAEL, ISDN30, ISDN2& Interconnect) The Dominant Provider must ensure that an Access Charge Change Notice includes:

- (a) a description of the network access in question;
- (b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that network access;
- (c) the date on which, or the period for which, the Access Charge Change will take effect (the "effective date"); and
- (d) the current and proposed new charge.

7.5B (WCO) The Dominant Provider must ensure that a Standard Access Charge Change Notice includes:

- (a) a description of the network access in question;
- (b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that network access;
- (c) the date on which, or the period for which, the Standard Access Charge Change will take effect (the "effective date"); and
- (d) the current and proposed new charge

7.6A (WFAEL, ISDN30, ISDN2& Interconnect) The Dominant Provider must not apply any Access Charge Change identified in an Access Charge Change Notice before the effective date.

7.6B (WCO) The Dominant Provider must not apply any Standard Access Charge Change identified in a Standard Access Charge Change Notice before the effective date.

7.7 (WFAEL, ISDN30, ISDN2 & Interconnect) To the extent that the Dominant Provider provides to itself network access that:

- (a) is the same, similar or equivalent to that provided to any other person; or
- (b) may be used for a purpose that is the same, similar or equivalent to that provided to any other person,

in a manner that differs from that detailed in an Access Charge Change Notice in relation to network access provided to any other person the Dominant Provider must ensure that it sends to Ofcom a notice in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Conditions 7.5A(a) to (d) and, where the Dominant Provider amends the charges on which it provides itself with network access, it must ensure it sends to Ofcom a notice equivalent to an Access Charge Change Notice.

7.8

In this Condition 7:

- (a) “**Access Charge Change Notice**” means a notice given by the Dominant Provider of an Access Charge Change;
- (b) “**Access Charge Change**” means any amendment to the Dominant Provider’s charges for the provision of network access or for new network access;
- (c) “**Special Offer**” means a temporary price reduction for a particular product or service, applicable to all customers on a non-discriminatory basis, which is stated to apply for a limited and predefined period and where the price immediately on expiry of that period is no higher than the price immediately before the start of that period.
- (d) “**Standard Access Charge Change Notice**” means a notice given by the Dominant Provider of a Standard Access Charge Change;
- (e) “**Standard Access Charge Change**” means any amendment to the Dominant Provider’s standard charges for the provision of network access or for new network access.

Condition 8 – Price transparency

- 8.1 (WCT)** Unless Ofcom otherwise consents in writing, the Dominant Provider must publish its Call Termination Charges, and do so separately from any of its other interconnection charges (including other termination charges).
- 8.2 (WCT)** The Dominant Provider must publish the call termination charges which will apply from [1 October 2017], before that date.
- 8.3 (WCT)** The Dominant Provider must publish any proposed amendment to the call termination charges (a “change notice”) on or before the day any such amendment comes into effect.
- 8.4 (WCT)** Publication shall be effected by –
- (a) sending a copy of such information or any appropriate parts of it to any person who may reasonably request such a copy; and
 - (b) placing a readily accessible copy of such information on a relevant and publicly accessible website operated or controlled by the dominant provider, or on behalf of the Dominant Provider.
- 8.5 (WCT)** The Dominant Provider must ensure that a change notice includes –
- (a) a description of the proposed new charge for the network access in question;
 - (b) where applicable, the current charge for the network access in question; and
 - (c) the date that the amendment(s) come into effect.

Condition 9 – Quality of service

- 9.1A (WFAEL)** The Dominant Provider must comply with all such quality of service requirements as Ofcom may from time to time direct in relation to network access provided by the Dominant Provider pursuant to Conditions 1A and 2 (as applicable).
- 9.1B (ISDN30 & ISDN2)** The Dominant Provider must publish all such information as to the quality of service in relation to network access provided by the Dominant Provider pursuant to Conditions 1B, 1C and 2 (as applicable), in such manner and form, and including such content, as Ofcom may from time to time direct.
- 9.1C (Interconnect)** The Dominant Provider must publish all such information as to the quality of service in relation to network access provided by the Dominant Provider pursuant to Conditions 1A and 2 (as applicable), in such manner and form, and including such content, as Ofcom may from time to time direct.
- 9.2A (WFAEL)** The direction dated 22 November 2016 requiring BT to comply with minimum standards in relation to the provision of network access to wholesale analogue line rental contained at Annex 1 of the November 2016 Quality of Service Statement shall have force until such time as it is modified or withdrawn, as if it has been given under this Condition 9 from the date that this Condition enters into force and that direction must be read accordingly.
- 9.2B (WFAEL)** The direction dated 26 June 2014 requiring the publication of KPIs by BT for specified wholesale line rental services as published on the same day at Annex 29 to the 2014 FAMR Statement and as modified 19 October 2016 by Schedule 2 of the notification contained in Annex 2 of the October 2016 Quality of Service Statement shall have force until such time as it is modified or withdrawn, as if it has been given under this Condition 9 from the date that this Condition enters into force and that direction must be read accordingly.
- 9.3 (Interconnect)** The direction dated 26 September 2013 requiring the Dominant Provider to provide interconnect circuit KPIs as published on the same day in Annex 4 to the 2013 NMR Statement shall have force until such time as it is modified or withdrawn, as if it has been given under this Condition 9 from the date that this Condition enters into force and that direction must be read accordingly.
- 9.4** In this Condition 9:
- (a) **“October 2016 Quality of Service Statement”** means the statement entitled Quality of Service for WLR and MPF: Directions and Consents relating to the minimum standards and KPIs imposed in the 2014 Fixed Access Market Reviews published on 19 October 2016;
 - (b) **“November 2016 Quality of Service Statement”** means the statement entitled Quality of Service for WLR and MPF: Directions and Consents relating to the minimum standards and KPIs imposed in the 2014 Fixed Access Market Reviews published on 22 November 2016.

Condition 10 – Regulatory Financial Reporting

- 10.1** The Dominant Provider must maintain a separation for accounting purposes between such different matters relating to network access to the relevant network or the availability of the relevant facilities, as required by Conditions 10.3 to 10.35 including as Ofcom may from time to time direct under those Conditions 10.3 to 10.35 (as applicable).
- 10.2** The Dominant Provider must comply with such rules made by Ofcom about the use of cost accounting systems as required by Conditions 10.3 to 10.35 (as applicable) and must comply with such requirements about the description to be made available to the public of the cost accounting system as required by Conditions 10.3 to 10.35 (as applicable) in each case including as Ofcom may from time to time direct under Conditions 10.3 to 10.35 (as applicable).
- 10.3** Except in so far as Ofcom may consent otherwise in writing, the Dominant Provider shall act in the manner set out in this Condition 10.
- 10.4** Ofcom may from time to time make such directions as they consider appropriate in relation to the Dominant Provider's obligations under this Condition 10.
- 10.5** The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition 10.
- 10.6** Where the Dominant Provider is required to comply with:
- (i) this Condition 10; and
 - (ii) the Regulatory Accounting Principles,
- and it appears to the Dominant Provider that any of these requirements conflict with each other in a particular case, the Dominant Provider must resolve such conflict by giving priority to them in the order in which they are set out above.
- 10.7** For the purpose of this Condition 10, publication shall be effected by:
- (i) placing a copy of the relevant information on any relevant publicly accessible website operated or controlled by the Dominant Provider; and
 - (ii) sending a copy of the relevant information to any person at that person's written request.

Requirements relating to the preparation, audit, delivery and publication of the Regulatory Financial Statements

- 10.8** The Dominant Provider shall in respect of the Market, Technical Areas, Products, Network Components and Network Services (as applicable), for each Financial Year:
- (i) prepare such Regulatory Financial Statements as directed by Ofcom from time to time in accordance with this Condition 10, the

Regulatory Accounting Principles and the Accounting Methodology Documents (the relevant Accounting Methodology Documents to be identified in the Regulatory Financial Statements by reference to their date);

- (ii) prepare a reconciliation report as set out in Condition 10.23;
- (iii) secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time and on the reconciliation report as set out in Condition 10.24;
- (iv) secure the approval of the Regulatory Financial Statements by the board of directors of the Dominant Provider and secure the signature of the Regulatory Financial Statements by a director of the Dominant Provider for and on behalf of the board of directors;
- (v) deliver to Ofcom copies of the Regulatory Financial Statements, the reconciliation report and any corresponding audit opinion, each and all of which shall be in the form in which they are ultimately to be published, at least two weeks before they are required to be published;
- (vi) publish the Regulatory Financial Statements, the reconciliation report and any corresponding audit opinion, within four months after the end of the Financial Year to which they relate;
- (vii) ensure that any Regulatory Financial Statement and corresponding audit opinion that it delivers to Ofcom and/or publishes are fit for such purpose (or purposes), if any, as notified by Ofcom in writing; and
- (viii) publish with the Regulatory Financial Statements any written statement made by Ofcom and provided to the Dominant Provider commenting on the figures in, the notes to or the presentation of any or all of the Regulatory Financial Statements, the reconciliation report and/or the Accounting Methodology Documents.

10.9 The Dominant Provider shall make such amendments to the form and content of the Regulatory Financial Statements as are necessary to give effect fully to the requirements of this Condition 10. The Dominant Provider shall provide to Ofcom particulars of any such amendment, the reasons for it and its effect, when it delivers the Regulatory Financial Statements to Ofcom.

10.10 The Dominant Provider shall prepare all Regulatory Financial Statements, explanations or other information required by virtue of this Condition 10 on a regulatory asset value adjusted current cost basis as directed by Ofcom from time to time and shall be capable of doing so in relation to any period. Such Regulatory Financial Statements, explanations or other information shall be, in the opinion of Ofcom, meaningfully reconcilable to the Statutory Financial Statements.

10.11 Each Regulatory Financial Statement shall include Prior Year Comparatives which shall be prepared on a basis consistent with Current Year Figures. The Dominant Provider may depart from this

requirement in preparing the Regulatory Financial Statements for a Financial Year if there are reasons for doing so provided that the particulars of the departure, the reasons for it and its effect are stated in a note in the Regulatory Financial Statements in accordance with the Statutory Accounting Standards.

Requirements relating to audit of the Regulatory Financial Statements

- 10.12** The Regulatory Auditor that the Dominant Provider from time to time appoints shall at all times be satisfactory to Ofcom having regard to such matters as Ofcom consider appropriate. The Dominant Provider shall notify Ofcom in writing of the Regulatory Auditor appointed to secure compliance with this Condition 10 before the Regulatory Auditor carries out any work for that purpose. The Dominant Provider shall notify Ofcom of any proposed change of Regulatory Auditor 28 days before effect is given to that change.
- 10.13** In the event that the Regulatory Auditor is in the opinion of Ofcom unsatisfactory, the Dominant Provider shall appoint and instruct an Alternative Regulatory Auditor that is at all times satisfactory to Ofcom having regard to such matters as Ofcom consider appropriate. The Dominant Provider shall ensure that the Alternative Regulatory Auditor:
- (i) carries out such on-going duties as are required to secure compliance with this Condition 10;
 - (ii) carries out work or further work, in addition to that performed by the Statutory Auditor and/or by the former Regulatory Auditor, in relation to such matters connected to compliance with this Condition 10 as are of concern to Ofcom and notified to the Dominant Provider in writing; and/or
 - (iii) re-performs work previously performed by the Statutory Auditor and/or by the former Regulatory Auditor in relation to such matters connected to compliance with this Condition as are of concern to Ofcom and notified to the Dominant Provider in writing.
- 10.14** The Dominant Provider shall extend to the Alternative Regulatory Auditor such assistance and co-operation as would be extended to the Statutory Auditor and/or to the Regulatory Auditor and, to the extent similar assistance and co-operation may be required from the Statutory Auditor and/or from the former Regulatory Auditor, the Dominant Provider shall use its best endeavours to secure such assistance and co-operation.
- 10.15** The Dominant Provider's letter of engagement appointing the Regulatory Auditor or Alternative Regulatory Auditor shall include such provisions acknowledging the acceptance by the Regulatory Auditor or Alternative Regulatory Auditor of duties and responsibilities to Ofcom in respect of its audit work, audit report and audit opinion as are consistent with the ICAEW Guidance.
- 10.16** The Dominant Provider shall use its best endeavours to obtain from the Regulatory Auditor or Alternative Regulatory Auditor any further explanation and clarification of any audit opinion required under this

Condition 10 and any other information in respect of the matters which are the subject of that audit opinion as Ofcom shall require.

- 10.17** The Dominant Provider shall obtain such assurance statement in the form of the Agreed Upon Procedures in relation to the Dominant Provider's obligations under this Condition 10 as directed by Ofcom.

Requirements relating to the Accounting Methodology Documents

- 10.18** The Dominant Provider must prepare, maintain and keep up-to-date the Accounting Methodology Documents in accordance with this Condition 10 and with the Regulatory Accounting Principles.
- 10.19** The Dominant Provider must include in the Accounting Methodology Documents documentation setting out a description of each of the Attribution Methods, the Transfer Charge System Methodology, the Accounting Policies and the Long Run Incremental Cost Methodology.
- 10.20** The Dominant Provider must deliver an up-to-date version of the Accounting Methodology Documents to Ofcom when it delivers the Regulatory Financial Statements to Ofcom in accordance with Condition 10.8 and publish such up-to-date version on or before the day of publication of the Regulatory Financial Statements which have been prepared in accordance with such version.

Requirements relating to changes to the Regulatory Accounting Methodology and the correction of Material Errors

- 10.21** The Dominant Provider must publish and deliver to Ofcom a list of each and every change to the Regulatory Accounting Methodology, by 31 March of the Financial Year in which the change to the Regulatory Accounting Methodology is to be made (the "**Change Control Notification**"). The Change Control Notification must be accompanied by a description of each of the changes, the reason for making each of the changes (including by reference to their compliance with the Regulatory Accounting Principles), and the impact of each of the changes on the figures at the level of the Markets and Technical Areas (as applicable) by setting out the figures which were presented in the previous Financial Year alongside the figures that would have been presented had such changes been made in the previous Financial Year.
- 10.22** Where in Ofcom's opinion any change referred to in Condition 10.21 does not comply with this Condition 10 or the Regulatory Accounting Principles, the Dominant Provider shall not make such change, if so directed by Ofcom.
- 10.23** The Dominant Provider must prepare a reconciliation report as referred to in Condition 10.8 and as directed by Ofcom from time to time, which sets out changes to the Regulatory Accounting Methodology and the impact of such changes on the Regulatory Financial Statements, and Material Errors corrected in the Regulatory Financial Statements and the impact of such Material Errors on the Regulatory Financial Statements.

10.24 The Dominant Provider must obtain an audit opinion on the reconciliation report as directed by Ofcom from time to time.

Requirements relating to the Regulatory Accounting System

10.25 The Dominant Provider's Regulatory Accounting System must be able to produce the Regulatory Financial Statements as directed by Ofcom under Condition 10.8 in accordance with this Condition 10, the Regulatory Accounting Principles and the Accounting Methodology Documents.

10.26 Where the Dominant Provider replaces the whole or part of its Regulatory Accounting System, or substantially modifies such Regulatory Accounting System, the Dominant Provider must:

- (i) notify Ofcom in a timely manner of the replacement or modification, and, where so requested by Ofcom, inform Ofcom of progress towards completion and such other information as Ofcom may reasonably request;
- (ii) ensure, to the best of its ability, that the replacement or modification does not cause the figures contained in the Regulatory Financial Statements to be different from the figures that would have been contained in the Regulatory Financial Statements had such Regulatory Financial Statements been prepared using the old or unmodified Regulatory Accounting System;
- (iii) in relation to the final Financial Year for which the Regulatory Financial Statements are prepared using the old or unmodified Regulatory Accounting System, prepare a systems reconciliation report, which must:
 - a. set out the difference between the Current Year Figures presented in the Regulatory Financial Statements and the Current Year Figures had such Regulatory Financial Statements been prepared on the basis of the new or modified Regulatory Accounting System, expressed as a percentage change; and
 - b. explain each and every Material Difference between the Current Year Figures presented in the Regulatory Financial Statements and the Current Year Figures had such Regulatory Financial Statements been prepared on the basis of the new or modified Regulatory Accounting System;
- (iv) publish and deliver the systems reconciliation report to Ofcom by 31 December of the Financial Year for which the figures will be prepared using the new or modified Regulatory Accounting System for the first time;
- (v) obtain an assurance statement in the form of Agreed Upon Procedures on the systems reconciliation report, which must report:

- a. whether the figures in the systems reconciliation report referred to in Condition 10.26(iii)(a) have been properly extracted from the old or unmodified Regulatory Accounting System and the new or modified Regulatory Accounting System respectively;
 - b. whether each and every difference in the systems reconciliation report referred to in Condition 10.26(iii)(a) has been correctly calculated; and
 - c. whether the explanation of each and every Material Difference in the systems reconciliation report referred to in Condition 10.26(iii)(b) is an accurate representation of the cause of each such Material Difference.
- (vi) deliver the assurance statement in the form of the Agreed Upon Procedures to Ofcom when it delivers the systems reconciliation report to Ofcom in accordance with Condition 10.26(iv).
- (vii) where the systems reconciliation report referred to in Condition 10.26(iii) indicates that the replacement or modification causes the Current Year Figures contained in the Regulatory Financial Statements to be significantly different, either individually or in aggregate, from the Current Year Figures that would have been contained in the Regulatory Financial Statements had such Regulatory Financial Statements been prepared using the new or modified Regulatory Accounting System, prepare, if so directed by Ofcom, the Regulatory Financial Statements on a basis consistent with the old or unmodified Regulatory Accounting System.

Requirements relating to deficiencies in the Regulatory Financial Statements and the Accounting Methodology Documents

- 10.27** Where Ofcom have reasonable grounds to believe that any or all of the Regulatory Financial Statements and/or Accounting Methodology Documents are deficient, the Dominant Provider shall, where directed by Ofcom:
- (i) amend the Accounting Methodology Documents in order to remedy the deficiencies identified by Ofcom;
 - (ii) restate the Regulatory Financial Statements identified by Ofcom as requiring restatement in accordance with the Accounting Methodology Documents which have, where necessary, been amended pursuant to Condition 10.27(i);
 - (iii) prepare a reconciliation report as set out in Condition 10.23, whereby any reference to the Regulatory Financial Statements should be understood as a reference to the restated Regulatory Financial Statements;
 - (iv) secure in accordance with any relevant notification of Ofcom under this Condition the expression of an audit opinion on the restated Regulatory Financial Statements;
 - (v) deliver to Ofcom the restated Regulatory Financial Statements, the reconciliation report and corresponding audit opinion; and

- (vi) publish the restated Regulatory Financial Statements, the reconciliation report and corresponding audit opinion.

Requirements relating to the maintenance of sufficient accounting records

- 10.28** The Dominant Provider shall maintain accounting records for a period of six years from the date on which each Regulatory Financial Statement is delivered to Ofcom.
- 10.29** The Dominant Provider shall maintain the accounting records in accordance with this Condition 10, the Regulatory Accounting Principles and the Accounting Methodology Documents.
- 10.30** The Dominant Provider shall maintain accounting records in a form which, on a historical cost basis and on a current cost basis:
- (i) separately identifies each of the Markets, Technical Areas, Products, Network Components and Network Services;
 - (ii) separately attributes the costs, revenues, assets and liabilities of each of the Markets, Technical Areas, Products, Network Components and Network Services; and
 - (iii) shows and explains the transactions underlying each of the Markets, Technical Areas, Products, Network Components and Network Services.
- 10.31A (WFAEL, ISDN30, ISDN2, WCT, Interconnect)** The Dominant Provide shall maintain the accounting records so that they are sufficient:
- (i) to provide an adequate explanation of each Regulatory Financial Statement;
 - (ii) to show that charges are non-discriminatory; and
 - (iii) to provide a complete justification of the Dominant Provider's charges for Network Access.
- 10.31B (WCO)** The Dominant Provide shall maintain the accounting records so that they are sufficient:
- (i) to provide an adequate explanation of each Regulatory Financial Statement; and
 - (ii) to provide a complete justification of the Dominant Provider's charges for Network Access.

Requirement to facilitate on-demand reporting

- 10.32** The Dominant Provider shall ensure that its Regulatory Accounting System and accounting records are sufficient to enable the Dominant Provider, at all times, to be capable of preparing in relation to any specified calendar month or months a financial statement in accordance with the Accounting Methodology Documents.

Requirements relating to the preparation and maintenance of a Wholesale Catalogue

- 10.33** The Dominant Provider must prepare, maintain and keep up-to-date a Wholesale Catalogue. Such Wholesale Catalogue should separately identify and describe:
- (i) External Wholesale Services;
 - (ii) Internal Wholesale Services;
 - (iii) Wholesale Services supplied both externally and internally; and
 - (iv) Network Services and the extent to which these activities are used in the course of supplying Wholesale Services.
- 10.34** The Dominant Provider must deliver an up-to-date version of the Wholesale Catalogue to Ofcom when it delivers the Regulatory Financial Statements to Ofcom in accordance with Condition 10.8 and publish such up-to-date version on or before the day of publication of the Regulatory Financial Statements which have been prepared by reference to such version.

Requirements relating to the demonstration of non-discrimination

- 10.35 (WFAEL, ISDN30, ISDN2, WCT, Interconnect)** The Dominant Provider shall ensure it is able to demonstrate that at any point in time:
- (i) where a Network Service or combination of Network Services is used by the Dominant Provider in providing Internal Wholesale Services, the amount applied and incorporated in the Transfer Charge for the Internal Wholesale Service in respect of the use of the Network Service or combination of Network Services is equivalent to the amount applied and incorporated for the use of the Network Services or combination of Network Services in the charge payable for an equivalent External Wholesale Service;
 - (ii) the same amount as applied and incorporated in the Transfer Charge for the Internal Wholesale Service in Condition 10.35(i) in respect of the use of the Network Service or combination of Network Services is applied to the Network Service or combination of Network Services whenever it is or they are used by the Dominant Provider in providing that same Internal Wholesale Service; and
 - (iii) the same amount as applied and incorporated in the Transfer Charge for the equivalent External Wholesale Service in Condition 10.35(i) in respect of the use of the Network Service or combination of Network Services is applied to the Network Service or combination of Network Services whenever it is or they are used by the Dominant Provider in providing that same External Wholesale Service;
 - (iv) the amount applied and incorporated in the Transfer Charge for the Internal Wholesale Service in Condition 10.32(i) in respect of the use of the Network Service or combination of Network

Services shall be the cost of those Network Services unless the Network Service concerned is provided from a Market which is different from the Market which comprises the Internal Wholesale Service.

10. 36

In this Condition 10:

- a) “**Accounting Methodology Documents**” means the documentation maintained by the Dominant Provider setting out in detail the rules, policies, methods, allocations, calculations, assumptions, procedures and Processes used by the Dominant Provider for the purpose of preparing Regulatory Financial Statements in accordance with the Regulatory Accounting Principles;
- b) “**Accounting Policies**” means the manner in which the Dominant Provider applies the requirements of the Regulatory Accounting Principles in each of the Regulatory Financial Statements;
- c) “**Alternative Regulatory Auditor**” means any auditor not for the time being appointed as the Dominant Provider’s Regulatory Auditor;
- d) “**Agreed Upon Procedures**” means an engagement carried out in accordance with international standard (ISRS 4400) under which the Regulatory Auditor or another independent third party performs a set of audit procedures agreed by Ofcom and based on Ofcom’s specific requirements in relation to the Regulatory Financial Statements, and reports the findings of that work to Ofcom;
- e) “**Attribution Methods**” means the practices used by the Dominant Provider to attribute revenue (including appropriate Transfer Charges), costs (including appropriate Transfer Charges), assets and liabilities to activities or, insofar as those activities have been aggregated into Wholesale Segments or Retail Segments in a given Market or Technical Area (as applicable), to each Wholesale Segment or Retail Segment;
- f) “**Current Year Figures**” means, in relation to any set of Regulatory Financial Statements, the amounts relating to the Financial Year to which the statements relate;
- g) “**External Wholesale Services**” means services supplied or offered to any Communications Provider other than the Dominant Provider;
- h) “**Financial Year**” means a financial year of the Dominant Provider in respect of which the Statutory Financial Statements are required to be (or to have been) prepared and audited in accordance with the requirements of the Companies Act 2006;
- i) “**ICAEW Guidance**” means the technical release titled “Reporting to Regulators of Regulated Entities: Audit 05/03” issued by the

Audit and Assurance Faculty of the Institute of Chartered Accountants in England & Wales in October 2003;

- j) “**Internal Wholesale Services**” means services supplied within the Dominant Provider;
- k) “**Long Run Incremental Cost Methodology**” means the long run incremental cost principles, procedures and Processes which form the framework under which long run incremental costs are determined by the Dominant Provider;
- l) “**Market**” means the market to which this Condition 10 apply;
- m) “**Material Error**” means a deviation from accuracy or correctness which meets the materiality threshold as directed by Ofcom from time to time for the purpose of this Condition 10;
- n) “**Material Difference**” means a difference identified in a systems reconciliation report which meets the materiality threshold as directed by Ofcom from time to time for the purpose of this Condition 10;
- o) “**Network Component**” means an element of the network that is used to provide Wholesale Services, and, to the extent the network components are used in the Market or Technical Area (as applicable), specified in a direction given by Ofcom from time to time for the purposes of this Condition 10;
- p) “**Network Services**” means those groups of Network Components used directly (or which in the absence of horizontal or vertical integration would be used directly) in the course of supplying Wholesale Services;
- q) “**Prior Year Comparatives**” means, in relation to any set of Regulatory Financial Statements, the amounts relating to the Financial Year immediately preceding the Financial Year to which the Regulatory Financial Statements relate, re-evaluated if necessary to ensure that such figures are comparable to the Current Year Figures;
- r) “**Process**” means the series of inter-related activities or actions to obtain, record or hold data or information or to carry out any operation or set of operations on the data or information, including:
 - i. organisation, storage, adaptation, or alteration of the data or information;
 - ii. retrieval, consultation, computation or use of the data or information;
 - iii. disclosure of the data or information by transmission, dissemination, or otherwise making available; or

- iv. alignment, combination, blocking, erasing or destruction of the data or information;
- s) “**Product**” means any product or service comprised in a Market or Technical Area to which this Condition 10 apply;
- t) “**Regulatory Accounting Methodology**” means the rules, policies, methods, allocations, calculations, assumptions and procedures used by the Dominant Provider for the purpose of preparing Regulatory Financial Statements;
- u) “**Regulatory Accounting Principles**” means the principles as directed by Ofcom from time to time for the purpose of this Condition 10;
- v) “**Regulatory Accounting System**” means the set of computerised and manual accounting methods, procedures, Processes and controls established to determine and attribute the costs, revenues, assets and liabilities and summarise, interpret, and present the resultant financial data in an accurate and timely manner;
- w) “**Regulatory Auditor**” means the auditor for the time being appointed by the Dominant Provider in accordance with this Condition 10;
- x) “**Regulatory Financial Statement**” means any financial statement in respect of a Financial Year prepared or required to be prepared by the Dominant Provider in accordance with this Condition 10;
- y) “**Retail Products**” means services used by or offered to any End Users (including the Dominant Provider);
- z) “**Retail Segments**” means groups of Retail Products;
- aa) “**Statutory Accounting Standards**” means the accounting standards, including the requirements of the Companies Act 2006, by reference to which the Dominant Provider is required to prepare the Statutory Financial Statements;
- bb) “**Statutory Auditor**” means the auditor for the time being appointed by the Dominant Provider in accordance with the requirements of the Companies Act 2006;
- cc) “**Statutory Financial Statements**” means any annual account required to be prepared by the Dominant Provider in accordance with the requirements of the Companies Act 2006;
- dd) “**Technical Area**” means the technical area to which this Condition 10 apply;
- ee) “**Transfer Charge**” means the charge or price that is applied, or deemed to be applied, within the Dominant Provider by one division or business unit of the Dominant Provider to another for

the use or provision of an activity or group of activities. For the avoidance of doubt, such activities or group of activities include, amongst other things, Products provided from, to or within the Market or Technical Area (as applicable) and the use of Network Components in the Market or Technical Area (as applicable);

- ff) “**Transfer Charge System Methodology**” means the methodology of the system employed by the Dominant Provider which enables an activity to use a service or good from another activity and to account for it as though it had purchased that service or good from an unrelated party (including accounting for it at an appropriate amount);
- gg) “**Wholesale Catalogue**” means the documentation required to be produced by the Dominant Provider under Condition 10.33;
- hh) “**Wholesale Segments**” means groups of Wholesale Services; and
- ii) “**Wholesale Services**” means services related to network access on the Dominant Provider’s network used by or offered to any Communications Provider (including the Dominant Provider).

SCHEDULE 2: Proposed SMP Conditions (KCOM)

Part 1: Application

1. The SMP conditions in Part 3 of this Schedule 2, except where specified otherwise, apply to the Dominant Provider in each of the relevant markets and area listed in Column 1 of **Table 1** below to the extent specified in Column 2 of **Table 1**. Save as otherwise specified in any condition, each condition will enter into force on the date of publication of [*date of final notification*] and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.

Table 1: Relevant markets and area for the purposes of this Schedule 2

Column 1: Relevant market or area	Column 2: Applicable SMP condition as set out in Part 3 of this Schedule 1
Wholesale fixed analogue exchange line services in the Hull Area	Conditions 1A (except 1A.2B, 1A.3), 2, 4, 5 (except 5.2B, 5.3B, 5.4B, 5.4C, 5.4D, 5.5B, 5.6B)
Wholesale ISDN30 exchange line services in the Hull Area	Conditions 1B, 1C (except 1C.1B), 2, 4, 5 (except 5.2B, 5.3B, 5.4A, 5.4C, 5.4D, 5.5B, 5.6B)
Wholesale ISDN2 exchange line services in the Hull Area	Conditions 1B, 1C (except 1C.1A), 2, 4, 5 (except 5.2B, 5.3B, 5.4A, 5.4C, 5.4D, 5.5B, 5.6B)
Wholesale call origination on a fixed narrowband network in the Hull Area	Conditions 1A (except 1A.2B, 1A.3), 4 (except 4.3, 4.9), 5 (except 5.2A, 5.3A, 5.4A, 5.4B, 5.4C, 5.5A, 5.6A, 5.7)
Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers in the area served by the Dominant Provider	Conditions 1A (except 1A.2A), 3, 6
Interconnect Circuits in the Hull Area	Conditions 1A (except 1A.2B, 1A.3), 4 (except 4.3, 4.9), 5 (except 5.2A, 5.3A, 5.4A, 5.4B, 5.4D, 5.5A, 5.6A, 5.7)

The Conditions referred to in Column 2 of **Table 1** are entitled as follows—

Condition 1	Network access on reasonable request
Condition 2	No undue discrimination
Condition 3	Charge control
Condition 4	Publication of a Reference Offer
Condition 5	Notification of charges
Condition 6	Price transparency

Part 2: Interpretation

1. In addition to the definitions set out above in this Notification and in each condition below (where relevant), in this Schedule 2—
 - a) “**Access Agreement**” means an agreement entered into between the Dominant Provider and a Third Party for the provision of network access in accordance with Condition 1A, 1B or 1C (as applicable);
 - b) “**Call**” means a voice call which is terminated to a United Kingdom geographic number in the area served by the Dominant Provider;
 - c) “**Call Termination Charges**” means the charge made by the Dominant Provider to terminate a Call.
 - d) “**Dominant Provider**” means KCOM;
 - e) “**Reference Offer**” means the terms and conditions on which the Dominant Provider is willing to enter into an Access Agreement;
 - f) “**Third Party**” means “Third Party” means a person providing a public electronic communications service or a person providing a public electronic communications network.

Part 3: Conditions (KCOM)

Condition 1A – Network access on reasonable request

- 1A.1**
**(WFAEL,
WCO, WCT,
Interconnect)**
- The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1A.2A**
**(WFAEL,
WCO &
Interconnect)**
- The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1A.2B**
(WCT)
- Except where Condition 1A.3 applies, the provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1A.3**
(WCT)
- Where Condition 3 applies, the provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms and conditions (excluding charges); and
 - (ii) such terms and conditions (excluding charges) as Ofcom may from time to time direct.
- 1A.4**
**(WFAEL,
WCO, WCT,
Interconnect)**
- The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network

access and such other entitlements as Ofcom may from time to time direct.

**1A.5
(WFAEL,
WCO, WCT,
Interconnect)**

The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

Condition 1B – Network access on reasonable request

(in force [1 October 2017 to 30 September 2018])

- 1B.1
(ISDN30 &
ISDN2)** The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1B.2
(ISDN30 &
ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) such terms, conditions and charges as Ofcom may from time to time direct.
- 1B.3
(ISDN30 &
ISDN2)** The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.
- 1B.4
(ISDN30 &
ISDN2)** The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

Condition 1C – Network access on reasonable request

(in force from [1 October 2018])

1C.1A (ISDN30) Where a Third Party purchases Existing ISDN30 Rental, the Dominant Provider must provide network access to that Third Party where that Third Party, in writing, reasonably requests it in respect of an Existing ISDN30 Rental.

1C.1B (ISDN2) Where a Third Party purchases Existing ISDN2 Rental, the Dominant Provider must provide network access to that Third Party where that Third Party, in writing, reasonably requests it in respect of an Existing ISDN2 Rental.

1C.2 (ISDN30 & ISDN2) The provision of network access by the Dominant Provider in accordance with this Condition must:

- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
- (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.

1C.3 (ISDN30 & ISDN2) The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.

1C.4 (ISDN30 & ISDN2) The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

1C.6 (ISDN30 & ISDN2) In this Condition 1C:

- (a) “**Existing ISDN30 Rental**” means the rental of an ISDN30 Exchange Line as at the date Condition 1C enters into force;
- (b) “**Existing ISDN30 Rental**” means the rental of an ISDN30 Exchange Line as at the date Condition 1C enters into force;
- (c) “**ISDN2 Exchange Line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Basic Rate Access standard as defined by the International Telecommunications Union, providing two digital channels with a bandwidth of 64 kbit/s each plus a control channel of 16kbit/s over a common digital bearer circuit;
- (d) “**ISDN30 Exchange Line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Primary Rate Access standard as defined by the International

Telecommunications Union, providing up to 30 digital channels with a bandwidth of 64 kbit/s per channel plus a control channel of 64 kbit/s;

- (e) **“ISDN”** means the integrated services digital network which is an electronic communications network that provides for digital end-to-end connectivity to support a wide range of public electronic communications services, including voice and non-voice services, to which end-users have access by a limited set of standard multipurpose customer interfaces.

Condition 2 – No undue discrimination

2.1 The Dominant Provider must not unduly discriminate against particular persons or against a particular description of persons in relation to the provision of network access in accordance with Conditions 1A, 1B or 1C (as applicable).
(WFAEL, ISDN30, ISDN2)

2.2 Without prejudice to the generality of Condition 2.1, in this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place one or more Third Parties at a competitive disadvantage in relation to activities carried on by the Dominant Provider.
(WFAEL, ISDN30, ISDN2)

Condition 3 – Charge control

3.1 (WCT) From [1 December 2017], the Dominant Provider must ensure that for each Call on any day, during any Relevant Period, the Call Termination Charge (which shall be expressed in pence per minute) does not exceed the Charge Ceiling.

3.2 (WCT) For the purposes of Condition 3.1, the Charge Ceiling is⁴ –

1. for any Call on a day in the First Relevant Period, [0.024] pence per minute;
2. for any Call on a day in the Second Relevant Period and Third Relevant Period-

a. an amount equal to –

- i. the charge ceiling, expressed in pence per minute (rounded to three decimal places), in the Relevant Period preceding the Relevant Period in which the Call was made; multiplied by,
- ii. the sum of CPI and the Controlling Percentage for the Relevant Period in which the Call was made

Where:

CPI means the amount of the change in the Consumer Prices Index in the period of twelve months ending on 31 August immediately before the beginning of the relevant period, expressed as a percentage (rounded to one decimal place); and

Controlling Percentage is:

- a. for the Second Relevant Period, [-8.5%]
- b. for the Third Relevant Period, [-9.3%]

and is

- b. expressed as being pence per minute and rounded to three decimal places.

3.3 (WCT) Without prejudice to Ofcom’s statutory information gathering powers, the Dominant Provider must provide to Ofcom in writing any information reasonably required by Ofcom for the Dominant Provider to demonstrate compliance with this Condition at any time upon reasonable notice.

3.4 (WCT) The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

3.5 In this Condition 3,

⁴ These are the base case values expressed in nominal terms (using our estimate of inflation) for the range on which we are consulting.

(WCT)

- a) “**Consumer Prices Index**” means the index of consumer prices compiled by an agency or a public body on behalf of Her Majesty’s Government or a governmental department (which is the Office for National Statistics at the time of publication of this Notification) from time to time in respect of all items;
- b) “**pence per minute**” means the sum in pence charged for a minute of a Call;
- c) “**Relevant Period**” means any of the following:
 - a. the period of ten months beginning on [1 December 2017] and ending on [30 September 2018] (the “First Relevant Period”);
 - b. the period of twelve months beginning on [1 October 2018] and ending on [30 September 2019] (the “Second Relevant Period”);
 - c. the period of twelve months beginning on [1 October 2019] and ending on [30 September 2020] (the “Third Relevant Period”).

Condition 4 – Publication of a Reference Offer

4.1 (WFAEL, ISDN30, ISDN2, WCO, Interconnect)

Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish a Reference Offer in relation to the provision of network access pursuant to Conditions 1A, 1B or 1C (as applicable) and comply with the requirements set out below.

4.2 (WFAEL, ISDN30, ISDN2, WCO, Interconnect)

Subject to Condition 4.8 below, the Dominant Provider must ensure that a Reference Offer in relation to the provision of network access pursuant to Conditions 1A, 1B or 1C (as applicable) includes, where applicable, at least the following:

- (a) a description of the network access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of network access);
- (b) the locations at which network access will be provided;
- (c) any relevant technical standards for network access (including any usage restrictions and other security issues);
- (d) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);
- (e) any ordering and provisioning procedures;
- (f) relevant charges, terms of payment and billing procedures;
- (g) details of interoperability tests;
- (h) details of traffic and network management;
- (i) details of maintenance and quality as follows:
 - (i) specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, for provision of support services (such as fault handling and repair);
 - (ii) service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
 - (iii) the amount of compensation payable by one party to another for failure to perform contractual commitments;
 - (iv) a definition and limitation of liability and indemnity; and

- (v) procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;
- (j) details of measures to ensure compliance with requirements for network integrity;
- (k) details of any relevant intellectual property rights;
- (l) a dispute resolution procedure to be used between the parties;
- (m) details of duration and renegotiation of agreements;
- (n) provisions regarding confidentiality of the agreements;
- (o) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts);
- (p) the standard terms and conditions for the provision of network access.

**4.3
(WFAEL, ISDN30,
ISDN2)**

To the extent that the Dominant Provider provides to itself network access that:

- (a) is the same, similar or equivalent to that provided to any other Third Party; or
- (b) may be used for a purpose that is the same, similar or equivalent to that provided to any other Third Party,

in a manner that differs from that detailed in a Reference Offer in relation to network access provided to any other Third Party, the Dominant Provider must ensure that it publishes a Reference Offer in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Condition 4.2.

**4.4
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)**

The Dominant Provider must, on the date that this Condition enters into force, publish a Reference Offer in relation to any network access that it is providing as at the date that this Condition enters into force.

**4.5
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)**

The Dominant Provider must as soon as reasonably practicable update and publish the Reference Offer in relation to any amendments or in relation to any further network access provided after the date that this Condition enters into force.

**4.6
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)**

Publication referred to above shall be effected by placing a copy of the Reference Offer on any relevant publicly accessible website operated or controlled by the Dominant Provider.

4.7
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)

The Dominant Provider must send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts as have been requested).

4.8
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)

The Dominant Provider must make such modifications to the Reference Offer as Ofcom may direct from time to time.

4.9
(WFAEL, ISDN30,
ISDN2)

The Dominant Provider must provide network access at the charges, terms and conditions in the relevant Reference Offer and must not depart therefrom either directly or indirectly.

4.10
(WFAEL, ISDN30,
ISDN2, WCO,
Interconnect)

The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

Condition 5 – Notification of charges

- 5.1**
(WFAEL, ISDN30, ISDN2, WCO & Interconnect)
- Except in so far as Ofcom may from time to time otherwise consent in writing, the Dominant Provider must publish charges and act in the manner set out in this Condition.
- 5.2A**
(WFAEL, ISDN30 & ISDN2)
- Where it proposes an Access Charge Change, the Dominant Provider must send to every person with which it has entered into an Access Agreement pursuant to Conditions 1A, 1B or 1C (as applicable), an Access Charge Change Notice.
- 5.2B**
(WCO & Interconnect)
- Where it proposes a Standard Access Charge Change, the Dominant Provider must send to every person with which it has entered into an Access Agreement pursuant to Condition 1A, a Standard Access Charge Change Notice.
- 5.3A**
(WFAEL, ISDN30 & ISDN2)
- The obligation in Condition 5.2A will not apply where the Access Charge Change is directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or required by a notification or enforcement notification issued by Ofcom under sections 96A or 96C of the Act.
- 5.3B**
(WCO & Interconnect)
- The obligation in Condition 5.2B will not apply where the Standard Access Charge Change is directed or determined by Ofcom (including pursuant to the setting of an SMP services condition under the power in section 45 of the Act) or required by a notification or enforcement notification issued by Ofcom under sections 96A or 96C of the Act.
- 5.4A**
(WFAEL)
- An Access Charge Change Notice must-
- (a) in the case of an Access Charge Change relating to the Wholesale Line Rental Charge and subject to conditions (b) and (c) below, be sent not less than 90 days before any such amendment comes into effect;
 - (b) in the case of an Access Charge Change relating solely to a reduction in the price of the Wholesale Line Rental Charge, (including, for the avoidance of doubt, a Special Offer), be sent not less than 28 days before any such amendment comes into effect;
 - (c) in the case of an Access Charge Change relating to the end of a temporary price reduction to the Wholesale Line Rental Charge in accordance with the terms of a Special Offer, be sent not less than 28 days before any such amendment comes into effect; and
 - (d) in the case of any other Access Charge Change, not less than 28 days before any such amendment comes into effect.
- 5.4B**
(ISDN30 & ISDN2)
- An Access Charge Change Notice must in the case of an Access Charge Change involving network access pursuant to Condition 1B or 1C (as applicable), be sent not less than 28 days before any such amendment comes into effect.

**5.4C
(Interconnect)** A Standard Access Charge Change Notice must in the case of a Standard Access Charge Change involving network access pursuant to Condition 1A must be sent not less than 56 days before any such amendment comes into effect.

**5.4D
(WCO)** A Standard Access Charge Change Notice must in the case of a Standard Access Charge Change involving network access pursuant to Condition 1A must be sent not less than 56 days before any such amendment comes into effect.

**5.5A
(WFAEL,
ISDN30 &
ISDN2)** The Dominant Provider must ensure that an Access Charge Change Notice includes:

- (a) a description of the network access in question;
- (b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that network access;
- (c) the date on which, or the period for which, the Access Charge Change will take effect (the "effective date"); and
- (d) the current and proposed new charge.

**5.5B
(WCO &
Interconnect)** The Dominant Provider must ensure that a Standard Access Charge Change Notice includes:

- (a) a description of the network access in question;
- (b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that network access;
- (c) the date on which, or the period for which, the Standard Access Charge Change will take effect (the "effective date"); and
- (d) the current and proposed new charge.

**5.6A
(WFAEL,
ISDN30 &
ISDN2)** The Dominant Provider must not apply any Access Charge Change identified in an Access Charge Change Notice before the effective date.

**5.6B
(WCO &
Interconnect)** The Dominant Provider must not apply any Standard Access Charge Change identified in a Standard Access Charge Change Notice before the effective date.

**5.7
(WFAEL,
ISDN30 &
ISDN2)** To the extent that the Dominant Provider provides to itself network access that:

- (a) is the same, similar or equivalent to that provided to any other person; or

- (b) may be used for a purpose that is the same, similar or equivalent to that provided to any other person,

in a manner that differs from that detailed in an Access Charge Change Notice in relation to network access provided to any other person the Dominant Provider must ensure that it sends to Ofcom a notice in relation to the network access that it provides to itself which includes, where relevant, at least those matters detailed in Conditions 5.5A(a) to (d) and, where the Dominant Provider amends the charges on which it provides itself with network access, it must ensure it sends to Ofcom a notice equivalent to an Access Charge Change Notice.

5.8

In this Condition 5:

- (a) **“Access Charge Change Notice”** means a notice given by the Dominant Provider of an Access Charge Change;
- (b) **“Access Charge Change”** means any amendment to the Dominant Provider’s charges for the provision of network access or for new network access;
- (c) **“Exchange Line”** means apparatus comprised in the Dominant Provider’s electronic communications network and installed for the purpose of connecting a telephone exchange run by the Dominant Provider to a Network Termination Point comprised in Network Termination and Testing Apparatus installed by the Dominant Provider for the purpose of providing electronic communications services at the premises at which the Network Termination and Testing Apparatus is located;
- (d) **“Network Termination and Testing Apparatus”** means an item of apparatus comprised in an electronic communications network installed in a fixed position on served premises which enables:
 - i. approved apparatus to be readily connected to, and disconnected from, the network;
 - ii. the conveyance of signals between such approved apparatus and the network;
 - iii. the due functioning of the network to be tested, but the only other functions of which, if any, are:
 - a. to supply energy between such approved apparatus and the network;
 - b. to protect safety or security of the operation of the network; or
 - c. to enable other operations exclusively related to the running of the network to be performed or the due functioning of any system to which the network is or is to be

connected to be tested (separately or together with the network);

- (e) **“Network Termination Point”** means the physical point at which a Relevant Subscriber is provided with access to a public electronic communications network;
- (f) **“Ordinary Maintenance”** means maintenance which is part of the service provided by the Dominant Provider in consideration of the charge for an Exchange Line, an ISDN30 Exchange Line or an ISDN2 Exchange Line and includes normal fault repair, as defined in the Dominant Provider’s standard terms and conditions;
- (g) **“Special Offer”** means a temporary price reduction for a particular product or service, applicable to all customers on a non-discriminatory basis, which is stated to apply for a limited and predefined period and where the price immediately on expiry of that period is no higher than the price immediately before the start of that period.
- (h) **“Standard Access Charge Change Notice”** means a notice given by the Dominant Provider of a Standard Access Charge Change;
- (i) **“Standard Access Charge Change”** means any amendment to the Dominant Provider’s standard charges for the provision of network access or for new network access.
- (j) **“Wholesale Analogue Line Rental”** means an electronic communications service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an analogue Exchange Line;

Condition 6 – Price transparency

- 6.1 (WCT)** Unless Ofcom otherwise consents in writing, the Dominant Provider must publish its Call Termination Charges, and do so separately from any of its other interconnection charges (including other termination charges).
- 6.2 (WCT)** The Dominant Provider must publish the Call Termination Charges which will apply from [1 October 2017], before that date.
- 6.3 (WCT)** The Dominant Provider must publish any proposed amendment to the call termination charges (a “change notice”) on or before the day any such amendment comes into effect.
- 6.4 (WCT)** Publication shall be effected by –
- (a) sending a copy of such information or any appropriate parts of it to any person who may reasonably request such a copy; and
 - (b) placing a readily accessible copy of such information on a relevant and publicly accessible website operated or controlled by the dominant provider, or on behalf of the Dominant Provider.
- 6.5 (WCT)** The Dominant Provider must ensure that a change notice includes –
- (a) a description of the proposed new charge for the network access in question;
 - (b) where applicable, the current charge for the network access in question; and
 - (c) the date that the amendment(s) come into effect.

SCHEDULE 3: Proposed SMP Conditions (Dominant Providers listed in the Annex to this Schedule 3)

Part 1: Application

1. The SMP conditions in Part 3 of this Schedule 3 shall apply to each of the Dominant Providers listed in the Annex to this Schedule 3, in relation to the market for wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers in the area served by the Dominant Provider. Save as otherwise specified in any condition, each condition will enter into force on the date of publication of [*date of final notification*] and shall have effect until the publication of a notification under section 48(1) of the Act revoking such conditions.

Part 2: Interpretation

1. In addition to the definitions set out above in this Notification and in each condition below (where relevant), in this Schedule 3—
 - a) “**Call**” means a voice call which is terminated to a United Kingdom geographic number in the area served by the Dominant Provider;
 - b) “**Call Termination Charges**” means the charge made by the Dominant Provider to terminate a Call;
 - c) “**Dominant Provider**” means each of the persons listed in the Annex to this Schedule 3.

Part 3: Conditions (Dominant Providers listed in the Annex to this Schedule 3,)

Condition 1 – Network access on reasonable request

- 1.1 The Dominant Provider must provide network access to a Third Party where that Third Party, in writing, reasonably requests it.
- 1.2 Except where Condition 1A.3 applies, the provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms, conditions and charges; and
 - (ii) be on such terms, conditions and charges as Ofcom may from time to time direct.
- 1.3 Where Condition 2 applies, the provision of network access by the Dominant Provider in accordance with this Condition must:
- (a) take place as soon as reasonably practicable after receiving the request from a Third Party; and
 - (b) be on:
 - (i) fair and reasonable terms and conditions (excluding charges); and
 - (ii) such terms and conditions (excluding charges) as Ofcom may from time to time direct.
- 1.4 The provision of network access by the Dominant Provider in accordance with this Condition must also include such associated facilities as are reasonably necessary for the provision of network access and such other entitlements as Ofcom may from time to time direct.
- 1.5 The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.
- 1.6 In this Condition 1
- a) “**Third Party**” means a person providing a public electronic communications service or a person providing a public electronic communications network.

Condition 2 - Charge control

- 2.1** From [1 December 2017], the Dominant Provider must ensure that for each Call on any day, during any Relevant Period, the Call Termination Charge (which shall be expressed in pence per minute) does not exceed the Charge Ceiling.
- 2.2** For the purposes of Condition 2.1, the Charge Ceiling is⁵ –
1. for any Call on a day in the First Relevant Period, [0.024] pence per minute;
 2. for any Call on a day in the Second Relevant Period and Third Relevant Period-
 - a. an amount equal to –
 - i. the charge ceiling, expressed in pence per minute (rounded to three decimal places), in the Relevant Period preceding the Relevant Period in which the Call was made; multiplied by,
 - ii. the sum of CPI and the Controlling Percentage for the Relevant Period in which the Call was made
- Where:
- CPI means the amount of the change in the Consumer Prices Index in the period of twelve months ending on 31 August immediately before the beginning of the relevant period, expressed as a percentage (rounded to one decimal place); and
- Controlling Percentage is:
- a. for the Second Relevant Period, [-8.5%]
 - b. for the Third Relevant Period, [-9.3%]
- and is
- b. expressed as being pence per minute and rounded to three decimal places.
- 2.3** Without prejudice to Ofcom's statutory information gathering powers, the Dominant Provider must provide to Ofcom in writing any information reasonably required by Ofcom for the Dominant Provider to demonstrate compliance with this Condition at any time upon reasonable notice.
- 2.4** The Dominant Provider must comply with any direction Ofcom may make from time to time under this Condition.

⁵ These are the base case values expressed in nominal terms (using our estimate of inflation) for the range on which we are consulting.

2.5

In this Condition 2,

- a) “**Consumer Prices Index**” means the index of consumer prices compiled by an agency or a public body on behalf of Her Majesty’s Government or a governmental department (which is the Office for National Statistics at the time of publication of this Notification) from time to time in respect of all items;
- b) “**pence per minute**” means the sum in pence charged for a minute of a Call;
- c) “**Relevant Period**” means any of the following:
 - a. the period of ten months beginning on [1 December 2017] and ending on [30 September 2018] (the “First Relevant Period”);
 - b. the period of twelve months beginning on [1 October 2018] and ending on [30 September 2019] (the “Second Relevant Period”);
 - c. the period of twelve months beginning on [1 October 2019] and ending on [30 September 2020] (the “Third Relevant Period”).

Condition 3 – Price transparency

- 3.1** Unless Ofcom otherwise consents in writing, the Dominant Provider must publish its Call Termination Charges, and do so separately from any of its other interconnection charges (including other termination charges).
- 3.2** The Dominant Provider must publish the Call Termination Charges which will apply from [1 October 2017], before that date.
- 3.3** The Dominant Provider must publish any proposed amendment to the call termination charges (a “change notice”) on or before the day any such amendment comes into effect.
- 3.4** Publication shall be effected by –
- (a) sending a copy of such information or any appropriate parts of it to any person who may reasonably request such a copy; and
 - (b) placing a readily accessible copy of such information on a relevant and publicly accessible website operated or controlled by the dominant provider, or on behalf of the Dominant Provider.
- 3.5** The Dominant Provider must ensure that a change notice includes –
- (a) a description of the proposed new charge for the network access in question;
 - (b) where applicable, the current charge for the network access in question; and
 - (c) the date that the amendment(s) come into effect.

Annex to Schedule 3

1. (AQ) Limited whose registered company number is 03663860, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
2. 10ACT Ltd whose registered company number is 05617099, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
3. 118 Limited whose registered company number is 03951948, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
4. 24 Seven Communications Limited whose registered company number is 04468566, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
5. 3C Limited whose registered company number is 06041466, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
6. 4D Interactive Ltd whose registered company number is 02676756, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
7. ADDK Holdings LLP whose registered number is OC304799, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
8. Adepteo Limited whose registered company number is 07015559, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
9. Advanced Voip Solutions Ltd whose registered company number is 08440874, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
10. Affiniti Integrated Solutions Ltd whose registered company number is 02817039, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
11. Alliance Technologies LLC whose registered entity number is 1616678 (registered in Ohio, USA), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

12. Alnitak GmbH whose registered entity number is HRB 149805 (registered in Germany), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
13. Aloha Telecommunications Ltd whose registered company number is 07210905, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
14. Alphatak Limited whose registered company number is 04828811, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
15. Andrews & Arnold (Numbers) Ltd whose registered company number is 04905897, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
16. Andrews & Arnold Limited whose registered company number is 03342760, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
17. Annecto Telecom whose registered company number is 380845 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
18. API Telecom Limited whose registered company number is 07945651, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
19. AQL Wholesale Limited whose registered company number is 05134355, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
20. Atlas Interactive Group Limited whose registered company number is 03249486, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
21. Atomstream Limited whose registered company number is 06746855, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
22. AVC One Limited whose registered company number is 08664236, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

23. Barritec Limited whose registered company number is 03636926, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
24. Barritel Limited whose registered company number is 04101655, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
25. Bellingham Telecommunications Ltd whose registered company number is 07038166, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
26. Bicom Systems EURL whose registered company number is 478 993 967 (registered in Boulogne-sur-mer, France), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
27. Bluecom (UK) Ltd whose registered company number is 04483434 and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
28. Bright Orange Outsourcing Ltd whose registered company number is 07480717, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
29. BT OnePhone Limited whose registered company number is 08043734, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
30. Budget Numbers Limited whose registered company number is 05006466, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
31. Business Broadcast Communications Limited whose registered company number is 6949556, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
32. Business Telecom Limited whose registered company number is 54966 (registered in Guernsey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
33. Buzz Networks Limited whose registered company number is 03260342, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

34. C2C Limited whose registered company number is 04212219, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
35. Callmonitor Limited whose registered company number is 03844878, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
36. Calltracks Limited whose registered company number is 06539973, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
37. Central Technology Limited whose registered company number is 04579191, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
38. CFL Communications Ltd whose registered company number is 04419749, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
39. Cheers International Sales Limited whose registered company number is 06288825, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
40. Cirrus Response Limited whose registered company number is 08700358, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
41. Citrus Telecommunications Ltd whose registered company number is 03517870, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
42. Clix Ltd whose registered company number is 8270033, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
43. Cloud9 Communications Limited whose registered company number is 07153956, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
44. Cloudcall Limited whose registered company number is 05557457, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

45. Club Communications Ltd whose registered company number is 3408718, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
46. Cobalt Telephone Technologies Limited whose registered company number is 03151938, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
47. COLT Technology Services whose registered company number is 02452736, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
48. Commi Holdings Limited whose registered company number is 10010319, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
49. Comms Consulting Ltd whose registered company number is 07242321, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
50. Connect Telecom UK Limited whose registered company number is 04198443, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
51. Content Guru Limited whose registered company number is 05653869, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
52. Core Communication Services Limited whose registered company number is 05467282, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
53. Core Telecom Limited whose registered company number is 05332008, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
54. Core Telecommunications International Limited whose registered company number is 467960 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
55. Coretx Communications Limited whose registered company number is 05402754, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

56. Coretx Protect Limited whose registered company number is 03882936, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
57. Daisy Communications Ltd whose registered company number is 04145329, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
58. Daotec Ltd whose registered company number is 04296038, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
59. Dark Group Ltd whose registered company number is 03766500, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
60. Dial A Bite Ltd whose registered company number is 06945325, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
61. DIDWW Ireland Limited whose registered company number is 473521 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
62. Digital Mail Limited whose registered company number is 02661078, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
63. Digital Select Limited whose registered company number is 06481372, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
64. Digitech Solutions Global Limited whose registered company number is 05821246, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
65. Digiweb Limited whose registered company number is 263513 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
66. DRD Communications Limited whose registered company number is 03545257, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

67. E164 Limited whose registered company number is 06982841, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
68. Easynet Channel Partners Limited whose registered company number is 03676297, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
69. Easynet Enterprise Services Limited whose registered company number is 04287100, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
70. Eclipse Tel Limited whose registered company number is 06718575, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
71. Edge Telecom Ltd whose registered company number is 03101247, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
72. EE Limited whose registered company number is 02382161, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
73. Eircom (UK) Ltd whose registered company number is 03478971, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
74. Entanet International Limited whose registered company number is 03274237, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
75. Esendex Limited whose registered company number is 04217280, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
76. Essensys Ltd whose registered company number is 05959557, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
77. ETC Telecom Limited whose registered company number is 06295193, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

78. Exa Networks Limited whose registered company number is 04922037, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
79. Exponential-e Limited whose registered company number is 04499567, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
80. Fibernet UK Limited whose registered company number is 02940263, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
81. Fido Telecom Limited whose registered company number is 05495621, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
82. Firstsound Limited whose registered company number is 02845928, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
83. FleXtel Limited whose registered company number is 02772380, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
84. Fluency Communications Limited whose registered company number is SC390685, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
85. Foehn Limited whose registered company number is 03925996, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
86. FTTC Limited whose registered company number is 06362149, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
87. Fuse 2 Communications Ltd whose registered company number is 09556526, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
88. Game Network BV whose registered company number is 34260590 (registered in the Netherlands), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

89. Gamma Telecom Holdings Limited whose registered company number is 04287779, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
90. Globalcharge Limited whose registered company number is 06058897, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
91. Group 3 Technology Limited whose registered company number is 04127747, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
92. Guernsey Airtel Limited whose registered company number is 45232 (registered in Guernsey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
93. Hello Telecom (UK) plc whose registered company number is 04489059, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
94. Hemshore Ltd whose registered company number is 09185481, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
95. HighSpeed Office Limited whose registered company number is 03935705, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
96. Hospedia Limited whose registered company number is 02841021, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
97. Hyperoptic Ltd whose registered company number is 07222543, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
98. I.T Communications Limited whose registered company number is 07418692, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
99. ICC Networks Limited whose registered company number is 05755098, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

100. Icron Network Limited whose registered company number is 05445235, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
101. IDT Global Limited whose registered company number is 03322447, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
102. iHub 2 Limited whose registered company number is 09626588, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
103. IM Software Ltd whose registered company number is 04602389, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
104. Impello PLC whose registered company number is 04558469, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
105. In2com Ltd whose registered company number is 397687 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
106. Inclarity Communications Ltd whose registered company number is 07193672, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
107. i-Net Communications Group Plc whose registered company number is 04036526, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
108. iNet Telecoms Ltd whose registered company number is 05168033, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
109. Instant Communication Limited whose registered company number is 07435377, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
110. Internexus Networks Limited whose registered company number is 83610 (registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

111. Interoute Networks Limited whose registered company number is 03773255, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
112. "InTouch Communication Services" Limited whose registered company number is 03606467, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
113. Invade International Limited whose registered company number is 03660482, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
114. Invoco Ltd whose registered company number is 04465219, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
115. Invomo Limited whose registered company number is 06267056, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
116. Invosys Limited whose registered company number is 05799390, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
117. IOVOX Limited whose registered company number is 06057954, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
118. [IP Base Limited whose address is 24 Broad Street, Salford, Manchester, M6, 5BY / 05607201 Limited whose registered company number is 05607201 / IP Wholesale Limited whose registered company number is 09070835], and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.⁶
119. IP Phone Solutions Ltd whose registered company number is 06681608, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
120. IPPlus (UK) Limited whose registered company number is 03443083, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

⁶ We are establishing which of these entities holds the number range and whether they are providing wholesale call termination services. To the extent that one, or more, of these entities is providing wholesale call termination services within our market definition, we are proposing to designate them as having SMP and impose relevant SMP conditions on them.

121. IPV6 Limited whose registered company number is 06711525, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
122. IV Response Limited whose registered company number is 04318927, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
123. Jersey Airtel Limited whose registered company number is 92186 (registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
124. JT (Global) Limited whose registered company number is 03122929, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
125. JT (Jersey) Limited whose registered company number is 83487 (registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
126. JT (Guernsey) Limited whose registered company number is 39971 (registered in Guernsey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
127. Jtec UK Limited whose registered company number is 05054246, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
128. Kalnet4u Ltd whose registered company number is 04655311, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
129. KDDI Europe Limited whose registered company number is 02407242, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
130. Lanonyx Telecom Limited whose registered company number is 07658086, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
131. Level 3 Communications Limited whose registered company number is 03514850, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

132. Level 3 Communications UK Limited whose registered company number is 2495998, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
133. Linear Telecoms Limited whose registered company number is 06917811, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
134. Liquid 11 Limited whose registered company number is 04404380, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
135. Localphone Limited whose registered company number is 06085990, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
136. London Central Communications Limited whose registered company number is 02184289, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
137. Lycatel (Ireland) Limited whose registered company number is 357730 (registered in Ireland), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
138. M247 Ltd whose registered company number is 04968341, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
139. Magrathea Telecommunications Limited whose registered company number is 04260485, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
140. Manx Telecom Trading Limited whose registered company number is 005629V (registered in the Isle of Man), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
141. Marathon Telecom Limited whose registered company number is 93007 (registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
142. Mars Communications Limited whose registered company number is 06478834, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

143. Maxadie Limited whose registered company number is 08320797, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
144. Media Hawk Limited whose registered company number is 04432034, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
145. Media Telecom Limited whose registered company number is 07126854, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
146. Metronet (UK) Limited whose registered company number is 04975343, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
147. Mi Telecom Limited whose registered company number is 02668468, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
148. Microtalk Wholesale Limited whose registered company number is 06477169, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
149. Minotaur Telecom Limited whose registered company number is 08147848, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
150. Mintaka Limited whose registered company number is 07064805, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
151. Mundio Mobile Limited whose registered company number is 04553934, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
152. Nationwide Telephone Assistance Limited whose registered company number is 04315226, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
153. Nectar Cloud Ltd whose registered company number is 07948894, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

154. Need More Time Limited whose registered company number is 03925530, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
155. Net Solutions Europe Limited whose registered company number is 03203624, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
156. Netfuse Telecom Ltd whose registered company number is 07923863, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
157. Net-Work Internet Ltd whose registered company number is 03900685, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
158. Neutrino Networks Ltd whose registered company number is 07457504, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
159. New Call Telecom Limited whose registered company number is 07298834, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
160. Newtel (Guernsey) Limited whose registered company number is 22792 (registered in Guernsey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
161. Newtel Limited whose registered company number is 70523 (Registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
162. NewVoiceMedia Limited whose registered company number is 03602868, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
163. Nexbridge Communications Limited whose registered company number is 07179973, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
164. Nextec (UK) Limited whose registered company number is 06015444, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

165. Nexus Telecommunications Limited whose registered company number is 03895766, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
166. NFON UK Ltd whose registered company number is 08510507, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
167. NG Network Consultancy Ltd whose registered company number is 06920255, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
168. NGN Express Limited whose registered company number is 09292004, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
169. Node 4 Limited whose registered company number is 04759927, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
170. Nodemax Limited whose registered company number is 06127089, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
171. Numbergroup Network Limited whose registered company number is 07390438, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
172. Numbers Plus Ltd whose registered company number is 07611130, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
173. Numbers Telecom Ltd whose registered company number is 07936388, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
174. Odyssey Systems Limited whose registered company number is 02517487, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
175. Opex Hosting Ltd whose registered company number is 04391287, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

176. Orange Business Holdings UK Limited whose registered company number is 03051335, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
177. Orbital Net Limited whose registered company number is 03761505, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
178. Orbtalk Limited whose registered company number is 05382664, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
179. Outsourcery Hosting Ltd whose registered company number is 06854066, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
180. OVH Limited whose registered company number is 05519821, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
181. Oxygen8 Communications UK Limited whose registered company number is 03383285, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
182. Phone Co-Op Numbering Limited whose registered company number is 07432108, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
183. Planet Numbers Limited whose registered company number is 03823269, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
184. Plus Telecom Limited whose registered company number is 04052436, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
185. Port 5060 Limited whose registered company number is 08332891, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
186. Premier Voicemail Limited whose registered company number is 03172426, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

187. Prodigy Internet Limited whose registered company number is 03828160, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
188. Promotions4All Ltd whose registered company number is 07046038, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
189. Proton Telecom Limited whose registered company number is 05570915, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
190. Pulsant (Scotland) Limited whose registered company number is SC236128, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
191. Puma Unified Communications Ltd whose registered company number is 04187304, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
192. Quad Connect Ltd whose registered company number is 08213958, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
193. QX Telecom Ltd whose registered company number is 03820728, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
194. Radius Communications Limited whose registered company number is 08510594, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
195. Real Telekom Limited whose registered company number is 04621678, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
196. Real Time Telecoms Ltd whose registered company number is 05519646, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
197. Reality Network Services Ltd whose registered company number is 04267969, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

198. Red Matter Limited whose registered company number is 06968219, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
199. Red Telecom Solutions Limited whose registered company number is 08902433, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
200. Redcentric Solutions Limited whose registered company number is 08322856, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
201. Relax Telecom Limited whose registered company number is 06777698, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
202. Relish Network PLC whose registered company number is 03921568, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
203. Resilient Plc whose registered company number is 01403177, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
204. Rexcom Tech Limited whose registered company number is 06693961, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
205. RingCentral UK Ltd whose registered company number is 06737634, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
206. Sala Trading Ltd whose registered company number is 03617973, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
207. Served Up Ltd whose registered company number is 04555918, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
208. Sesui Limited whose registered company number is 04975554, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

209. Simetric Telecom Ltd whose registered company number is 07051067, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
210. Simwood eSMS Limited whose registered company number is 03379831, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
211. SingTel (Europe) Limited whose registered company number is 03426947 and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
212. Sipcentric Ltd whose registered company number is 07365592, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
213. Six Degrees Unified Comms Limited whose registered company number is 04335920, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
214. Sky UK Limited whose registered company number is 02906991, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
215. Skype Communications S.a.r.l whose registered company number is B100.468 (registered in Luxembourg, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
216. Sleek Networks Limited whose registered company number is 05611125, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
217. Solutios Limited whose registered company number is 03977874, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
218. SOS Technology Limited whose registered company number is 06822088 and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
219. Sound Advertising Limited whose registered company number is 03218628, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

220. Spacetel UK Limited whose registered company number is 03036383, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
221. Spitfire Network Services Limited whose registered company number is 02657590, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
222. Spoke (Interactive) Limited whose registered company number is 02372101, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
223. Square Systems Limited whose registered company number is 03047595, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
224. Square 1 Communications Limited whose registered company number is 04541344, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
225. Starcomm Limited whose registered company number is 02830288, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
226. Stardex (UK) Limited whose registered company number is SC192625, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
227. Storacall Technology Limited) whose registered company number is 02578478, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
228. Stour Marine Limited whose registered company number is 05914603, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
229. Stream Live Limited whose registered company number is 03487227, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
230. Subhan Universal Ltd whose registered company number is 05642502, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

231. Subtopia Ltd whose registered company number is 08784460, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
232. Supreme Connect Limited whose registered company number is 07752448, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
233. Sure (Guernsey) Limited whose registered company number is 38694 (registered in Guernsey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
234. Sure (Isle of Man) Limited whose registered company number is 004621V (registered in the Isle of Man), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
235. Sure (Jersey) Limited whose registered company number is 84645 (registered in Jersey), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
236. Suretec Systems Limited whose registered company number is SC258005, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
237. SwanseaIT Limited (T/A Blue Telecoms) whose registered company number is 07637869, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
238. Swiftnet Limited whose registered company number is 02469394, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
239. Swisstok Telnet UK Limited whose registered company number is 09409620, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
240. Syntec Limited whose registered company number is 03529985, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
241. Tabsoft Limited whose registered company number is 05846429, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

242. Talk Numbers Limited whose registered company number is 05972811, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
243. TalkTalk Telecoms Group Plc whose registered company number is 07105891, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
244. Telappliant Limited whose registered company number is 04632756, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
245. TelcoSwitch Limited whose registered company number is 09687883, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
246. Telecom2 Limited whose registered company number is 06926334, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
247. TelecomIQ Limited whose registered company number is 08561455, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
248. Telecoms Cloud Networks Limited whose registered company number is 09071980, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
249. Telecoms World Direct Limited whose registered company number is 05861680, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
250. Telecoms World Plc whose registered company number is 03576847, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
251. Teledesign Limited whose registered company number is 03254784, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
252. Telefonica UK Limited whose registered company number is 01743099, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

253. TeleMagic Ltd whose registered company number is 07390681, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
254. Telemix Limited whose registered company number is 05245040, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
255. Telephone Box Limited whose registered company number is 07198723, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
256. TeleSurf Ltd whose registered company number is 06427905, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
257. TeleWare Public Limited Company whose registered company number is 04756742, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
258. TelNG Limited whose registered company number is 05503631, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
259. Telsis Systems Limited whose registered company number is 02312314, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
260. TelXL Limited whose registered company number is 04249562, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
261. Tesla Dynamic Limited whose registered company number is 08161832, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
262. Test2date B.V whose registered company number is 30194024 (registered in the Netherlands), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
263. TGL Service (UK) Limited whose registered company number is 09293520, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

264. The Excell Group Plc whose registered company number is 03678027, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
265. Think Telecom Solutions Ltd whose registered company number is 06995223, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
266. Timico Limited whose registered company number is 04841830, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
267. Tipicall Limited whose registered company number is 03216399, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
268. Tismi BV whose registered company number is 32081827 (registered in the Netherlands), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
269. Tripudio Limited whose registered company number is 05567444, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
270. Truphone Limited whose registered company number is 04187081, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
271. TTNC Limited whose registered company number is 05256607, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
272. Tuxtel Ltd whose registered company number is 06774113, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
273. Twelve Telecom Limited whose registered company number is 07846351, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
274. UK Number Store Limited whose registered company number is 02883497, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

275. United Connect Limited whose registered company number is 03204967, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
276. Udata Infrastructure (UK) Limited whose registered company number is 06957593, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
277. Verizon UK Limited whose registered company number is 02776038, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
278. Viatel Global Services (UK) Limited whose registered company number is 09735402, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
279. Via-Vox Limited whose registered company number is 04646978, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
280. Vibe Communications UK Ltd whose registered company number is 05742367, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
281. Virgin Media Limited whose registered company number is 02591237, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
282. VirtualTalk Limited whose registered company number is 04890632, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
283. Vizion Communication Limited whose registered company number is 08332664, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
284. Vodafone Limited whose registered company number is 01471587, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
285. Voice Simplified Ltd whose registered company number is 07171825, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

286. VoiceHost Limited whose registered company number is 05851537, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
287. Voicenet Solutions Limited whose registered company number is 05083841, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
288. Voiceserve Limited whose registered company number is 04401935, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
289. Voicetec Systems Limited whose registered company number is 03948745, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
290. VOIP-4U Limited whose registered company number is 05142934, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
291. VoIP-Un Limited whose registered company number is 05225497, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
292. Vonage Limited whose registered company number is 05199171, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
293. Vortex Telecom Ltd whose registered company number is 06107494, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
294. Voxbone SA whose registered company number is BE 0478.928.788 (registered in Belgium), and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
295. Voxclever Limited whose registered company number is 06825458, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
296. VSL Networks Ltd whose registered company number is 05413070, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

297. Wavecrest (UK) Ltd whose registered company number is 03042254, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
298. We Love Communications Limited whose registered company number is 07838466, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
299. West Cloud Contact Solutions Limited whose registered company number is 03637644, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
300. Wightfibre Limited whose registered company number is 05470659, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
301. Wi-Manx Limited whose registered company number is 107738C, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
302. Windsor Telecom Plc whose registered company number is 03752620, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
303. Wizaner Limited whose registered company number is 02530183, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
304. XoverX Ltd whose registered company number is 08319701, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
305. Xtec Communications Limited whose registered company number is 03673661, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
306. YayYay Limited whose registered company number is 08738610, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
307. Yim Siam Telecom whose address is PO Box 112, 15-17 Caledonian Road, London, N1 9DX.
308. York Data Services Limited whose registered company number is 04753514, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

309. ZAF Telecom Ltd whose registered company number is 04347883, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
310. Zamir Telecom Limited whose registered company number is 05286517, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
311. Zestel Ltd whose registered company number is 08235267, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
312. Ziron (UK) Ltd whose registered company number is 07597853, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
313. Zsquare Global Solutions Limited whose registered company number is 04185214, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

Draft legal instruments: Proposals for directions

Section 1: Proposed directions for BT

Proposal for a direction requiring the publication of KPIs by BT for specified wholesale ISDN2 exchange line services

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 9.1B (Quality of Service) proposed to be imposed on BT in respect of wholesale ISDN2 exchange line services

Background

1. Today, Ofcom is consulting, in a consultation entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, among other things, to impose certain SMP conditions on BT in relation to the market for wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area.
2. Under proposed Condition 9.1B, set out at Annex 6 to this consultation, Ofcom is proposing that BT must publish all such information as to the quality of service in relation to network access provided by BT pursuant to proposed Conditions 1B, 1C and 2 (as applicable), in such manner and form, and including such content, as Ofcom may from time to time direct.

Proposal to give a direction

3. Ofcom is proposing, in accordance with section 49 of the Act, to give a direction pursuant to proposed Condition 9.1B requiring the Dominant Provider to publish KPIs for wholesale ISDN2 exchange line services.
4. The proposed direction specifying KPIs for wholesale ISDN2 exchange line services is set out in the Schedule to this Notification.
5. The effect of, and the reasons for giving, the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom's duties and legal tests

6. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 3 complies with the requirements of section 49(2) of the Act.
7. In making the proposals referred to in paragraph 3, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

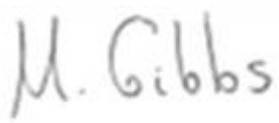
8. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
9. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

10. Except as otherwise defined in the Notification, words or expressions used shall have the same meaning as they have in the Act.
11. In this Notification—
 - a) “**Act**” means the Communications Act 2003 (c.21);
 - b) “**BT**” means British Telecommunications plc, whose registered company number is 180000, and any of its subsidiaries or holding companies, or any subsidiaries of such holding companies, as defined in section 1159 of the Companies Act 2006;
 - c) “**Hull Area**” means the area defined as the ‘Licensed Area’ in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc;
 - d) “**ISDN2 exchange line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Basic Rate Access standard as defined by the International Telecommunications Union, providing two digital channels with a bandwidth of 64 kbit/s each plus a control channel of 16kbit/s over a common digital bearer circuit;
 - e) “**KPIs**” means key performance indicators;
 - f) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002; and
 - g) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (c.30).

12. The Schedule to this Notification shall form part of this Notification.

Signed

A rectangular box containing a handwritten signature in black ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [XX] requiring the publication of KPIs by BT for specified wholesale ISDN2 exchange line services

Background

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals to (among other things) impose certain SMP conditions on BT in relation to wholesale ISDN2 exchange line services.
2. Annex 6 to the 2016 NMR Consultation set out the notification under section 49A of the Act in which Ofcom set out for domestic consultation its proposal to give a direction to BT requiring the publication of certain key performance indicators for specified wholesale ISDN2 exchange line services. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2017.
3. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the Notification, with the reasons and effect explained in the accompanying explanatory statement.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has significant market power in the market for wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area.
5. SMP service Condition [XX] (quality of service) was set in relation to, amongst others, the market referred to in paragraph 4 and this Direction concerns matters to which Condition [XX] relates.
6. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with the relevant duties set out in sections 3 and 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

8. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
9. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Notification setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
10. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Notification and the statement accompanying this notification as it considers appropriate.

[DRAFT] Direction

11. Ofcom hereby, pursuant to section 49 of the Act and Condition [XX], directs the Dominant Provider to act as prescribed in paragraphs 12 to 15 below.
12. The Dominant Provider must publish to Third Party Customers the information specified in paragraphs 1, 2, 3 and 8 of Part 1 and paragraphs 1 and 3 of Part 2 (as applicable) of the Annex to this Direction in relation to the provision of wholesale ISDN2 exchange line services, as required in paragraph 15 below.
13. The Dominant Provider must provide to individual Third Party Customers on request the information specified in paragraph 7 of Part 1 of Annex A to this Direction in relation to the provision to them of wholesale ISDN2 exchange line services, as required in paragraph 15 below.
14. The Dominant Provider must provide to Ofcom, by means of electronic mail to such person in Ofcom as notified from time to time, the information specified in paragraphs 5 and 6 of Part 1 and paragraphs 2 and 3 of Part 2 (as applicable) of the Annex to this Direction in relation to the provision of wholesale ISDN2 exchange line services, as required in paragraph 15 below.
15. The information required by paragraphs 12 to 14 above must be published and provided as required by the Dominant Provider within 14 Working Days of the last Working Day of every month in respect of the previous month.
16. The Annex to this Direction forms part of the Direction.
17. Nothing in this Direction shall require the Dominant Provider to publish confidential information relating to its business or that of a Third Party.
18. For the purpose of interpreting this Direction the following definitions shall apply:
 - a) **“2014 FAMR Legal Instrument”** means the legal instrument set out at Annex 29 to the 2014 FAMR Statement;
 - b) **“2014 FAMR Statement”** means the statements entitled Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Statement on the markets, market power determinations and remedies and Fixed access market reviews: wholesale local

access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Volume 2: LLU and WLR Charge Controls published on 26 June 2014;

- c) “**Access Agreement**” means an agreement entered into between the Dominant Provider and a Third Party for the provision of the ISDN2 exchange line services;
- d) “**Act**” means the Communications Act 2003;
- e) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined in section 1159 of the Companies Act 2006;
- f) “**Dominant Provider**” means BT;
- g) “**Fault**” means a degradation or problem with an ISDN2 exchange line service that is identified by the Dominant Provider or a Third Party and which has been registered on the Dominant Provider’s operational support system;
- h) “**Hull Area**” means the area defined as the ‘Licensed Area’ in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc;
- i) “**Installed Base**” means the average number of ISDN2 channels that are in use during the relevant month;
- j) “**ISDN2 exchange line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Basic Rate Access standard as defined by the International Telecommunications Union, providing two digital channels with a bandwidth of 64 kbit/s each plus a control channel of 16kbit/s over a common digital bearer circuit;;
- k) “**KPI**” means key performance indicator;
- l) “**MBORC**” (Matters Beyond Our Reasonable Control) means a force majeure event under the relevant Access Agreement, the occurrence of which releases the Dominant Provider from the liability to make any payment under the corresponding Service Level Guarantee;
- m) “**MBORC Declaration**” means a declaration made by the Dominant Provider that an MBORC has occurred in relation to ISDN2 exchange line services and includes both ‘major’ and ‘local’ MBORC Declarations;
- n) “**Notification**” means the Notification at [XX] of the statement [narrowband market reviews] dated [XX];
- o) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002 (c. 11);
- p) “**Order**” means a request for an ISDN2 exchange line submitted to the Dominant Provider by a Third Party;

- q) “**Relevant Region**” means the ten regions specified in Schedule 3 to Part 1 of the 2014 FAMR Legal Instrument or such other regions as Ofcom may direct from time to time;
- r) “**Restored Service**” means the point at which the ISDN2 exchange line service in relation to which a Fault was registered becomes available again for use by the Third Party;
- s) “**Scheduled Outages**” means the defined periods of time notified to Third Parties in accordance with the terms of the Dominant Provider’s contract for wholesale ISDN2 exchange line services whereby the Dominant Provider’s operational support system is not available for use by Third Parties in order for the Dominant Provider to perform certain tasks including, but not limited to, routine maintenance, changing configurations, software upgrades and updating facilities and may include specific maintenance activities;
- t) “**Service Level Commitment**” means the quality standards that the Dominant Provider must meet when performing its obligations;
- u) “**Service Level Guarantees**” means a commitment specifying the amount payable by the Dominant Provider to a Third Party for a failure to adhere to a Service Level Commitment;
- v) “**Service Maintenance Level 2**” means the fault clearance timescale specification of that name as defined by the Dominant Provider in its contracts for the provision of wholesale ISDN2 exchange line services to Third Parties;
- w) “**Service Maintenance Level 3**” means the fault clearance timescale specification of that name as defined by the Dominant Provider in its contracts for the provision of wholesale ISDN2 exchange line services to Third Parties;
- x) “**Third Party**” means a person providing a public electronic communications network or a person providing a public electronic communications service;
- y) “**Third Party Customer**” means a Third Party purchasing wholesale ISDN2 exchange line services from the Dominant Provider;
- z) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (c.30); and
- aa) “**Working Day**” means any day other than Saturdays, Sundays, public holidays or bank holidays in the United Kingdom.

19. For the purpose of interpreting this Direction:

- a) except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them above and otherwise any word or expression shall have the same meaning as it has in the Act, or if it has no meaning there, in Part 2 of Schedule 1 to the Notification.
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Schedule shall be construed accordingly; and

d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.

20. This Direction will take effect on [XX].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Annex A

Key Performance Indicators for wholesale ISDN2 exchange line services

Part 1: Indicators

1. The Dominant Provider must publish to Third Party Customers the information required in KPIs (i) to (viii) below in relation to the provision of ISDN2 exchange line services, in at least the detail outlined below:
 - a) an industry average (for the avoidance of doubt this includes provision by the Dominant Provider to itself where it does so).
2. The Dominant Provider must also publish to Third Party Customers the information required in KPIs (i) to (vi) below in relation to the provision of ISDN2 exchange line services to itself.
3. In relation to KPIs (i) to (vi), the Dominant Provider must also publish to Third Party Customers separate KPI results where options exist for Third Parties (excluding the Dominant Provider) to purchase different ISDN2 exchange line services.
4. Where the Dominant Provider is required to publish KPIs under paragraphs 1 to 3 above, it must publish KPIs (i) to (viii) for the United Kingdom as a whole. In addition, in relation to KPIs (iii) and (iv), the Dominant Provider must publish KPIs split by reference to each Relevant Region.
5. The Dominant Provider must provide to Ofcom KPIs (i) to (viii) as described in paragraphs 1 to 4 above and paragraph 8 below by electronic mail to the designated person.
6. The Dominant Provider must also provide to Ofcom data relating to specific Third Parties upon request.
7. The Dominant Provider must provide to each Third Party Customer upon request, on a confidential basis, the information required in KPIs (i) to (vi) below for that Third Party Customer.
8. Where the Dominant Provider does not provide ISDN2 exchange line services to itself, it must instead publish or provide to Third Party Customers (as required) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to end users.

KPI(i) - Percentage of installed base reported as faulty

the number of Faults that achieved Restored Service during the relevant month, expressed as a percentage of the Installed Base;

KPI(ii) - Average time to restore service

the average time (in working hours) during the relevant month for the Dominant Provider to achieve Restored Service after a Fault has been registered in relation to each of:

(a) Service Maintenance Level 2; and

(b) Service Maintenance Level 3;

KPI(iii) – Percentage of faults restored on time for services subject to Service Maintenance Level 2

for services subject to Service Maintenance Level 2, the percentage of Faults during the relevant month whereby the Dominant Provider achieved a Restored Service within the timescales for Service Maintenance Level 2;

KPI(iv) – Percentage of faults restored on time for services subject to Service Maintenance Level 3

for services subject to Service Maintenance Level 3, the percentage of Faults during the relevant month whereby the Dominant Provider achieved a Restored Service within the timescales for Service Maintenance Level 3;

KPI(v) - Timing of fault repairs

the percentage of Faults during the relevant month that achieved a Restored Service on each of the first ten calendar days from the date on which the Fault was validated and registered on the Dominant Provider's operational support system;

KPI(vi) - Percentage of repeat faults

the percentage of Faults for which Restored Service was achieved in the relevant month that were repeat faults, where a repeat fault is a Fault registered within 30 calendar days of the Dominant Provider having achieved Restored Service of a previous Fault with the same service;

KPI(vii) - Gateway availability (excluding Scheduled Outages)

the percentage of actual availability of the Dominant Provider's ordering gateway during the relevant month compared to the potential availability during the same period as published by the Dominant Provider, excluding any Scheduled Outages; and

KPI(viii) - Gateway availability (including Scheduled Outages)

the percentage of actual availability of the Dominant Provider's ordering gateway during the relevant month compared to the potential availability during the same period as published by the Dominant Provider, including any Scheduled Outages.

Part 2: Volumes

1. The Dominant Provider must publish to Third Party Customers the information required in KPIs (i) to (iii) below for the United Kingdom as a whole in relation to the provision of ISDN2 exchange line services to all Third Party Customers (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of ISDN2 exchange line services to itself).
2. The Dominant Provider must provide to Ofcom by electronic mail the information required in KPIs (i) to (iii) below in relation to the provision of ISDN2 exchange line

services to itself. The Dominant Provider shall also provide to Ofcom data relating to specific Third Parties upon request.

3. Where the Dominant Provider does not provide ISDN2 exchange line services to itself, it must instead publish or provide to Third Party Customers and Ofcom (as required) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to end users.

KPI(i) - Volume of Installed Base

the Installed Base during the relevant month;

KPI(ii) - Volume of completed faults

the number of Faults where the Dominant Provider subsequently achieves Restored Service during the relevant month in relation to each of:

(a) Service Maintenance Level 2; and

(b) Service Maintenance Level 3;

KPI(iii) – Volume of repairs affected by MBORC declarations

the total number of Faults during the relevant month that were not completed within either Service Maintenance Level 2 or Service Maintenance Level 3 contracted repair times (as applicable) that were subject to an MBORC Declaration by the Dominant Provider.

Proposal for a direction requiring the publication of KPIs by BT for specified wholesale ISDN30 exchange line services

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 9.1B (Quality of Service) proposed to be imposed on BT in respect of wholesale ISDN30 exchange line services

Background

1. Today, Ofcom is consulting, in a consultation entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing (among other things) to impose certain SMP conditions on BT in relation to wholesale ISDN30 Exchange Line Services.
2. Under proposed Condition 9.1B, set out at Annex 6 to this consultation, Ofcom is proposing that BT must publish all such information as to the quality of service in relation to network access provided by BT pursuant to proposed Conditions 1B, 1C and 2 (as applicable), in such manner and form, and including such content, as Ofcom may from time to time direct.

Proposal to give a direction

3. Ofcom is proposing, in accordance with section 49 of the Act, to give a direction pursuant to proposed Condition 9.1B requiring the Dominant Provider to publish KPIs for wholesale ISDN30 exchange line services.
4. The proposed direction specifying KPIs for wholesale ISDN30 exchange line services is set out in the Schedule to this Notification.
5. The effect of, and the reasons for giving, the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom's duties and legal tests

6. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 3 complies with the requirements of section 49(2) of the Act.
7. In making the proposals referred to in paragraph 3, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Representations

8. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
9. In accordance with section 49C of the Act, a copy of this Notification will be sent to the Secretary of State.

Interpretation

10. Except as otherwise defined in this Notification, words or expressions used shall have the same meaning as they have been ascribed in the Act.

11. For the purpose of interpreting this Notification—

- a) except in so far as the context otherwise requires, words or expressions shall have the meaning assigned to them in paragraph 9 below, and otherwise any word or expression shall have the same meaning as it has in the Act;
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Notification shall be construed accordingly; and
- d) the Interpretation Act 1978 (c.30) shall apply as if this Notification were an Act of Parliament.

12. In this Notification—

- a) “**Act**” means the Communications Act 2003 (c.21);
- b) “**BT**” means British Telecommunications plc, whose registered company number is 180000, and any of its subsidiaries or holding companies, or any subsidiaries of such holding companies, as defined in section 1159 of the Companies Act 2006;
- c) “**Hull Area**” means the area defined as the ‘Licensed Area’ in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc;
- d) “**ISDN30 exchange line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Primary Rate Access standard as defined by the International Telecommunications Union, providing up to 30 digital channels with a bandwidth of 64 kbit/s per channel plus a control channel of 64 kbit/s;
- e) “**KPIs**” means key performance indicators;
- f) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002; and
- g) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (c.30).

13. The Schedule to this Notification shall form part of this Notification.

Signed

A rectangular box containing a handwritten signature in black ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [XX] requiring the publication of KPIs by BT for specified wholesale ISDN30 exchange line services

Background

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals to, among other things, impose certain SMP conditions on BT in relation to wholesale ISDN30 Exchange Line Services.
2. Annex 6 to the 2016 NMR Consultation set out the notification under section 49A of the Act in which Ofcom set out for domestic consultation its proposal to give a direction to BT requiring the publication of certain key performance indicators for specified wholesale ISDN30 exchange line services. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2017.
3. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the Notification, with the reasons and effect explained in the accompanying explanatory statement.
4. Ofcom determined in the review referred to in paragraph 3 above, that BT has significant market power in the market for wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area.
5. SMP service Condition [XX] (quality of service) was set in relation to, amongst others, the market referred to in paragraph 3 and this Direction concerns matters to which Condition [XX] relates.
6. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with the relevant duties set out in sections 3 and 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

8. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
9. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Notification setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
10. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Notification and the statement accompanying this notification as it considers appropriate.

[DRAFT] Direction

11. Ofcom hereby, pursuant to section 49 of the Act and Condition [XX], directs the Dominant Provider to act as prescribed in paragraphs 12 to 15 below
12. The Dominant Provider must publish to Third Party Customers the information specified in paragraphs 1, 2, 3 and 8 of Part 1 and paragraphs 1 and 3 of Part 2 (as applicable) of Annex A to this Direction in relation to the provision of wholesale ISDN30 exchange line services, as required in paragraph 15 below.
13. The Dominant Provider must provide to individual Third Party Customers on request the information specified in paragraph 7 of Part 1 of Annex A to this Direction in relation to the provision to them of wholesale ISDN30 exchange line services, as required in paragraph 15 below.
14. The Dominant Provider must provide to Ofcom, by means of electronic mail to such person in Ofcom as notified from time to time, the information specified in paragraphs 5 and 6 of Part 1 and paragraphs 2 and 3 of Part 2 (as applicable) of Annex A to this Direction in relation to the provision of ISDN30 exchange line services, as required in paragraph 15 below.
15. The information required by paragraphs 12 to 14 above must be published and provided as required by the Dominant Provider within 14 Working Days of the last Working Day of every month in respect of the previous month.
16. The Annex to this Direction forms part of the Direction.
17. Nothing in this Direction shall require the Dominant Provider to publish confidential information relating to its business or that of a Third Party.
18. For the purpose of interpreting this Direction the following definitions shall apply:
 - a) **“2014 FAMR Legal Instrument”** means the legal instrument set out at Annex 29 to the 2014 FAMR Statement;
 - b) **“2014 FAMR Statement”** means the statements entitled Fixed access market reviews: wholesale local access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30 Volume 1: Statement on the markets, market power determinations and remedies and Fixed access market reviews: wholesale local

access, wholesale fixed analogue exchange lines, ISDN2 and ISDN30: Volume 2: LLU and WLR Charge Controls published on 26 June 2014

- c) “**Access Agreement**” means an agreement entered into between the Dominant Provider and a Third Party for the provision of ISDN30 exchange line services;
- d) “**Act**” means the Communications Act 2003;
- e) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined in section 1159 of the Companies Act 2006;
- f) “**Dominant Provider**” means BT;
- g) “**Fault**” means a degradation or problem with an ISDN30 exchange line service that is identified by the Dominant Provider or a Third Party and which has been registered on the Dominant Provider’s operational support system;
- h) “**Hull Area**” means the area defined as the ‘Licensed Area’ in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communications (Hull) plc;
- i) “**Installed Base**” means the average number of ISDN30 channels that are in use during the relevant month;
- j) “**ISDN30 exchange line**” means a digital multiline telephone service conforming to the Integrated Services Digital Network (ISDN) Primary Rate Access standard as defined by the International Telecommunications Union, providing up to 30 digital channels with a bandwidth of 64 kbit/s per channel plus a control channel of 64 kbit/s
- k) “**KPI**” means key performance indicator;
- l) “**MBORC**” (Matters Beyond Our Reasonable Control) means a force majeure event under the relevant Access Agreement, the occurrence of which releases the Dominant Provider from the liability to make any payment under the corresponding Service Level Guarantee;
- m) “**MBORC Declaration**” means a declaration made by the Dominant Provider that an MBORC has occurred in relation to ISDN30 exchange line services and includes both ‘major’ and ‘local’ MBORC Declarations;
- n) “**Notification**” means the Notification at [XX] the statement [narrowband market reviews] dated [XX];
- o) “**Ofcom**” means the Office of Communications as established pursuant to section 1(1) of the Office of Communications Act 2002 (c. 11);
- p) “**Order**” means a request for an ISDN30 exchange line submitted to the Dominant Provider by a Third Party;

- q) “**Relevant Region**” means the ten regions specified in Schedule 3 to Part 1 of the 2014 FAMR Legal Instrument or such other regions as Ofcom may direct from time to time;
- r) “**Restored Service**” means the point at which the ISDN30 exchange line service in relation to which a Fault was registered becomes available again for use by the Third Party;
- s) “**Scheduled Outages**” means the defined periods of time notified to Third Parties in accordance with the terms of the Dominant Provider’s contract for wholesale ISDN30 exchange line services whereby the Dominant Provider’s operational support system is not available for use by Third Parties in order for the Dominant Provider to perform certain tasks including, but not limited to, routine maintenance, changing configurations, software upgrades and updating facilities and may include specific maintenance activities;
- t) “**Service Level Commitment**” means the quality standards that the Dominant Provider must meet when performing its obligations;
- u) “**Service Level Guarantees**” means a commitment specifying the amount payable by the Dominant Provider to a Third Party for a failure to adhere to a Service Level Commitment;
- v) “**Service Maintenance Level 2**” means the fault clearance timescale specification of that name as defined by the Dominant Provider in its contracts for the provision of wholesale ISDN30 exchange line services to Third Parties;
- w) “**Service Maintenance Level 3**” means the fault clearance timescale specification of that name as defined by the Dominant Provider in its contracts for the provision of wholesale ISDN30 exchange line services to Third Parties;
- x) “**Third Party**” means a person providing a public electronic communications network or a person providing a public electronic communications service;
- y) “**Third Party Customer**” means a Third Party purchasing wholesale ISDN30 exchange line services from the Dominant Provider;
- z) “**United Kingdom**” has the meaning given to it in the Interpretation Act 1978 (c.30);
- aa) “**Working Day**” means any day other than Saturdays, Sundays, public holidays or bank holidays in the United Kingdom.

19. For the purpose of interpreting this Direction:

- a) except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them above and otherwise any word or expression shall have the same meaning as it has in the Act, or if it has no meaning there, in Part 2 of Schedule 1 to the Notification.
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Schedule shall be construed accordingly; and

d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.

20. This Direction will take effect on [XX].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Annex A

Key Performance Indicators for wholesale ISDN30 exchange line services

Part 1: Indicators

1. The Dominant Provider must publish to Third Party Customers the information required in KPIs (i) to (viii) below in relation to the provision of ISDN30 exchange line services, in at least the detail outlined below:
 - a) an industry average (for the avoidance of doubt this includes provision by the Dominant Provider to itself where it does so).
2. The Dominant Provider must also publish to Third Party Customers the information required in KPIs (i) to (vi) below in relation to the provision of ISDN30 exchange line services to itself.
3. In relation to KPIs (i) to (vi), the Dominant Provider must also publish to Third Party Customers separate KPI results where options exist for Third Parties (excluding the Dominant Provider) to purchase different ISDN30 exchange line services.
4. Where the Dominant Provider is required to publish KPIs under paragraphs 1 to 3 above, it must publish KPIs (i) to (viii) for the United Kingdom as a whole. In addition, in relation to KPIs (iii) and (iv), the Dominant Provider must publish KPIs split by reference to each Relevant Region.
5. The Dominant Provider must provide to Ofcom KPIs (i) to (viii) as described in paragraphs 1 to 4 above and paragraph 8 below by electronic mail to the designated person.
6. The Dominant Provider must also provide to Ofcom data relating to specific Third Parties upon request.
7. The Dominant Provider must provide to each Third Party Customer upon request, on a confidential basis, the information required in KPIs (i) to (vi) below for that Third Party Customer.
8. Where the Dominant Provider does not provide ISDN30 exchange line services to itself, it must instead publish or provide to Third Party Customers (as required) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to end users.

KPI(i) - Percentage of installed base reported as faulty

the number of Faults that achieved Restored Service during the relevant month, expressed as a percentage of the Installed Base;

KPI(ii) - Average time to restore service

the average time (in working hours) during the relevant month for the Dominant Provider to achieve Restored Service after a Fault has been registered in relation to each of:

(a) Service Maintenance Level 2; and

(b) Service Maintenance Level 3;

KPI(iii) – Percentage of faults restored on time for services subject to Service Maintenance Level 2

for services subject to Service Maintenance Level 2, the percentage of Faults during the relevant month whereby the Dominant Provider achieved a Restored Service within the timescales for Service Maintenance Level 2;

KPI(iv) – Percentage of faults restored on time for services subject to Service Maintenance Level 3

for services subject to Service Maintenance Level 3, the percentage of Faults during the relevant month whereby the Dominant Provider achieved a Restored Service within the timescales for Service Maintenance Level 3;

KPI(v) - Timing of fault repairs

the percentage of Faults during the relevant month that achieved a Restored Service on each of the first ten calendar days from the date on which the Fault was validated and registered on the Dominant Provider's operational support system;

KPI(vi) - Percentage of repeat faults

the percentage of Faults for which Restored Service was achieved in the relevant month that were repeat faults, where a repeat fault is a Fault registered within 30 calendar days of the Dominant Provider having achieved Restored Service of a previous Fault with the same service;

KPI(vii) - Gateway availability (excluding Scheduled Outages)

the percentage of actual availability of the Dominant Provider's ordering gateway during the relevant month compared to the potential availability during the same period as published by the Dominant Provider, excluding any Scheduled Outages; and

KPI(viii) - Gateway availability (including Scheduled Outages)

the percentage of actual availability of the Dominant Provider's ordering gateway during the relevant month compared to the potential availability during the same period as published by the Dominant Provider, including any Scheduled Outages.

Part 2: Volumes

1. The Dominant Provider must publish to Third Party Customers the information required in KPIs (i) to (iii) below for the United Kingdom as a whole in relation to the provision of ISDN30 exchange line services to all Third Party Customers (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of ISDN30 exchange line services to itself).

2. The Dominant Provider must provide to Ofcom by electronic mail the information required in KPIs (i) to (iii) below in relation to the provision of ISDN30 exchange line services to itself. The Dominant Provider shall also provide to Ofcom data relating to specific Third Parties upon request.
3. Where the Dominant Provider does not provide ISDN30 exchange line services to itself, it must instead publish or provide to Third Party Customers and Ofcom (as required) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to end users.

KPI(i) - Volume of Installed Base

the Installed Base during the relevant month;

KPI(ii) - Volume of completed faults

the number of Faults where the Dominant Provider subsequently achieves Restored Service during the relevant month in relation to each of:

- (a) Service Maintenance Level 2; and
- (b) Service Maintenance Level 3;

KPI(iii) – Volume of repairs impacted by MBORC declarations

the total number of Faults during the relevant month that were not completed within either Service Maintenance Level 2 or Service Maintenance Level 3 contracted repair times (as applicable) that were subject to an MBORC Declaration by the Dominant Provider.

Proposal for a direction specifying the Regulatory Accounting Principles

Notification of proposals under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 specifying the Regulatory Accounting Principles

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting – Final Statement*” (“**2014 RFR Statement**”), which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that Ofcom considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s policy conclusions was that in preparing the Regulatory Financial Statements, BT should be required to comply with, among others, the Regulatory Accounting Principles.
2. Today, Ofcom is consulting, in a consultation entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10.8, set out at Annex 6 to this consultation, BT is required to comply with, among others, the Regulatory Accounting Principles.
5. Under proposed Condition 10.4 set out at Annex 6 to this consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 10.
6. This Notification sets out proposals specifying the Regulatory Accounting Principles in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to give a direction pursuant to proposed Condition 10.4 specifying the Regulatory Accounting Principles in relation to each of the markets set out in paragraph 2 and in relation to interconnect circuits.
8. The proposed direction is set out in the Schedule to this Notification.
9. The effect of and reasons for giving the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7 Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

12. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in blue ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] specifying the Regulatory Accounting Principles

Background

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraph 1 and 2 above included proposals to issue a direction specifying the Regulatory Accounting Principles. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10.8], set out in the 2017 NMR Notification, BT is required to comply with, among others, the Regulatory Accounting Principles.

7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - e) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - f) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - g) proportionate to what it is intended to achieve; and
 - h) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], gives the direction to BT specifying the Regulatory Accounting Principles, as set out in the Annex to this Direction, in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits.
14. The Annex to this direction forms part of the Direction.

Interpretation

15. For the purpose of interpreting this Direction:
 - a) except as otherwise defined in paragraph 16 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in

SMP conditions set out in the 2017 NMR Notification, and otherwise any word or expression has the same meaning as it has in the Act;

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

16. For the purposes of interpreting this Direction the following definitions shall apply,

- a) “**2017 NMR Notification**” means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE]; and
- b) “**Regulatory Financial Reporting**” means the whole of the Regulatory Financial Statements, the Accounting Methodology Documents, the accounting records and the Regulatory Accounting System.

17. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Annex - The Regulatory Accounting Principles

The Regulatory Accounting Principles which apply for the purposes of preparing and maintaining the Regulatory Financial Statements, the Accounting Methodology Documents, the accounting records and the Regulatory Accounting System are the following:

1. Completeness

Regulatory Financial Reporting must encompass all revenues, costs, assets and liabilities of the Markets and Technical Areas, together with residual activities (including wholesale and retail).

2. Accuracy

Regulatory Financial Reporting must maintain an adequate degree of accuracy, such that the information included in the Regulatory Financial Statements is free from material errors and double-counting. Materiality must be determined in accordance with the definition set out below.

3. Objectivity

Each element of Regulatory Financial Reporting, so far as is possible, must take account of all the available financial and operational data that is relevant to that element. Where an element of Regulatory Financial Reporting is based on assumptions, those assumptions must be justified and supported by all available relevant empirical data. The assumptions must not be formulated in a manner which unfairly benefits BT or any other operator or entity, or creates undue bias towards any part of BT's or any other operator's business or product.

4. Consistency with regulatory decisions

Regulatory Financial Reporting must be consistent with Ofcom's regulatory decisions as directed by Ofcom.

5. Causality

Regulatory Financial Reporting must ensure that:

- a) revenues (including revenues resulting from transfer charges);
- b) costs (including costs resulting from transfer charges);
- c) assets; and
- d) liabilities

are attributed in accordance with the activities which cause the revenues to be earned, or costs to be incurred, or assets to be acquired, or liabilities to be incurred respectively.

6. Compliance with the statutory accounting standards

Regulatory Financial Reporting must comply with the accounting standards applied in BT's statutory accounts; with the exception of any departures as Ofcom may direct from time to time.

7. Consistency of the Regulatory Financial Statements as a whole and from one period to another

Regulatory Financial Reporting must be applied consistently in all the Regulatory Financial Statements relating to the same period.

Regulatory Financial Reporting must be applied consistently from one period to another.

All the changes in Regulatory Financial Reporting from one period to another must be justified by reference to the Regulatory Accounting Principles.

If there are material changes in Regulatory Financial Reporting from one period to another, BT must restate the previous period's Regulatory Financial Statements, applying the changes to the Regulatory Financial Statements for that period.

The Regulatory Accounting Principles must be applied to all material items of revenue, costs, assets and liabilities in the Regulatory Financial Statements, or material changes in those items. A material item of revenue, costs, assets or liabilities, or a material change in those items, is one which is reasonably expected by virtue of its magnitude or nature, to affect the views of any user of the Regulatory Financial Statements.

Where it appears to BT that any of the Regulatory Accounting Principles set out above conflict with each other in a particular case, BT must resolve such conflict by giving priority to them in the order in which they are set out above, with a previous principle taking precedence over a later principle.

Proposal for a direction specifying the requirements in relation to regulatory asset value

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis.

Background

1. On 20 May 2014, Ofcom published a policy statement entitled "*Regulatory Financial Reporting – Final Statement*" ("**2014 RFR Statement**"), which set out Ofcom's conclusions on the requirements for regulatory financial reporting that Ofcom considered should be applied to BT in markets in which BT has SMP. Ofcom decided, among other things, to introduce a requirement to prepare all Regulatory Financial Statements, explanations and other required information on a regulatory asset value current cost basis.
2. Today, Ofcom is consulting, in a consultation entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10.10, set out at Annex 6 to this consultation, BT shall prepare all Regulatory Financial Statements, explanations or other information required by virtue of proposed Condition 10 on the regulatory asset value adjusted current costs basis.
5. Under proposed Condition 10.4 set out at Annex 6 to this consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under proposed Condition 10.

6. This Notification sets out proposals specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to give a direction pursuant to proposed Condition 10.4 specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.
8. The proposed direction is set out in the Schedule to this Notification.
9. The effect of and reasons for giving the proposed direction are set out in 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

12. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in black ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] specifying the requirements in relation to regulatory asset value

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction proposals specifying the requirements in relation to the preparation of the Regulatory Financial Statements on a regulatory asset value adjusted current costs basis. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10.10], set out in the 2017 NMR Notification, BT shall prepare all Regulatory Financial Statements, explanations or other information required by virtue of proposed Condition 10 on regulatory asset value adjusted current costs basis.
7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].

8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT to act as prescribed in paragraph 14 below in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits.
14. In preparing the Regulatory Financial Statements, explanations and other required information on a regulatory asset value adjusted current costs basis, BT shall value the Access Ducts capitalised prior to 1 August 1997 on the basis of the closing historical cost on 31 March 2005 which is indexed by the Retail Price Index from 31 March 2005.

Interpretation

15. For the purpose of interpreting this Direction:
 - a) except as otherwise defined in paragraph 16 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 NMR Notification, and otherwise any word or expression has the same meaning as it has in the Act;

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

16. For the purposes of interpreting this Direction the following definitions shall apply,

- a) “**2017 NMR Notification**” means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE];
- b) “**Access Ducts**“ mean the underground pipes which hold copper and fibre lines and which are used in the part of BT’s network which connects directly to customers from the local telephone exchange; and
- c) “**Retail Price Index**” means the measure of inflation which is published monthly by the Office for National Statistics.

17. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Proposal for a direction specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting – Final Statement*” (“**2014 RFR Statement**”), which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that Ofcom considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s conclusions was that in preparing the Regulatory Financial Statements, BT should be required to comply with, among others, specified transparency requirements.
2. Today, Ofcom is consulting, in a consultation entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10.4 set out at Annex 6 to this consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 10.
5. This Notification sets out proposals specifying the level of transparency required to be met by BT in preparing and maintaining the accounting records, the Accounting

Methodology Documents and the Regulatory Financial Statements in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

6. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”) to give a direction pursuant to proposed Condition 10.4 specifying the level of transparency required to be met by BT in preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.
7. The proposed direction is set out in the Schedule to this Notification.
8. The effect of and reasons for giving the proposed direction are set out in 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

9. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 6 complies with the requirements of section 49(2) of the Act.
10. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

11. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
12. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

13. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in blue ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] specifying the transparency requirements for the purposes of preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction specifying the level of transparency required to be met by BT in preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].

7. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
9. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
10. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
11. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

12. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT to act as prescribed in paragraph 13 below in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits.
13. In preparing and maintaining the accounting records, the Accounting Methodology Documents and the Regulatory Financial Statements, BT shall ensure that any data, information, description, material or explanatory document prepared in respect of accounting and other methods used in the preparation of the accounting records and Regulatory Financial Statements shall be sufficiently transparent and prepared such that a suitably informed reader can gain a clear understanding of such data, information, description, material or explanatory document, and, if necessary, the overall structure of BT's financial and information systems from which regulatory accounting data is derived and in particular the sequence of the processing and 'cascade' effect of the intermediate cost centres; and gain a clear understanding of all the material, methodologies and drivers (e.g. systems, Processes and procedures) applied in the preparation of regulatory accounting data.

Interpretation

14. For the purpose of interpreting this Direction:

- a) except as otherwise defined in paragraph 15 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 NMR Notification, and otherwise any word or expression has the same meaning as it has in the Act;
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
- d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.

15. For the purposes of interpreting this Direction the following definition shall apply:

- a) “**2017 NMR Notification**” means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE];

16. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Proposal for a direction setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled "*Regulatory Financial Reporting – Final Statement*" ("**2014 RFR Statement**"), which set out (among other things) Ofcom's policy conclusions, following consultation, on the regulatory financial reporting policy that Ofcom considered should be applied to BT in markets in which BT has significant market power. One of Ofcom's conclusions was to specify the level of audit which must, where so required by Ofcom, be secured by BT in obtaining:
 - a) an audit to "fairly presents in accordance with" ("FPIA") standards; and
 - b) an audit to "properly prepared in accordance with" ("PPIA") standards.
2. Today, Ofcom is consulting, in a consultation entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10.8(iii), set out at Annex 6 to this consultation, BT is required to secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time.

5. Under proposed Condition 10.4 set out at Annex 6 to this consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition 10.
6. This Notification sets out proposals setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the "**Act**") to give a direction pursuant to proposed Condition 10.4 setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits. The proposed direction is set out in the Schedule to this Notification.
8. The effect of and reasons for giving the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom's duties and legal tests

9. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Act.
10. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

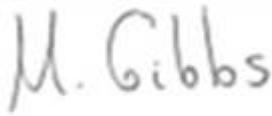
11. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2018.
12. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

13. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this

document. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A handwritten signature in black ink that reads "M. Gibbs". The signature is written in a cursive style and is contained within a thin black rectangular border.

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction setting the requirements in relation to audit, form of the FPIA opinion and form of PPIA opinion for Regulatory Financial Statements. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10.8(iii)], set out in the 2017 NMR Notification, BT is required to secure the expression of an audit opinion upon the Regulatory Financial Statements as notified by Ofcom from time to time.
7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].

8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT to act as prescribed in paragraphs 14 to 16 below in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits.
14. BT shall secure, to the satisfaction of Ofcom, an appropriate audit opinion in respect of the published Regulatory Financial Statements as a whole, in respect of each Regulatory Financial Statement and in respect of groups of Regulatory Financial Statement, to either “fairly presents in accordance with” (“FPIA”) standards or “properly prepared in accordance with” (“PPIA”) standards, as specified by Ofcom and as shall be notified in writing to BT from time to time by Ofcom.
15. Where BT is required to secure the expression of an audit opinion to FPIA standards upon any Regulatory Financial Statement, BT shall ensure that the Regulatory Auditor shall state whether in his opinion:
 - a. each Regulatory Financial Statement has been prepared in accordance with the applicable SMP services conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents;

- b. each Regulatory Financial Statement and corresponding audit opinion that BT delivers to Ofcom and/or publishes is fit for such purpose (or purposes), if any, as notified by Ofcom to BT in writing;
- c. each Regulatory Financial Statement fairly presents in accordance with the Regulatory Accounting Principles, and the Accounting Methodology Documents:
 - i. in the case of the 'Performance Summary by Market or Technical Area' and the 'BT Reconciliation Statement – Consolidated Profit and Loss Account', the results in the relevant market, technical area, basket, single charge category and Network Service (as appropriate) for the relevant Financial Year and Prior Year Comparatives;
 - ii. in the case of the 'Attribution of Wholesale Current Cost Mean Capital Employed' and the 'BT Reconciliation Statement – Consolidated Mean Capital Employed', the mean capital employed in the relevant market, technical area, basket, single charge category and Network Service (as appropriate) for the relevant Financial Year and Prior Year Comparatives; and
 - iii. in the case of the other statements of revenues, costs, assets, liabilities and other quantities, the revenues, costs, assets, liabilities and other quantities incurred or employed in the relevant market, technical area, basket, single charge category and Network Service (as appropriate) for the relevant Financial Year and Prior Year Comparatives.

16. Where BT is required to secure the expression of an audit opinion to PPIA standards upon any Regulatory Financial Statement, BT shall ensure that the Regulatory Auditor shall state whether in his opinion:

- a. each Regulatory Financial Statement has been properly prepared in accordance with the applicable SMP services conditions, the Regulatory Accounting Principles, and the Accounting Methodology Documents, including the Prior Year Comparatives;
- b. each Regulatory Financial Statement and corresponding audit opinion that BT delivers to Ofcom and/or publishes is fit for such purpose (or purposes), if any, as notified by Ofcom to BT in writing; and
- c. anything has come to his attention that would lead him to conclude that the applicable SMP services conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents have not been properly applied in the preparation of the relevant Regulatory Financial Statement, disclosing where practicable any adjustments he considers to be required in respect of any such matter.

Interpretation

17. For the purpose of interpreting this Direction:

- a) except as otherwise defined in paragraph 18 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the Notification, and otherwise any word or expression has the same meaning as it has in the Act;
- b) headings and titles shall be disregarded;

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

18. For the purposes of interpreting this Direction the following definition shall apply:

- a) “**2017 NMR Notification**” means the notification at Annex[X] of the statement [narrowband market reviews] dated [DATE].

19. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Proposal for a direction setting the requirements in relation to reconciliation report and accompanying audit opinion

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 setting the requirements in relation to reconciliation report and accompanying audit opinion

Background

1. On 20 May 2014, Ofcom published a policy statement entitled “*Regulatory Financial Reporting – Final Statement*” (“**2014 RFR Statement**”), which set out (among other things) Ofcom’s policy conclusions, following consultation, on the regulatory financial reporting policy that Ofcom considered should be applied to BT in markets in which BT has significant market power. One of Ofcom’s conclusions was on the requirements in relation to a reconciliation report and an accompanying audit opinion.
2. Today, Ofcom is consulting, in a consultation entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10.8(iv), set out at Annex 6 to this consultation, BT is required to prepare and publish the reconciliation report as directed by Ofcom from time to time. The reconciliation report must set out changes to the Regulatory Accounting Methodology and the impact of such changes on the Regulatory Financial Statements, and Material Errors corrected in the Regulatory Financial Statements and the impact of such Material Errors on the Regulatory Financial Statements.
5. Under proposed Condition 10.4 set out at Annex 6 to this consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under Condition 10.

6. This Notification sets out proposals setting the requirements in relation to the reconciliation report and accompanying audit opinion in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to give a direction pursuant to proposed Condition 10.4 setting the requirements in relation to the reconciliation report and accompanying audit opinion in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.
8. The proposed direction is set out in the Schedule to this Notification.
9. The effect of and reasons for giving the proposed direction are set out in 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

12. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in blue ink that reads "M. Gibbs".

Marina Gibbs
[Competition Policy Director], Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] setting the requirements in relation to reconciliation report and accompanying audit opinion

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction setting the requirements setting the requirements in relation to reconciliation report and accompanying audit opinion. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10.8(iv)], set out in the 2017 NMR Notification, BT is required to prepare and publish the reconciliation report as directed by Ofcom from time to time. The reconciliation report must set out changes to the Regulatory Accounting Methodology and the impact of such changes on the Regulatory Financial Statements, and Material Errors corrected in the Regulatory Financial Statements and the impact of such Material Errors on the Regulatory Financial Statements.

7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].
8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT to act as prescribed in paragraphs 14 and 15 below in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits.
14. BT must prepare a reconciliation report which sets out:
 - i. In relation to changes to the Regulatory Accounting Methodology:
 - a) each and every change;
 - b) the impact of all changes on all figures presented in the Regulatory Financial Statements, by setting out, on an aggregated basis, the difference between the Current Year Figures and the Current Year Figures had such changes not been made, expressed as an absolute amount and as a percentage change;

- c) the impact of each Material Change at the Markets and Technical Areas Level, by setting out, for each Material Change separately, the difference between the Current Year Figures and the Current Year Figures had such Material Change not been made, expressed as an absolute amount and as a percentage change;
 - d) the impact of changes which are not Material Changes at the Markets and Technical Areas Level, by setting out, on an aggregated basis, the difference between the Current Year Figures and the Current Year Figures had such changes not been made, expressed as an absolute amount and as a percentage change; and
- ii. in relation to Material Errors identified since the publication of the previous Financial Year's Regulatory Financial Statements:
- a) for each Material Error, a description of the Material Error, the circumstances of discovery of the Material Error, the reason for the Material Error, and whether such Material Error has been corrected in the restated Prior Year Comparatives;
 - b) the impact of all Material Errors on all figures presented in the Regulatory Financial Statements for the previous Financial Year, by setting out, on an aggregated basis:
 - i. the Current Year Figures set out in the Regulatory Financial Statements for the previous Financial Year had such Material Errors been corrected in the previous Financial Year ("the Corrected Previous Year Figures"); and
 - ii. the difference as an absolute amount and as a percentage change between the Current Year Figures set out in the Regulatory Financial Statements for the previous Financial Year and the Corrected Previous Year Figures.
 - c) the impact of each Material Error at the Markets and Technical Areas Level, by setting out, for each Material Error, the difference as an absolute amount and as a percentage change between:
 - i. the Current Year Figures set out in the Regulatory Financial Statements for the previous Financial Year; and
 - ii. the Current Year Figures set out in the Regulatory Financial Statements for the previous Financial Year had such Material Error been corrected in the previous Financial Year.

15. BT must obtain an audit opinion on the reconciliation report which must set out:

- i. whether all Material Changes were included in the Change Control Notification. Where this is not the case, the audit opinion must report whether Material Changes other than those included in the Change Control Notification were made as a result of an audit requirement made following delivery of the Change Control Notification or otherwise;
- ii. whether the description of each of the Material Changes provided by BT in the Change Control Notification is accurate;

- iii. whether BT included each and every Material Change in the reconciliation report and correctly calculated the impact of all changes on all figures presented in the Regulatory Financial Statements in accordance with paragraph 1(i)(b) above;
- iv. whether the description of each of the Material Errors provided by BT in the reconciliation report is accurate; and
- v. whether the Corrected Previous Year Figures set out in the reconciliation report in accordance with paragraph 1(ii)(b)(i) above are properly prepared in accordance with the Accounting Methodology Documents for the previous Financial Year had these Accounting Methodology Documents not included these Material Errors.

Interpretation

16. For the purpose of interpreting this Direction:

- a) except as otherwise defined in paragraph 17 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the Notification, and otherwise any word or expression has the same meaning as it has in the Act;
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Direction shall be construed accordingly; and
- d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.

17. For the purposes of interpreting this Direction the following definitions shall apply:

- a) **“2017 NMR Notification”** means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE].
- b) **“Audit and Risk Committee”** means the committee of the board of directors of BT whose principal duties include financial reporting, internal controls, risk management and audit and includes any committee or unit established from time to time by the board of directors of BT to perform such duties;
- c) **“Change Control Notification”** means a list of each and every change to the Regulatory Accounting Methodology which BT is required to publish and deliver to Ofcom by 31 March of the Financial Year in which the change to the Regulatory Accounting Methodology is to be made;
- d) **“Markets and Technical Areas Level”** means the level at which total costs, total revenue and total assets are reported for each separate Market and Technical Area to which this Direction applies;
- e) **“Material Change”** means a change in any element of the Regulatory Accounting Methodology which results in a change (be it positive or negative) in any figure in the Regulatory Financial Statements which exceeds the higher of 5% or £1 million. The percentage change in a figure shall be calculated by taking the value of the affected figure before the change in the Regulatory Accounting Methodology is applied, and

subtracting from it, the value of the same figure after the change in the Regulatory Accounting Methodology is applied, and then dividing this result by the former value;

- f) **“Material Error”** means an error which:
- i. results in a correction (be it positive or negative) in any figure in the Regulatory Financial Statements which exceeds the higher of 5% or £1 million. The percentage correction in a figure shall be calculated by taking the value of the affected figure in the Regulatory Financial Reporting before the error is corrected, and subtracting from it, the value of the same figure after the error is corrected, and then dividing this result by the former value; and
 - ii. fulfils at least one of the following conditions set out in paragraphs (ii)(a) and (ii)(b) below:
 - (a) the error has arisen within the Regulatory Attribution System;
 - (b) the error has been brought to the attention of the Audit and Risk Committee by the Regulatory Auditor;
- g) **“Regulatory Attribution System”** means the set of computerised and manual accounting methods, procedures, Processes and controls established to attribute the costs, revenues, assets and liabilities and summarise, interpret, and present the resultant financial data in an accurate and timely manner for the purposes of the whole of the Regulatory Financial Statements, the Accounting Methodology Documents, the accounting records and the Regulatory Accounting System.

18. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Proposal for a direction specifying network components

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 to specify network components

Background

1. Today, Ofcom is consulting, in a consultation entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
3. Under proposed Condition 10 set out at Annex 6 of this document, network components are defined as the network components specified in a direction given by Ofcom from time to time for the purpose of that Condition.
4. Under proposed Condition 10.4, Ofcom may from time to time make such directions as they consider appropriate in relation to BT’s obligations under the conditions.
5. This Notification sets out proposals to specify network components in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a new direction

6. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “**Act**”), to give a direction pursuant to proposed Condition 10 specifying network components in relation to each of the markets set out in paragraph 1 above and in relation to interconnect circuits.
7. The proposed direction is set out in the Schedule to this Notification.

8. The effect of and reasons for giving the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom's duties and legal tests

9. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 6 complies with the requirements of section 49(2) of the Act.
10. In making the proposals referred to in paragraph 6, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

11. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
12. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

13. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex [6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act

Signed

A rectangular box containing a handwritten signature in black ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] specifying network components

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction specifying network components. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10] network components are defined as the network components specified in a direction given by Ofcom from time to time for the purpose of that Condition.
7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].

8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - b) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - c) proportionate to what it is intended to achieve; and
 - d) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT that the Network Components specified for the purposes of Condition [10] in relation to each of the markets set out in paragraph 1 and in relation to interconnect circuits, are those shown in the Annex to this Direction. BT to act as prescribed in paragraphs 14 and 15 below in relation to each of the markets set out in paragraph 2 and in relation to interconnect circuits.
14. The Annex to this direction forms part of the Direction.

Interpretation

15. For the purpose of interpreting this Direction:
 - a) except as otherwise defined in paragraph 16 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 NMR Notification, and otherwise any word or expression has the same meaning as it has in the Act;

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

16. For the purposes of interpreting this Direction the following definition shall apply,

- a) “2017 NMR Notification” means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE].

17. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Annex: the Network Components

The network components shall be as shown below:

1. Low TISBO 3rd Party Equipment Depn
2. Medium TISBO 3rd Party Equipment Depn
3. High TISBO 3rd Party Equipment Depn
4. TISBO Excess Construction
5. AISBO Excess Construction
6. PC rentals 2Mbit/s regional trunk
7. PC rentals 34Mbit/s regional trunk
8. PC rentals 140Mbit/s regional trunk
9. Co-mingling set up
10. Co-mingling rentals
11. WLA Tie cables
12. Local Loop Unbundling systems development
13. Wholesale Access specific
14. Routeing & records
15. MDF Hardware jumpering
16. E side copper capital
17. E side copper current
18. D side copper capital
19. D side copper current
20. Local exchanges general frames equipment
21. Local exchanges general frames maintenance
22. Analogue line test equipment
23. Dropwire capital & analogue NTE
24. Analogue line drop maintenance
25. Analogue line cards
26. OR Service Centre - Provision AISBO
27. OR Service Centre - Provision Analogue/ISDN2
28. OR Service Centre - Provision WLA
29. Service Level Guarantees
30. OR Service Centre - Assurance Ethernet
31. OR Service Centre - Assurance Analogue/ISDN2
32. OR Service Centre - Assurance WLA
33. Combi Card and MSAN Access - Voice
34. Combi Card - Broadband
35. EES and MSAN Access - Broadband
36. Core Directors - Broadband
37. Edge Ethernet ports broadband
38. Ethernet Backhaul Direct - active
39. Ethernet Backhaul Direct - passive
40. Ethernet Backhaul Direct extended reach
41. Ethernet Backhaul Direct resilience - active

42. Ethernet Backhaul Direct – resilience - passive
43. Ethernet Switch BB
44. Core/Metro (broadband)
45. Metro-core broadband transmission
46. ADSL connections
47. EVOTAM testing systems
48. MPF line testing systems
49. Broadband line testing systems
50. DSLAM support
51. DSLAM equipment
52. PC rental 2Mbit/s link per km distribution
53. PC rental 34Mbit/s link per km distribution
54. PC rental 140Mbit/s link per km distribution
55. Point of Handover electronics
56. PC rental 64kbit/s link
57. PC rental 2Mbit/s link
58. PC rental 34Mbit/s link
59. PC rental 140Mbit/s link
60. PC rental 64kbit/s link per km transmission
61. 2Mbit/s and above PC link connection cct provision
62. 64kbit/s PC link connection cct provision
63. PC rental 64kbit/s link local end
64. PC rental 34Mbit/s link local end
65. PC rental 140Mbit/s link local end
66. PC rental 2Mbit/s local end copper
67. PC rental 2Mbit/s local end fibre
68. Backhaul Extension Services Fibre
69. Wholesale Extension Services Fibre
70. OR systems & development - Ethernet
71. Ethernet Access Direct Fibre
72. Other Ethernet rentals - CCTV
73. Interconnect local end rental 2Mbit/s
74. Interconnect 2Mbit/s connection
75. Interconnect extension circuits (IEC) 2Mbit/s link
76. Customer Sited Interconnect cct (CSI) 2Mbit/s link
77. Nominated In Span I/Connect cct (ISI) transmission
78. Interconnect Extension Circuits (IEC) 2Mbit/s per km
79. Customer Sited Interconnect (CSI) 2Mbit/s per km
80. In Span Interconnect circuits (ISI) transmission
81. Intra Building Circuit (IBC) connection
82. Intra Building Circuit (IBC) rental
83. Ethernet main links
84. Ethernet Electronics
85. Other Ethernet new provides - CCTV

86. Customer support - partial private circuits
87. Customer support - interconnect
88. Customer support - broadband
89. Broadband backhaul circuits (excl Virtual Paths)
90. Openreach sales product management
91. Co-mingling power & vent
92. Revenue Receivables
93. Co-mingling electricity
94. Caller display
95. Metro BRAS and MSE
96. Openreach time related charges
97. PC rental 2Mbit/s link national trunk
98. PC rental 140Mbit/s link national trunk
99. FTTC Development
100. Service centre – provision WLR NGA
101. iNode features
102. Network Features
103. Special Fault Investigation
104. EOI Notional Payables

Proposal for a direction setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and proposed SMP Services Condition 10.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

Background

1. On 20 May 2014, Ofcom published a policy statement entitled "*Regulatory Financial Reporting – Final Statement*" ("**2014 RFR Statement**"), which set out Ofcom's conclusions on the requirements for regulatory financial reporting that Ofcom considered should be applied to BT in all markets in which BT has significant market power.
2. Today, Ofcom is consulting, in a consultation entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. At Annex 6 to the 2016 NMR Consultation, Ofcom is proposing, in relation to the markets listed below, to impose, among other things, SMP conditions with respect to regulatory financial reporting on BT (proposed Condition 10):
 - a) Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) Wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
3. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 2 above, Ofcom is proposing to set SMP conditions in relation to Interconnect Circuits.
4. Under proposed Condition 10 set out at Annex 6 of this document, and in particular Condition 10.8(i), BT will be required to prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time.
5. Under proposed Condition 10.4, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under the conditions.
6. This Notification sets out proposals to set the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements in relation

to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.

Proposal to give a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to give a direction pursuant to proposed Condition 10.4 setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements in relation to each of the markets set out in paragraph 2 above and in relation to interconnect circuits.
8. The proposed direction is set out in the Schedule to this Notification.
9. The effect of and reasons for giving the proposed direction are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed direction referred to in paragraph 7 complies with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making Representations

12. Representations may be made to Ofcom about the proposals set out in the Notification and the 2016 NMR Consultation by no later than 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of this Notification, together with the Direction set out in the Schedule to this Notification, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the proposed SMP conditions set out at Annex 6 of this document. Otherwise any word or expression shall have the same meaning as it has in the Act

Signed



Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule

[DRAFT] Direction under section 49 of the Communications Act 2003 and Condition [10.4] setting the requirements in relation to preparation, delivery, publication, form and content of the Regulatory Financial Statements

1. On 1 December 2016, Ofcom published a consultation document entitled "*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*" ("**2016 NMR Consultation**"), on proposals identifying markets, making market power determinations and setting SMP conditions. In the 2016 NMR Consultation, Ofcom consulted on proposals, in relation to the markets listed below, to impose (among other things) SMP conditions with respect to regulatory financial reporting on BT:
 - a) wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area;
 - b) wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c) wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d) wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area; and
 - e) wholesale call termination services that are provided by the Dominant Provider to another communications provider, for the termination of voice calls to United Kingdom geographic numbers which the Dominant Provider has been allocated by Ofcom in the area served by the Dominant Provider.
2. As a result of the proposed SMP determinations set out at (d) and (e) of paragraph 1 above, Ofcom consulted on proposals to set SMP conditions in relation to Interconnect Circuits.
3. The proposals referred to in paragraphs 1 and 2 above, included proposals to issue a direction setting the requirements in relation to the preparation, delivery, publication, form and content of the Regulatory Financial Statements. Ofcom invited responses to the 2016 NMR Consultation by 28 February 2016.
4. On [DATE], Ofcom concluded its review of the narrowband markets in which it identified markets, made market power determinations and set appropriate SMP conditions as set out in the 2017 NMR Notification.
5. Ofcom determined in the review referred to in paragraph 4 above, that BT has SMP in the markets set out a paragraph 1 above.
6. Under Condition [10], set out in the 2017 NMR Notification, and in particular Condition 10.8(i), BT will be required to prepare, deliver to Ofcom and publish the Regulatory Financial Statements as directed by Ofcom from time to time.
7. Under Condition [10.4], set out in the 2017 NMR Notification, Ofcom may from time to time make such directions as they consider appropriate in relation to BT's obligations under Condition [10].

8. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - e) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - f) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - g) proportionate to what it is intended to achieve; and
 - h) in relation to what it is intended to achieve, transparent.
9. For the reasons set out in the explanatory statement accompanying this Direction, Ofcom is satisfied that it has acted in accordance with its general duties set out in section 3 of the Act, the six community requirements set out in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.
10. Ofcom has considered every representation about the proposed Direction duly made to it and the Secretary of State has not notified Ofcom of any international obligation of the United Kingdom for the purposes of section 49A(6)(b) of the Act.
11. The proposals set out in the 2016 NMR Consultation contained proposals of EU significance for the purposes of the Act. Therefore, after making any modifications of the proposals that appeared to Ofcom to be appropriate following domestic consultation, Ofcom sent on [DATE] a copy of them, and of a draft of the statement accompanying this Direction setting out the reasons for them, to the European Commission, BEREC and the regulatory authorities of every other member State for EU consultation, in accordance with section 49B(2) of the Act.
12. Ofcom received comments from the European Commission on its proposals on [DATE], and has made such modifications to this Direction and the statement accompanying this Direction as it considers appropriate.

[DRAFT] Direction

13. Ofcom hereby, pursuant to section 49 of the Act and Condition [10.4], directs BT to act as prescribed in paragraphs 14 to 18 below in relation to each of the markets set out in paragraph 2 and in relation to interconnect circuits.
14. BT shall prepare, deliver to Ofcom and publish the following statements:
 - a. the following statements in respect of each individual Market and interconnect circuits in accordance with the obligation in paragraph 16 below:
 - i. Statement by Ofcom;
 - ii. Statement of Responsibility;
 - iii. Regulatory Financial Review;
 - iv. Notes to the Regulatory Financial Statements;
 - v. Report of the Regulatory Auditor;

- vi. Performance Summary by Market or Technical Area;
 - vii. Attribution of Wholesale Current Costs;
 - viii. Attribution of Wholesale Current Cost Mean Capital Employed;
 - ix. Market/Technical Area Summary;
 - x. Market/Technical Area Calculation of FAC based on component costs and usage factors;
 - xi. BT Reconciliation Statement – Consolidated Profit and Loss Account;
 - xii. BT Reconciliation Statement – Consolidated Mean Capital Employed;
 - xiii. Consolidated Network Activity Statement;
 - xiv. Adjusted financial performance at a market review level;
 - xv. Price controls in wholesale markets (Non Confidential Statements).
15. BT shall publish the statements set out in paragraph 14 of this Direction within four months after the end of the Financial Year to which they relate with the exception of:
- a. Price controls in wholesale markets (Non Confidential Statements) which must be published at the same time as the Price controls in wholesale markets (Confidential Statements), as referred to in paragraph 18(a)(xv) of this Direction, are delivered to Ofcom;
16. Except where BT is entitled to amend the form and content of the Regulatory Financial Statements, BT shall prepare the statements described in paragraph 15 above as to form and content in the manner set out in Annex A to this Direction;
17. BT shall publish the Regulatory Financial Statements in Excel spreadsheet format as well as in portable document format (“PDF”).
18. BT shall prepare and deliver to Ofcom:
- a. the following additional financial information in the form and content as described in Annex B in respect of each Market:
 - i. Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost;
 - ii. Summarised activity analysis of components for network activities, increments and the relevant layers of common cost (LRIC basis);
 - iii. Cost category (as used within regulatory LRIC model) analysis for network components and increments;
 - iv. Summarised activity analysis for network components and increments;
 - v. Analysis, by asset category and network activities, of the depreciation charge for the year and impact of CCA valuation adjustments on costs for the year;
 - vi. CCA fixed asset movement statement;

- vii. Total mean capital employed and detailed activity analysis for all network components;
 - viii. Detailed network activity analysis of mean capital employed for all network components;
 - ix. Graphs over time of the various raw indices, index weightings and composite indices used by BT to revalue assets onto a current cost basis;
 - x. Estimated economic useful lives, valuation and depreciation basis, survey used for valuation or index used to revalue, historical cost accounting (HCA) and current cost accounting (CCA) depreciation, gross book values (GBV) by year of acquisition, gross replacement costs (GRC) and net replacement costs (NRC) across asset categories;
 - xi. Total operating costs and mean capital employed costs (and associated volumes) for each plant group and their individual exhaustion, including the disclosure of relevant usage factors, onto each network activity and/or (sub) component;
 - xii. Provision of BT 'Data File';
 - xiii. CCA information to allow Ofcom to re-calculate the regulatory asset value (RAV) for copper assets used in BT's access network;
 - xiv. BT Network Services Reconciliation;
 - xv. Price controls in wholesale markets (Confidential Statements);
 - xvi. Adjusted financial performance at a market level;
 - xvii. Provision of FAC, DLRIC and DSAC data per service.
- b. the following additional financial information as described in Annex B in respect of the market for Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area (Confidential Statements):
- i. Time Related Charge Costs.

19. The Annexes to this direction form part of the Direction.

Interpretation

20. For the purpose of interpreting this Direction:

- a) except as otherwise defined in paragraph 21 below or in so far as the context otherwise requires, words or expressions have the meaning assigned to them in SMP conditions set out in the 2017 NMR Notification, and otherwise any word or expression has the same meaning as it has in the Act;
- b) headings and titles shall be disregarded;
- c) expressions cognate with those referred to in this Direction shall be construed accordingly; and

d) the Interpretation Act 1978 (c. 30) shall apply as if this Direction were an Act of Parliament.

21. For the purposes of interpreting this Direction the following definition shall apply,

a) “**2017 NMR Notification**” means the notification at Annex [X] of the statement [narrowband market reviews] dated [DATE].

22. The Direction will take effect on [DATE].

Signed

[NAME]

[Competition Policy Director]

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

[DATE]

Annex A

Statement by Ofcom

The statement provided by Ofcom commenting on the figures in, the notes to, or the presentation of any or all of the Regulatory Financial Statements, in relation to each of the markets to which cost accounting and/or accounting separation obligations apply.

Statement of Responsibility

The statement provided by the board of directors of BT shall set out the basis of preparation of the Regulatory Financial Statements and confirm the approval of the Regulatory Financial Statements by BT's board of directors.

Regulatory Financial Review

BT shall be required to summarise the financial performance:

1. across all of the SMP markets to which cost accounting and/or accounting separation obligations apply;
2. at the market review level encompassing individual SMP markets to which cost accounting and/or accounting separation obligations apply considered as part of such market review; and
3. at the level of each individual SMP market to which cost accounting and/or accounting separation obligations apply.

The Regulatory Financial Review (RFR) shall be included in the Regulatory Financial Statements either as a separate statement or as notes to relevant other statements.

The RFR should assist the user's assessment of the Regulatory Financial Statements and provide commentary on compliance with these regulatory conditions.

The RFR should focus on those matters which are relevant to the users of the information, be clearly written and readily understandable.

The information and analysis contained within the RFR should be complete and free from bias.

Disclosure should make clear any issues of comparability that would assist the reader's understanding of the RFR. It should highlight accounting policies that are key to the understanding of performance, focusing on those which have required the particular exercise of judgement in their application and those accounting policies which have changed in the year.

When using financial and non financial measures in the RFR it is important these are defined and explained, assumptions set out and Prior Year Comparatives are disclosed on the same basis as Current Year Figures.

The RFR should explain the main factors that underlie all of the regulated activities, all of the individual SMP markets forming part of each market review and each individual SMP market. In particular, the RFR should explain those factors which have either varied in the past or are expected to change in the future. It should also set out an analysis of the effect of changes in each individual SMP market or the environment in which it operates and of developments within each individual SMP market. For example, it should include changes in the market conditions, introduction or announcement of new products and services, new and discontinued activities, other acquisitions and disposals.

The RFR should also analyse the main factors and influences that may have an effect on future performance, whether or not they were significant in the period under review. There should be a discussion of the principal risks facing all of the regulated activities, all of the individual SMP markets forming part of each market review, and each individual SMP market, with a commentary on the approach taken to manage them.

Notes to the Regulatory Financial Statements

The Regulatory Financial Statements shall contain, as a separate statement or as notes to relevant other statements, notes, modelled on statutory accounting conventions, to assist the user in the interpretation of the individual Regulatory Financial Statements.

The notes will address issues necessary to ensure the fair presentation of the Regulatory Financial Statements (where BT is required to obtain an audit to “fairly presents in accordance with” standards) and the proper preparation of the Regulatory Financial Statements (where BT is required to obtain an audit to “properly prepared in accordance with” standards). They should set out to the extent necessary the basis of accounting, accounting policies, changes for restatement, non compliance with the ICAEW Guidance and any other information that will enable users to properly understand the individual Regulatory Financial Statement.

Amongst others the necessary notes would be expected to include:

- a description of the basis on which revenue from sales to other operators arise and other related matters necessary to understand how financial performance has been measured;
- a commentary setting out how the principle of non discrimination and the calculation of usage factors have been applied in the preparation and presentation of Regulatory Financial Statements in respect of Wholesale Services.

Report of the Regulatory Auditor

The statement by the Regulatory Auditor shall set out the duties and responsibilities of BT and of the Regulatory Auditor, the basis of audit opinion in accordance with current auditing standards, to whom a duty of care is owed and their opinion in respect of each Regulatory Financial Statement.

Performance Summary by Market or Technical Area 20XX

For the year ended 31 March 20XX

	Section	Internal Revenue	External Revenue	Total Revenue	Operating Costs	Depreciation	Holding (gain)/loss	Supp. Dep.	Other CCA Adjs	Roundings	Total CCA Operating Costs	Return	Mean Capital Employed	Return on MCE %
		£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	£m	%
Market Review 1														
Market/Technical Area 1	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market/Technical Area 2 etc	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market Review 2 etc														
Market/Technical Area 1	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Market/Technical Area 2 etc	X.X	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total SMP Markets		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Wholesale Residual		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Retail Residual		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%
Total Markets		xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xxx	xx%

Attribution of Wholesale Current Costs 20XX

For the year ended 31 March 20XX

	Market Review 1		Market Review 2 etc		Wholesale Residual	Roundings	Total Wholesale Markets
	Market/Technical Area 1	Market/Technical Area 2 etc	Market/Technical Area 1	Market/Technical Area 2 etc			
	£m	£m	£m	£m			
Operating Costs of Wholesale Services:							
EOI Input Prices	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Provision/Maintenance	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Network Support	xxx	xxx	xxx	xxx	xxx	xxx	xxx
General Support	xxx	xxx	xxx	xxx	xxx	xxx	xxx
General Management	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Finance and Billing	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Accommodation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Bad Debts	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Depreciation - Land & Buildings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Access	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Switch and Transmission	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- Other related	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Sub Total Depreciation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Sub Total HCA Operating Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx
CCA Adjustments:							
Holding Loss/(Gain)	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Supplementary Depreciation	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other CCA Adjustments	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Roundings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total CCA Operating Costs	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Attribution of Wholesale Current Cost Mean Capital Employed 20XX

For the year ended 31 March 20XX

	Market Review 1		Market Review 2 etc		Wholesale Residual	Roundings	Total Wholesale Markets
	Market/Technical Area 1	Market/Technical Area 2 etc	Market/Technical Area 1	Market/Technical Area 2 etc			
	£m	£m	£m	£m			
Non-current Assets							
Land & Buildings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Copper	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Fibre	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Access - Duct	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Switch	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Transmission	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Other	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Investments	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Non-current Assets	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Current Assets							
Inventories	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Receivables							
- Internal	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- External	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Current Assets	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Current Liabilities							
- Internal	xxx	xxx	xxx	xxx	xxx	xxx	xxx
- External	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total liabilities falling due within one year	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Net Current Assets/(Liabilities)	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Total Assets less Current Liabilities	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Provisions for Liabilities & Charges	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Roundings	xxx	xxx	xxx	xxx	xxx	xxx	xxx
Mean Capital Employed	xxx	xxx	xxx	xxx	xxx	xxx	xxx

Market/Technical Area Summary 20XX

Summary for Market 1/Technical Area 1 etc

For the year ended 31 March 20XX

	Internal Revenue £m	External Revenue £m	Total Revenue £m	Internal Volume	External Volume	Unit(s)	Average Internal price £	Average External Price £	Internal FAC* £m	External FAC £m
Basket 1	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Basket 2 etc	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Single Charge 1 (if applicable)	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Single Charge 2 etc (if applicable)	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Specific services required to be shown seperately by Ofcom (if applicable)	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Other (if applicable)	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x	x.x
Total Market 1 etc	x.x	x.x	x.x						x.x	x.x
Adjustment for EOI and Internal (if appropriate)	x.x		x.x						x.x	x.x
Total Market 1 etc (excluding EOI and Internal)	x.x	x.x	x.x						x.x	x.x

Internal and External FAC as required by Ofcom

Average Prices may require more detailed analysis as required by Ofcom

* Only where Internal unit FAC is different from External unit FAC

Notes to the statement entitled “Market/Technical Area Summary”

BT shall disclose financial information shown in the “Market/Technical Area Summary” as follows:

1. In relation to the market “Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area” the information is required to be provided for the following Network Services:
 - a) Analogue Core WLR Rentals;
 - b) WLR Connections;
 - c) WLR Transfers;
 - d) WLR Conversions;
 - e) Analogue Premium Rentals;
 - f) WLR Premium Connections;
 - g) WLR Premium Conversions;
 - h) Caller Display;
 - i) Time Related Charges;
 - j) Other WLR.

2. In relation to the market “Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area” the information is required to be provided for each of the following Network Services. Internal FAC and external FAC information does not need to be provided;

For the period when SMP Condition [1B] is in force (i.e. [1 October 2017] to [30 September 2018]):

- a) ISDN2 rentals
- b) ISDN2 connections;
- c) ISDN2 transfers

From the date SMP Condition [1C] enters into force (i.e. [1 October 2018]):

- a) ISDN2 rentals – existing lines;

- b) ISDN2 transfers – existing lines;
 - c) ISDN2 – new connections, transfers and rentals. For this group of Network Services only revenue information is required.
3. In relation to the market “Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area” the information is required to be provided for each of the following Network Services. Internal FAC and external FAC information does not need to be provided:

For the period when SMP Condition [1B] is in force (i.e. [1 October 2017] to [30 September 2018]):

- a. ISDN30 Rentals;
- b. ISDN30 Connections;
- c. ISDN30 Transfers;
- d. ISDN30 SML 3 and 4;
- e. ISDN30 Direct Dialling - rentals;
- f. ISDN30 Direct Dialling – Planning;
- g. ISDN30 Direct Dialling – Connections.

From the date SMP Condition [1C] enters into force (i.e. [1 October 2018]):

- a. ISDN30 rentals – existing lines;
 - b. ISDN30 transfers – existing lines;
 - c. ISDN30 SML 3 and 4 – existing lines;
 - d. ISDN30 Direct Dialling - rentals – existing lines;
 - e. ISDN30 – new connections, transfers rentals and ancillary services. For this group of Network Services only revenue information is required.
4. In relation to the market “Wholesale call termination services on a fixed narrowband network in the United Kingdom excluding the Hull Area”:
- a. the information is required to be provided for the following Network Service: “WCT services”.

- b. Where BT varies WCT prices by time of day (for example different prices for day, evening and weekend) then volume and price information must be provided for each time of day price.
5. In relation to the technical area “Interconnect circuits in the United Kingdom excluding the Hull Area” the information is required to be provided for the following Network Services. Information must relate to External Revenues, as defined in SMP Condition [5D], only.
- i. external wholesale standard Customer-Sited Interconnect connections;
 - ii. external wholesale standard Customer-Sited Interconnect rentals – fixed;
 - iii. external wholesale standard Customer-Sited Interconnect rentals – per km;
 - iv. external wholesale interconnection extension circuits connections;
 - v. external wholesale interconnection extension circuits rentals – fixed;
 - vi. external wholesale interconnection extension circuits rentals – per km;
 - vii. external wholesale intra-building circuits connections;
 - viii. external wholesale intra-building circuits rentals;
 - ix. external wholesale in-span interconnection links rentals;
 - x. external nominated in-span interconnection links – per km;
 - xi. external wholesale rearrangements.
6. BT is not required to provide information in relation to the following markets:
- a. Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area.

Market/Technical Area calculation of FAC based on component costs and usage factors 20XX

Calculation of FAC based on component costs and usage factors for Market 1/Technical Area 1 etc

For the year ended 31 March 20XX

			Market/Technical Area 1 etc											
		Average cost per unit (from annex XX)	Basket 1 - internal *	Basket 1 - external	Sub-basket 1 - internal *	Sub-basket 1 - external	Basket 2 etc - internal *	Basket 2 etc - external	Sub-basket 2 etc - internal *	Sub-basket 2 etc - external	Single Charge Category 1 - internal*	Single Charge Category 1 - External	Single Charge Category 2 etc - Internal*	Single Charge Category 2 etc - External
Fully Allocated Cost (£)			£	£	£	£	£	£	£	£	£	£	£	£
Components	Unit		£	£	£	£	£	£	£	£	£	£	£	£
Component 1	X	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx
Component 2 etc	X	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx
EOI Inputs Prices (Basket level Part 3)			x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx
Fully Allocated Costs (£)			x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx	x.xx

Volumes (unit) (where applicable)

xxx xxx

Fully Allocated Cost (£m)

x.x x.x

Specific services required to be shown separately by Ofcom (if applicable)

* Only where Internal unit FAC is different from External unit FAC

Notes to the statement entitled “Market/Technical Area Calculation of FAC based on component costs and usage factors”

BT shall disclose financial information shown in the “Market/Technical Area Calculation of FAC based on component costs and usage factors” as follows:

1. In relation to the market “Wholesale fixed analogue exchange line services in the United Kingdom excluding the Hull Area” the information is required to be provided for;
 - a. Analogue Core WLR Rentals – Internal;
 - b. Analogue Core WLR Rentals – External;
 - c. WLR Connections – Internal;
 - d. WLR Connections – External;
 - e. WLR Simultaneously Provided Connections – Internal;
 - f. WLR Simultaneously Provided Connections – External;
 - g. WLR Transfers – Internal;
 - h. WLR Transfers – External;
 - i. WLR Simultaneously Provided Conversions – Internal;
 - j. WLR Simultaneously Provided Conversions – External;
 - k. WLR Conversions – Internal;
 - l. WLR Conversions - External

2. In relation to interconnect circuits, the information is required to be provided for:
 - a. external wholesale standard Customer-Sited Interconnect connections;
 - b. external wholesale standard Customer-Sited Interconnect rentals – fixed;
 - c. external wholesale standard Customer-Sited Interconnect rentals – per km;
 - d. external wholesale interconnection extension circuits connections;
 - e. external wholesale interconnection extension circuits rentals – fixed;
 - f. external wholesale interconnection extension circuits rentals – per km;
 - g. external wholesale intra-building circuits connections;
 - h. external wholesale intra-building circuits rentals;
 - i. external wholesale in-span interconnection links rentals;
 - j. external nominated in-span interconnection links – per km;

- i. external wholesale rearrangements.
- 3. BT is not required to provide information in relation to the following markets:
 - a. Wholesale call origination on a fixed narrowband network in the United Kingdom excluding the Hull Area;
 - b. Wholesale ISDN30 exchange line services in the United Kingdom excluding the Hull Area;
 - c. Wholesale ISDN2 exchange line services in the United Kingdom excluding the Hull Area;
 - d. Wholesale call termination services on a fixed narrowband network in the United Kingdom excluding the Hull Area.

BT Reconciliation Statement - Consolidated Profit and Loss Account 20XX

For the year ended 31 March 20XX

	External Revenue £m	Operating Costs £m	Return or Profit before taxation £m
As in the Annual Report	X	X	X
Adjustments			
Elimination of inter-market revenue and costs	X	X	X
Share of Post tax loss of associates and joint ventures	X	X	X
Loss on disposal of interest in associates and joint ventures	X	X	X
Net short term interest	X	X	X
Specific pension interest	X	X	X
Long term interest payable	X	X	X
Other adjustment(s) as required	X	X	X
Total Markets (HCA)	X	X	X
Holding (gain)/loss	X	X	X
Supplementary Depreciation	X	X	X
Other CCA adjustments	X	X	X
Roundings	X	X	X
Total Markets (CCA)	X	X	X

BT Reconciliation Statement - Consolidated Mean Capital Employed 20XX

For the year ended 31 March 20XX

	20XX £m	20XX-1 £m	Mean capital employed of BT Markets	20XX £m	20XX-1 £m
Shareholders' funds as in the 20XX Annual Report	X	X			
CCA adjustments	X	X	Market Review 1	X	X
	X	X	Market Review 2 etc	X	X
Adjustments			Sub total SMP Markets	X	X
Derivative financial instruments - assets	X	X	Residual activities		
Deferred tax liabilities	X	X	Wholesale residual activity	X	X
Deferred tax assets	X	X	Retail residual activity	X	X
Current tax assets	X	X	Sub total residual activities	X	X
Current tax liabilities	X	X	Roundings and other adjustments		
Long term loans and other borrowings:			Wholesale markets	X	X
Due in less than one year	X	X	Retail markets & activities	X	X
Due in more than one year	X	X	Sub total roundings and other adjustments	X	X
Derivative financial instruments - liabilities	X	X	Total CCA mean capital employed	X	X
Other liabilities	X	X			
Retirement benefit obligations	X	X			
Other adjustment(s) as required	X	X			
Closing CCA capital employed at 31 March	X	X			
Opening CCA capital employed at 1 April	X	X			
Total CCA mean capital employed	X	X			

Consolidated Network Activity Statement 20XX

For the year ended 31 March 20XX

Network Activity Statement - Consolidated (this is a consolidation of all markets where there are cost accounting obligations)

Fully Allocated Cost (£m)	Footnotes	HCA operating cost	Supplementary depreciation	Holding gain/(loss) and other CCA adjustments	Total CCA operating costs	CCA mean capital employed	Applicable rate of return on capital %	Capital costs	Total of operating costs and capital costs relating to current year	Volume (units)	Average costs per min/unit on a current cost basis relating to current year
Network Components											
Component 1		X	X	X	X	X	X	X	X	X	X
Component 2 etc		X	X	X	X	X	X	X	X	X	X
Residual components		X	X	X	X	X	X	X	X	X	X
Roundings		X	X	X	X	X	X	X	X	X	X
Total		X	X	X	X	X	X	X	X	X	X

Adjusted financial performance at a market review level 20XX

For the year ended 31 March 20XX

	As reported							Estimated impacts				Impact on return		
	Revenue	HCA Costs	CCA Adjustments	CCA Operating Costs	Return	MCE	Return on MCE	Revenue	CCA Operating Costs	Return	MCE	Revised return	Revised MCE	Return on MCE
	£m	£'m	£m	£m	£m	£m	%	£m	£m	£m	£m	£m	£m	Δ %
Market Review 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Market Review 2 etc	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Total	-	-	-	-	-	-	-	-	-	-	-	-	-	-

	Estimated impacts			
	Revenue	CCA Operating Costs	Return	MCE
	£'m	£m	£'m	£'m
Adjustment a	-	-	-	-
Adjustment b etc	-	-	-	-
	-	-	-	-

Price controls in wholesale markets (Non confidential Statements)

Basket 1 Total	Condition x.xx	Year	20XX/20XX+1	Notes
		RPI/CPI (as appropriate)	X.X%	
		X	X.X%	
		RPI/CPI (as appropriate) - X	X.X%	
		Changes made in prior year	X.X%	
		Control percentage	X.X%	
		Prior year Revenue	X	
		Changes made	X	
		% price change	X.X%	
		Carry-over %	X.X%	
		Complies	YES/NO	
		Sub Cap service 1	X.XX%	
		Complies	YES/NO	
	condition x.xx	Sub Cap service 1a	X.XX%	
	condition x.xx	Complies	YES/NO	
condition x.xx	Sub Basket 1 CP	X.X%		
	Complies	YES/NO		
condition x.xx	% sub basket change	X.X%		
	Complies	YES/NO		
Basket 2 etc Total	Condition x.xx	Year	20XX/20XX+1	Notes
		RPI/CPI (as appropriate)	X.X%	
		X	X.X%	
		RPI/CPI (as appropriate) - X	X.X%	
		Changes made in prior year	X.X%	
		Control percentage	X.X%	
		Prior year Revenue	X	
		Changes made	X	
		% price change	X.X%	
		Carry-over %	X.X%	
		Complies	YES/NO	
		Sub Cap service 1	X.XX%	
		Complies	YES/NO	
	condition x.xx	Sub Cap service 1a	X.XX%	
	condition x.xx	Complies	YES/NO	
condition x.xx	Sub Basket 1 CP	X.X%		
	Complies	YES/NO		
condition x.xx	% sub basket change	X.X%		
	Complies	YES/NO		
Single Charge Category 1 Total	Condition x.xx	Year	20XX/20XX+1	Notes
		RPI/CPI (as appropriate)	X.X%	
		X	X.X%	
		RPI/CPI (as appropriate) - X	X.X%	
		Changes made in prior year	X.X%	
		Control percentage	X.X%	
		Prior year Revenue	X	
		Changes made	X	
		% price change	X.X%	
		Carry-over %	X.X%	
		Complies	YES/NO	
Single Charge Category 2 Total	condition x.xx	Year	20XX/20XX+1	Notes
		RPI/CPI (as appropriate)	X.X%	
		X	X.X%	
		RPI/CPI (as appropriate) - X	X.X%	
		Changes made in prior year	X.X%	
		Control percentage	X.X%	
		Prior year Revenue	X	
		Changes made	X	
		% price change	X.X%	
		Carry-over %	X.X%	
		Complies	YES/NO	

Annex B

Reference	Additional Financial Information	Description
<u>Additional Financial Information to be provided in respect of each Market and Interconnect Circuits</u>		
5(a)(i)	Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost (LRIC basis)	<ol style="list-style-type: none"> 1. ensure the LRIC model reconciles to BT group's total cost and asset and liability base; 2. review the outputs of BT's LRIC model for the whole BT group by cost category and components, increments and layers of common costs; 3. identify all relevant layers of common costs separately within BT group; 4. enable trend analysis of this breakdown to be undertaken; 5. enable assessment of cost-volume relationships; 6. provide input into network price control reviews.

5(a)(ii)	Summarised activity analysis of components for network activities, increments and the relevant layers of common cost (LRIC basis)	<ol style="list-style-type: none"> 1. review the outputs of BT's LRIC model by activity analysis for network components, increments and the layers of common costs; 2. identify all relevant layers of common costs separately for network activities; 3. enable trend analysis of this breakdown to be undertaken; 4. provide input into network price control reviews; 5. ensure LRIC model reconciles to the total cost and asset and liability base for BT's network activities.
5(a)(iii)	Cost category (as used within regulatory LRIC model) analysis for network components and increments	Similar to "Cost category (as used within regulatory LRIC model) analysis for network components, increments and relevant layers of common cost" but on a fully allocated cost basis.
5(a)(iv)	Summarised activity analysis for network components and increments	Similar to "Summarised activity analysis of components for network activities, increments and the relevant layers of common cost" but on a fully allocated cost basis.

5(a)(v)	<p>Analysis, by asset category and network activities, of the depreciation charge for the year and impact of CCA valuation adjustments on costs for the year for example:</p> <ul style="list-style-type: none"> - HCA depreciation - CCA supplementary depreciation - Holding gain - Other CCA adjustments 	<ol style="list-style-type: none"> 1. provide impact on profit and loss cost base of the application of CCA methodologies; 2. enable trend analysis of this breakdown to be undertaken; 3. provide sub-analysis (for the cost/gain line items left) of the asset movement statement in relation to network components; 4. provide input into network price control reviews.
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5(a)(vi)	<p>CCA fixed asset movement statement</p> <p>a) gross replacement costs brought forward, additions/disposals/transfers, holdings gains/(loss), gross replacement costs carried forward; and</p> <p>b) gross depreciation brought forward, HCA depreciation charge, supplementary CCA depreciation, disposals/transfers/other movements, holding gains/(loss), gross depreciation carried forward)</p> <p>by asset category for BT Group</p> <p>plus reconciliation to HCA fixed assets movement statement in the group statutory accounts</p>	<ol style="list-style-type: none"> 1. review the breakdown of asset costs between principal asset categories and how such CCA asset values have moved in the year; 2. enable trend analysis of CCA asset values to be undertaken; 3. provide input into network price control reviews.
5(a)(vii)	<p>Total mean capital employed and detailed activity analysis for all network components</p>	<ol style="list-style-type: none"> 1. review network component costs; 2. enable trend analysis of these breakdowns to be undertaken; 3. provide input into price control reviews; 4. assist in dealing with investigations; 5. ensure summarised activity analysis presented elsewhere reconciles to BT's network activities cost base.

5(a)(viii)	Detailed network activity analysis of mean capital employed for all network components	<ol style="list-style-type: none"> 1. enable trend analysis of these breakdowns to be undertaken; 2. ensure summarised activity analysis reconciles to BT's network activity mean capital employed.
5(a)(ix)	Graphs over time of the various raw indices, index weightings and composite indices used by BT to revalue assets onto a current cost basis	<ol style="list-style-type: none"> 1. evaluate the price trends for composite elements of BT's asset revaluation indices; 2. evaluate the weightings within individual asset revaluation indices; 3. evaluate the trend of individual asset revaluation indices; 4. provide input into price control reviews and determinations.

5(a)(x)	<p>Estimated economic useful lives, valuation and depreciation basis, survey used for valuation or index used to revalue, historical cost accounting (HCA) and current cost accounting (CCA) depreciation, gross book values (GBV) by year of acquisition, gross replacement costs (GRC) and net replacement costs (NRC) across asset categories</p>	<ol style="list-style-type: none"> 1. review the nature and relative distribution of BT's asset base; 2. evaluate BT's chosen asset lives for individual asset categories; 3. review the relationship between gross HCA and CCA valuations; 4. evaluate the appropriateness of the CCA valuation basis for each asset category; 5. evaluate the appropriateness of the CCA depreciation methodology for each asset category; 6. review the impact of CCA accounting on the cost base; 7. enable trend analysis of CCA costs to be undertaken; 8. provide input into network price control reviews.
5(a)(xi)	<p>Total operating costs and mean capital employed costs (and associated volumes) for each plant group and their individual exhaustion, including the disclosure of relevant usage factors, onto each network activity and/or (sub) component</p>	<ol style="list-style-type: none"> 1. review the breakdown of costs to all the different components and sub-components within BT's network activities; 2. enable trend analysis of this breakdown to be undertaken; 3. provide input into network price control reviews; 4. ensure total plant group costs reconcile to the cost base for BT's network activities.

5(a)(xii)	Provision of BT 'Data File'	<p>Delivery of "data file" in prescribed format containing all records from cost attribution system. Format of file to allow for identification of sources of data, data flows (from the input sources at F8/OUC code level through to products and services) and attribution bases.</p> <p>The data would as a minimum, be able to replicate the outputs of the financial statements and include financial information (for example F8 code, OUC, finance type, and AS/WS sector) on all services and components that have received an allocation of costs in the Regulatory Financial Statements. The data would include transfer charges and CCA adjustments, and be able to identify the attribution bases to those described in the Accounting Methodology Documents. The basis of preparation must be consistent with BT's SMP conditions, the Regulatory Accounting Principles and the Accounting Methodology Documents.</p> <p>The information to be provided annually within 10 working days of the publication of the regulatory accounts. The outputs of the annual file would be consistent with published audited information.</p> <p>BT to maintain file in format consistent with Ofcom/third party import routine, accompanied by provision of control totals, and any technical advice which allows seamless data transfers and it should be updated where appropriate. In consultation with Ofcom, BT shall procure an appropriate audit opinion in relation to the data file.</p> <p>For the avoidance of doubt the data file will include the following information:</p> <ul style="list-style-type: none"> • revenue, volume and cost information relating to each
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		<p>new ISDN2 and ISDN30 rental, connection and ancillary service and cost information for related components; and</p> <ul style="list-style-type: none"> revenue, volume and cost information relating to each WCO and WCT service and cost information for related components.
5(a)(xiii)	CCA information to allow Ofcom to re-calculate the regulatory asset value (RAV) for copper assets used in BT's access network.	<ol style="list-style-type: none"> Provide breakdown of the following information: <ol style="list-style-type: none"> Full CCA on an actual price index basis; Pre 1997 assets on an RPI basis; Post 1997 assets on an actual price index basis; Enable Ofcom to re-calculate and monitor the effect of this going forward.
5(a)(xiv)	BT Network Services Reconciliation	Provide a breakdown of FAC into BT services and components and reconcile both categories to the total FAC for the year.
5(a)(xv)	Price controls in wholesale markets (Confidential Statements)	Demonstrate compliance with charge controls, including provision of revenue, price change, any relevant calculations and any other required information.
5(a)(xvi)	Adjusted financial performance at a market level	Provide revenue, cost, return and MCE at a market level adjusted for consistent application of Ofcom's price controls, including reconciliation to the numbers published in the Regulatory Financial Statements.
5(a)(xv)	Provision of FAC, DLRIC and DSAC data per service	Provide FAC, DLRIC and DSAC information for each regulated service.

Additional Financial Information to be provided in respect of the Wholesale Fixed Analogue Exchange Line Services Market

5(b)(i)	Time Related Charges Costs Relating to the Wholesale Fixed Analogue Exchange Line Services_Markets (Confidential Statements)	Provide Time Related Charges costs and billed volumes information.
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Section 2 – Proposed directions for KCOM

Proposal for direction modifying Direction 1

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and SMP Services Condition OB2 to modify Direction 1 specifying network components

Background

1. On 22 July 2004, Ofcom published a statement entitled *“The regulatory financial reporting obligations on BT and Kingston Communications Final statement and notification – Accounting separation and cost accounting: Final Statement and notification”* (“**July 2004 Statement**”). At Annex 3 of that statement, Ofcom imposed SMP conditions with respect to regulatory accounting (Conditions OB1 to OB33) on KCOM in markets in which KCOM had been found to have significant market power in previously concluded market reviews.
2. At Annex 5 of the July 2004 Statement, Ofcom published various directions for KCOM given under the SMP conditions. These included a direction specifying network components for the purposes of, among others, SMP Services Conditions OB1 to OB33 (“**Direction 1**”).
3. Direction 1 was subsequently modified by the Direction dated 28 April 2016 set out at section 4 of Annex 35 to the *“Business Connectivity Market Review: Review of competition in the provision of leased lines”* in relation to the markets covered by that review.
4. Today, Ofcom is consulting, in a consultation document entitled *“Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access”* (“**2016 NMR Consultation**”) on proposals identifying markets, making certain market power determinations and setting SMP services conditions. In the 2016 NMR Consultation, Ofcom is proposing to apply SMP conditions OB1 to OB27 and OB31 to OB33 to KCOM in relation to the following markets:
 - a) Wholesale fixed analogue exchange line services in the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the Hull Area; and
 - d) Wholesale call origination on a fixed narrowband network in the Hull Area.
5. In Condition OB, network components are defined as the network components specified in a direction given by Ofcom from time to time for the purposes of these conditions.
6. Under Condition OB2 set out at Annex 2 of the July 2004 Statement which Ofcom proposes to apply to KCOM in the 2016 NMR Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to KCOM’s obligations under these conditions.
7. This Notification sets out proposals to modify Direction 1 in relation to each of the markets set out in paragraph 4 above.

Proposal to modify a direction

8. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to modify Direction 1 specifying the network components in relation to each of the markets set out in paragraph 4 above.
9. The proposed modification to Direction 1 is set out in the Schedule to this Notification.
10. The effect of, and the reasons for, the proposed modifications are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

11. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed modification referred to in paragraph 8 complies with the requirements of section 49(2) of the Act
12. In making the proposals referred to in paragraph 8, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

13. Representations may be made to Ofcom about the proposals set out in this Notification and the 2016 NMR Consultation by no later 28 February 2017.
14. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, will be sent to the Secretary of State.

Interpretation

15. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the conditions set out in Annex 2 of the July 2004 Statement and Direction 1 and otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in black ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule – Proposed modification of Direction 1

[Proposed] Modification of Direction 1 made under section 49 of the Communications Act 2003 and SMP Services Condition OB2 specifying network components for the purposes of, among others, SMP Services Conditions OB1 to OB33

In accordance with section 49(1) of the Act, Ofcom hereby modifies Direction 1 specifying network components, in relation to the markets for: wholesale fixed analogue exchange line services in the Hull Area; wholesale ISDN30 exchange line services in the Hull Area; wholesale ISDN2 exchange line services in the Hull Area; and wholesale call origination on a fixed narrowband network in the Hull Area, as follows:

The information set out in Annex A to Direction 1 is modified by adding the following network components:

- 1.2 Local loop infrastructure;
- 1.3 Exchange to exchange infrastructure;
- 1.4 Electronics;
- 1.5 Field provision;
- 1.6 Field maintenance;
- 1.7 Back-office provision;
- 1.8 Back-office maintenance;
- 1.9 Sales and product management;
- 1.10 Net current assets; and
- 1.11 Other.

Proposal for direction modifying requirements set out in Direction 3

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and SMP Services Condition OB2 modifying the requirements in relation to preparation, audit, delivery and publication of the Regulatory Financial Statements

Background

1. On 22 July 2004, Ofcom published a statement entitled “*The regulatory financial reporting obligations on BT and Kingston Communications Final statement and notification – Accounting separation and cost accounting: Final Statement and notification*” (“**July 2004 Statement**”). At Annex 3 of that statement, Ofcom imposed SMP conditions with respect to regulatory accounting (Conditions OB1 to OB33) on KCOM in markets in which KCOM had been found to have significant market power in previously concluded market reviews.
2. At Annex 5 of the July 2004 Statement, Ofcom published various directions for KCOM given under the SMP conditions. These included a direction relating to the preparation, audit and delivery of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting (“**Direction 3**”).
3. Direction 3 was subsequently modified by:
 - a) the Direction published at Annex 6 of the regulatory statement “*Changes to BT and KCOM’s regulatory financial reporting – 2008/09 update*” of 15 June 2009;
 - b) the Direction published at Annex 5 of the regulatory statement “*Changes to BT and KCOM’s regulatory and financial reporting 2009/10 update*” of 4 June 2010; and
 - c) the Direction published at Annex 5 of the regulatory statement “*Changes to BT and KCOM’s regulatory and financial reporting 2013/14 update*” of 3 April 2014.
4. Today, Ofcom is consulting, in a consultation document entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”) on proposals identifying markets, making certain market power determinations and setting SMP services conditions. In the 2016 NMR Consultation, Ofcom is proposing to apply SMP conditions OB1 to OB27 and OB31 to OB33 to KCOM in relation to the following markets:
 - a) Wholesale fixed analogue exchange line services in the Hull Area;
 - b) Wholesale ISDN30 exchange line services in the Hull Area;
 - c) Wholesale ISDN2 exchange line services in the Hull Area; and
 - d) Wholesale call origination on a fixed narrowband network in the Hull Area.
5. Under Condition OB2 set out at Annex 2 of the July 2004 Statement which Ofcom proposes to impose on KCOM in the 2016 NMR Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to KCOM’s Cost Accounting System, Accounting Separation System and its obligations under these conditions.

6. This Notification sets out proposals modifying the requirements in relation to the preparation, delivery and publication of the Regulatory Financial Statements in relation to each of the markets set out in paragraph 4 above.

Proposal to modify a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to modify the requirements in Direction 3 in relation to the preparation, delivery and publication of the Regulatory Financial Statements in relation to each of the markets set out in paragraph 4 above.
8. The proposed modifications to Direction 3 are set out in the Schedule to this Notification.
9. The effect of, and the reasons for, the proposed modifications are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed modifications referred to in paragraph 7 comply with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

12. Representations may be made to Ofcom about the proposals set out in this Notification and the 2016 NMR Consultation by no later 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the conditions set out in Annex 2 of the July 2004 Statement and Direction 3 and otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in blue ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule – Proposed modifications of Direction 3

[Proposed] Modifications of Direction 3 made under section 49 of the Communications Act 2003 and SMP Services Condition OB2 specifying requirements for the preparation, audit and delivery of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting

In accordance with section 49(1) of the Act, Ofcom hereby modifies Direction 3 specifying requirements for the preparation, audit and delivery of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting, in relation to the markets for: wholesale fixed analogue exchange line services in the Hull Area; wholesale ISDN30 exchange line services in the Hull Area; wholesale ISDN2 exchange line services in the Hull Area; and wholesale call origination on a fixed narrowband network in the Hull Area, as follows:

A. Modifications to Annex A of Direction 3

1. The last sentence of the first paragraph of Annex A to Direction 3 which reads “In the table below, X means that the financial statement set out at the head of the column is required for the market or service on that row.” shall be deleted and replaced with the following text:

“In the table below, X means that the financial statement set out at the head of the column is required to be published for the market or service on that row while O means that the financial statement set out at the head of the column is required to be provided to Ofcom privately for the market or service on that row. A blank cell means the financial statement set out at the head of the column is not required.”

2. The following bullet in Annex A shall be deleted:

- *SoAC FA = statement of activity costs on a current fully allocated cost basis for the market (as set out in Annexes 34), supported by consolidated statement of activity costs on a current fully allocated cost basis (as set out in Annexes 33)*

and replaced with the following two bullets:

- SoAC FA (market) = statement of activity costs on a current fully allocated cost basis for the market (as set out in Annex 34);
- SoAC FA (consolidated) = consolidated statement of activity costs on a current fully allocated cost basis (as set out in Annex 33)

3. The following bullet in Annex A shall be modified as follows (where words shown as struck through are to be deleted):

- NCR FA = ~~attribution of activity costs on a current fully allocated cost basis for the market (as set out in annex 36), supported by~~ consolidated attribution of activity costs on a current fully allocated cost basis (as set out in annex 35).

4. The first Table in Part B of Annex A shall be modified as follows, so that the financial statement “SoAC FA (market)” shall be provided to Ofcom privately and the financial statement “SoAC FA (consolidated)” shall be published: (note: words in the table that have been deleted are shown as struck through while new words are in bold)

Part B

Review of the ~~fixed narrowband wholesale exchange line, call origination, call conveyance and transit~~ markets

	SoAC FA	Financial statements						Audit		Published
		SoAC FA (market)	SoAC FA (consolidated)	NCR FA	SoAC FA	RFR	SDR	FPIA	PPIA	
Wholesale market and illustrative services										
Wholesale fixed analogue exchange line services	✗	0	X	X	✗	X	X	X		
Wholesale ISDN30 exchange line services	✗	0	X	X	✗	X	X	X		
Wholesale ISDN2 exchange line services	✗	0	X	X	✗	X	X	X		
Wholesale call origination on a fixed narrowband network	✗	0	X	X	✗	X	X	X		

B. Modifications to Annex B of Direction 3

- The first table in Part A of Annex B to Direction 3 shall be modified as follows: (note: words in the table that have been deleted are shown as struck through while new words are in bold).

Part A

Review of the ~~fixed narrowband wholesale exchange line, call origination, call conveyance and transit~~ markets

	Financial statements			Audit		Published
	FS	SOS	IMT	FPIA	PPIA	
Wholesale market and illustrative services						
Wholesale fixed analogue exchange line services	✗	X	X	X		✗
Wholesale ISDN30 exchange line services	✗	X	X	X		✗
Wholesale ISDN2 exchange line services	✗	X	X	X		✗
Wholesale call origination on a fixed narrowband network	✗	X	X	X		✗

Proposal for direction modifying requirements set out in Direction 4

Notification of proposal under sections 49 and 49A of the Communications Act 2003 and SMP Services Condition OB2 modifying the requirements in relation to form and content of the Regulatory Financial Statements

Background

1. On 22 July 2004, Ofcom published a statement entitled “*The regulatory financial reporting obligations on BT and Kingston Communications Final statement and notification – Accounting separation and cost accounting: Final Statement and notification*” (“**July 2004 Statement**”). At Annex 3 of that statement, Ofcom imposed SMP conditions with respect to regulatory accounting (Conditions OB1 to OB33) on KCOM in markets in which KCOM had been found to have significant market power in previously concluded market reviews.
2. At Annex 5 of the July 2004 Statement, Ofcom published various directions for KCOM given under the SMP conditions. These included a direction specifying the form and content of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting (“**Direction 4**”);
3. Direction 4 was subsequently modified by:
 - a) the Direction published at Annex 7 of the regulatory statement “*Changes to BT and KCOM’s regulatory financial reporting – 2008/09 update*” of 15 June 2009;
 - b) the Direction published at Annex 6 of the regulatory statement “*Changes to BT and KCOM’s regulatory and financial reporting 2009/10 update*” of 4 June 2010; and
 - c) the Direction published at Annex 6 of the regulatory statement “*Changes to BT and KCOM’s regulatory and financial reporting 2013/14 update*” of 3 April 2014.
4. Today, Ofcom is consulting, in a consultation document entitled “*Narrowband Market Review: Consultation on the proposed markets, market power determinations and remedies for wholesale call termination, wholesale call origination and wholesale narrowband access*” (“**2016 NMR Consultation**”) on proposals identifying markets, making certain market power determinations and setting SMP services conditions. In the 2016 NMR Consultation, Ofcom is proposing to apply SMP conditions OB1 to OB27 and OB31 to OB33 to KCOM in relation to the following markets:
 - a) wholesale fixed analogue exchange line services in the Hull Area;
 - b) wholesale ISDN30 exchange line services in the Hull Area;
 - c) wholesale ISDN2 exchange line services in the Hull Area; and
 - d) wholesale call origination on a fixed narrowband network in the Hull Area.
5. Under Condition OB2 set out at Annex 2 of the July 2004 Statement which Ofcom proposes to impose on KCOM in the 2016 NMR Consultation, Ofcom may from time to time make such directions as they consider appropriate in relation to KCOM’s Cost Accounting System, Accounting Separation System and its obligations under these conditions.

6. This Notification sets out proposals to modify the requirements for the form and content of Regulatory Financial Statements in relation to each of the markets set out in paragraph 4 above.

Proposal to modify a direction

7. Ofcom is proposing, in accordance with section 49 of the Communications Act 2003 (the “Act”), to modify the requirements in Direction 4 in relation to the form and content of the Regulatory Financial Statements in relation to each of the markets set out in paragraph 4 above.
8. The proposed modifications to Direction 4 are set out in the Schedule to this Notification.
9. The effect of, and the reasons for, the proposed modifications are set out in the 2016 NMR Consultation accompanying this Notification.

Ofcom’s duties and legal tests

10. For the reasons set out in the 2016 NMR Consultation, Ofcom considers that the proposed directions referred to in paragraph 7 comply with the requirements of section 49(2) of the Act.
11. In making the proposals referred to in paragraph 7, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act, the six community requirements in section 4 of the Act and the duty to take account of European Commission recommendations for harmonisation in section 4A of the Act.

Making representations

12. Representations may be made to Ofcom about the proposals set out in this Notification and the 2016 NMR Consultation by no later 28 February 2017.
13. In accordance with section 49C(1)(a) of the Act, a copy of the Notification, together with the Schedules, will be sent to the Secretary of State.

Interpretation

14. Except as otherwise defined, words or expressions used shall have the same meaning as they have been ascribed in the conditions set out in Annex 2 of the July 2004 Statement and Direction 4 and otherwise any word or expression shall have the same meaning as it has in the Act.

Signed

A rectangular box containing a handwritten signature in blue ink that reads "M. Gibbs".

Marina Gibbs
Competition Policy Director, Ofcom

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

1 December 2016

Schedule 1 – Proposed modifications of Direction 4

[Proposed] Modifications of Direction 4 made under section 49 of the Communications Act 2003 and SMP Services Condition OB2 specifying requirements for the form and content of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting

In accordance with section 49(1) of the Act, Ofcom hereby modifies Direction 4 specifying requirements for the form and content of Regulatory Financial Statements in respect of wholesale cost accounting, accounting separation and retail cost accounting, in relation to the markets for: wholesale fixed analogue exchange line services in the Hull Area; wholesale ISDN30 exchange line services in the Hull Area; wholesale ISDN2 exchange line services in the Hull Area; and wholesale call origination on a fixed narrowband network in the Hull Area, as follows:

1. The following annexes to Direction 4 shall be removed in relation to each of the markets referred to above:
 - Annex 7 – wholesale summary narrowband P&L statement; and
 - Annex 8 – wholesale summary narrowband MCE statement
2. Annex 9 – wholesale market P&L statement shall be replaced, in relation to the markets for wholesale fixed analogue exchange line services in the Hull Area and wholesale call origination on a fixed narrowband network in the Hull Area, with the following Annex 9A:

Annex 9A – wholesale market P&L statement

KCOM Wholesale Market XX							
CURRENT COST PROFIT AND LOSS ACCOUNT						Restated	
for the year ended 31 March 20XX						(cross refer to	
						notes)	
			£k	% per line	£k	% per line	% Change
	Notes	20XX	<i>item/total</i>	20XX-1	<i>item/total</i>		Year on Year
Turnover							
Internal Sales							
External Sales							
Total Turnover							
			100%		100%		
Operating costs							
Operating costs of Wholesale Market (to show all cost categories that exceed 10% of operating cost)							
- Maintenance							
- Provision & Installation							
- Finance & Billing							
- Outpayments							
- Bad Debts							
- Depreciation							
- Other Costs (total of items below 10% of operating cost)							
Sub total operating expenditure							
			100%		100%		
CCA adjustments:							
Holding (gain)/loss							
Supplementary depreciation							
Other adjustments							
Total operating costs							
Return							
RETURN ON MEAN CAPITAL EMPLOYED AND TURNOVER							
for the year ended 31 March 2005						20XX	20XX-1
			%		%		%
Return on mean capital employed							
Return on turnover							

3. Annex 9 – wholesale market P&L statement shall be replaced, in relation to the markets for wholesale ISDN30 exchange line services in the Hull Area and wholesale ISDN2 exchange line services in the Hull Area , with the following Annex 9B for the period Condition 1B is in force (i.e. [1 October 2017] to [30 September 2018])

Annex 9B – wholesale market P&L statement

KCOM Wholesale Market XX						
CURRENT COST PROFIT AND LOSS ACCOUNT						Restated
for the year ended 31 March 20XX						(cross refer to
						notes)
			£k	% per line	£k	% per line
			20XX	item/total	20XX-1	item/total
		Notes				% Change
						Year on Year
Turnover						
Internal Sales						
External Sales						
Total Turnover				100%	100%	
Operating costs						
Operating costs of Wholesale Market (to show all cost categories that exceed 10% of operating cost)						
- Maintenance						
- Provision & Installation						
- Finance & Billing						
- Outpayments						
- Bad Debts						
- Depreciation						
- Other Costs (total of items below 10% of operating cost)						
Sub total operating expenditure				100%	100%	
CCA adjustments:						
Holding (gain)/loss						
Supplementary depreciation						
Other adjustments						
Total operating costs						
Return						
RETURN ON MEAN CAPITAL EMPLOYED AND TURNOVER						
for the year ended 31 March 2005						
			20XX		20XX-1	
			%		%	%
Return on mean capital employed						
Return on turnover						

4. Annex 9 – wholesale market P&L statement shall be replaced, in relation to the markets for wholesale ISDN30 exchange line services in the Hull Area and wholesale ISDN2 exchange line services in the Hull Area , with the following Annex 9C for the period Condition 1C is in force (i.e. from [1 October 20187])

Annex 9C – wholesale market P&L statement

KCOM Wholesale Market XX							
CURRENT COST PROFIT AND LOSS ACCOUNT						Restated	
for the year ended 31 March 20XX						(cross refer to	
						notes)	
			£k	% per line	£k	% per line	% Change
		Notes	20XX	item/total	20XX-1	item/total	Year on Year
Turnover							
Internal Sales - existing lines							
Internal Sales - new lines							
Internal Sales - total							
External Sales - existing lines							
External Sales - new lines							
External Sales - total							
Total Turnover				100%	100%		
Operating costs							
Operating costs of Wholesale Market (to show all cost categories that exceed 10% of operating cost)							
- Maintenance							
- Provision & Installation							
- Finance & Billing							
- Outpayments							
- Bad Debts							
- Depreciation							
- Other Costs (total of items below 10% of operating cost)							
Sub total operating expenditure				100%	100%		
CCA adjustments:							
Holding (gain)/loss							
Supplementary depreciation							
Other adjustments							
Total operating costs							
Return							
RETURN ON MEAN CAPITAL EMPLOYED AND TURNOVER							
for the year ended 31 March 2005						20XX	20XX-1
						%	%
Return on mean capital employed							
Return on turnover							

Annex 8

WCT cost model approach and design

Introduction

A8.1 This annex sets out our approach to developing the new WCT cost model (the “2016 WCT model”), which is published alongside this consultation. We propose to use this model to calculate the LRIC of WCT.

A8.2 We propose to model the cost of a hypothetical national NGN using a bottom-up cost model. We propose to base this model on the 2013 NCC model⁷, updating only those assumptions that have an impact on the LRIC of WCT.⁸

A8.3 In order to update the 2013 NCC model we have collected data using our formal powers. We requested information from BSkyB, BT, Gamma, TalkTalk, Virgin Media and Vodafone relating to:⁹

- historical network asset costs (capital and operating costs);
- asset capacity and utilisation; and
- historical asset cost trends.

A8.4 The remainder of this annex is structured as follows:

- An explanation of our modelling aims and technology choice.
- An overview of the 2016 WCT model and its constituent modules, namely:
 - Module 1: Scenario control and traffic;
 - Module 2: Network dimensioning and cost; and
 - Module 3: Depreciation.
- An explanation of our approach to verifying the outputs of the model.

A8.5 Annex 9 summarises the 2016 WCT model outputs, sensitivity and scenario analysis.

⁷ This model was published on our website and is available at:

<https://www.ofcom.org.uk/consultations-and-statements/category-2/nmr-13>

⁸ Since we have not updated any other parts of the model we do not consider that it would be appropriate to use the 2016 WCT model to calculate the LRIC+ of WCT or WCO, despite its similarity to the 2013 NCC model which did calculate these outputs. Outputs other than the LRIC of WCT should therefore not be relied upon.

⁹ We have gathered data from these CPs as the 2013 NCC model was based on information from these same CPs. Given they are the largest CPs in terms of traffic, we believe they provide a reasonable basis on which to set the input assumptions of the 2016 WCT model.

Model objectives

A8.6 The purpose of the 2016 WCT model is to forecast the cost of providing WCT for an efficient national fixed CP. The forecast costs derived from our 2016 WCT model are then used to inform our proposals for setting a charge control on WCT.

Technology choice

A8.7 In order to build a network cost model, we need to decide which network technology or combination of technologies to model. When choosing which technology to model, we have borne in mind:

- our economic objectives when setting cost based charges;
- the 2009 EC Recommendation;
- the technology modelled in the 2013 NCC and market developments since that time; and
- stakeholder responses to the April 2015 CFI.

Economic objectives in setting cost-based charges

A8.8 As explained in the 2013 NMR Statement¹⁰, in setting a charge control, our main objectives are:

- Allocative efficiency, meaning prices reflect forward looking marginal (or incremental) costs.
- Productive efficiency, meaning that CPs face incentives to minimise costs and there are efficient 'build or buy' signals.
- Dynamic efficiency, meaning that there is scope for innovation and investment. Delivering dynamic efficiency in regulated markets typically involves providing the opportunity (but not a guarantee) for firms to recover efficiently-incurred costs since this will affect future incentives to invest.
- Effective competition, meaning that CPs able to provide services more efficiently than BT can enter using their own resources and infrastructure, but that we do not restrict the ability of BT or other CPs already operating in regulated markets from competing.

A8.9 We recognise that tension can exist between these objectives. For example, setting prices on the basis of full replacement costs is likely to foster effective competition. However, prices based on full replacement costs may not generate allocative efficiency because prices will depart from actual forward looking marginal/incremental costs if replacement costs involve making new investments when there are already usable sunk assets in place.

The 2009 EC Recommendation

A8.10 The 2009 EC Recommendation states that:

¹⁰ 2013 NMR Statement, paragraph A5.40

“The cost model should be based on efficient technologies available in the timeframe considered by the model. Therefore the core part of both fixed and mobile networks could in principle be Next-Generation-Network (NGN)-based.”¹¹

A8.11 The explanatory note to the 2009 EC Recommendation provides added detail:

“From a forward-looking perspective, a new operator would choose a packet-switched network with all services delivered over an IP core network. Given that regulating termination rates at the level of efficient costs aims at reflecting a situation which would prevail under competitive circumstances, this implies the selection of the most efficient technologies subject to the availability of such technologies in the timeframe considered by the model. In a competitive market, a new entrant would opt for the most efficient available technology, i.e. one based on NGN, for the purposes of building a core network. Hence, a BU model built today could assume that the core network is NGN-based, to the extent that the costs of such a network can be reliably identified.”¹²

A8.12 In proposing our technology choice for the 2016 WCT model, we have taken due account of this recommendation, as we are required to do under Article 19(1) of the Framework Directive and section 4A of the Act.

The 2013 NCC model

A8.13 In the 2013 NMR we decided to set charges based on a hypothetical NGN. We decided this on the basis that this would provide a reasonable basis on which to set regulated charges because:

- NGNs have been the technology of choice for entrants in voice call markets and access seekers would face reasonably efficient build/buy price signals, which in turn should promote effective competition; and
- setting regulated prices independently of BT’s incurred costs would provide dynamic and productive efficiency advantages.

A8.14 We also considered that this approach was consistent with the 2009 EC Recommendation.

CFI responses

A8.15 We received several responses to the April 2015 CFI from stakeholders regarding the technology choice for the charge control on WCT.

A8.16 Colt saw no reason to depart from using NGN as the technology to calculate the unit LRIC of termination now that it has been implemented.¹³ Vodafone stated that it saw no reason to deviate from assessing costs on the basis of an NGN.¹⁴ Virgin Media suggested that the modelled hypothetically efficient operator is likely to provide a

¹¹ Paragraph 4. 2009 EC Recommendation.

¹² Section 5.1.1 EC. Explanatory note accompanying the 2009 EC Recommendation. Available online: http://ec.europa.eu/smart-regulation/impact/ia_carried_out/docs/ia_2009/sec_2009_0600_en.pdf

¹³ Colt, *April 2015 CFI Response*, page 8.

¹⁴ Vodafone, *April 2015 CFI Response*, page 20.

stable basis for regulation. Virgin Media considered that for the period of the review the broad position that was reflected in the last review (that both TDM and NGN were efficient technologies) was unlikely to change.¹⁵

A8.17 [redacted] did not see that anything had changed that would warrant any change to the model. According to [redacted], to suggest otherwise would be contrary to Ofcom's Article 8 objectives regarding regulatory certainty.¹⁶

Analysis and proposal on technology choice

A8.18 Modelling a hypothetical NGN provides regulatory consistency with our 2013 modelling approach and with the approach outlined in the 2009 EC Recommendation. We also note the general support in response to the CFI for our continued use of an NGN cost model. Based on these points we propose to model the costs of an NGN as the basis for charge controls on WCT. As in the 2013 NMR Statement, we consider that setting FTRs with reference to an NGN aligns with our objectives of economic efficiency and competition.

Modelling approach and design

Bottom-up hypothetical NGN operator

A8.19 The 2009 EC Recommendation states that:

*"It is recommended that the evaluation of efficient costs is based on current cost and the use of a bottom-up modelling approach using long-run incremental costs (LRIC) as the relevant cost methodology."*¹⁷

A8.20 A bottom-up model estimates how much network equipment is needed based on the projected volumes for cost drivers such as subscribers, traffic, or other equipment installed in the network. The parameters which define these relationships between equipment drivers and the volume of cost drivers are sometimes referred to as "network build parameters". The total cost of network equipment is then calculated (using evidence of the replacement cost of each piece of equipment).

A8.21 Bottom-up modelling has a number of advantages over top-down modelling:

- By using network build parameters, bottom-up modelling allows us to model underlying cost/volume relationships more accurately.
- Typically, it is also more transparent. The model can be published without redacting confidential information and it is more explicit how network components drive service costs.
- Building a bottom-up model allows us to create an efficient forward looking network, without being unduly constrained in trying to precisely mimic the network of the regulated firm(s).

A8.22 Our proposal is to continue using a bottom-up NGN modelling approach as used for the 2013 NCC model. We therefore propose that the modelling of FTRs in this review

¹⁵ Virgin Media, April 2015 CFI response, page 3.

¹⁶ [redacted]

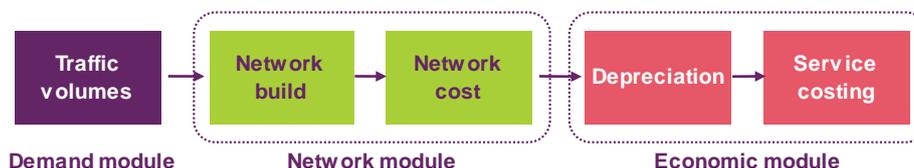
¹⁷ 2009 EC Recommendation, Recital 2.

be based on an updated version of the 2013 NCC model. In performing this update, we have only updated those assumptions which drive incremental WCT costs. These updates are discussed in greater detail later in this Annex.

Overview of the model

A8.23 Figure A8.1 below displays the high-level outline of the 2016 WCT model:

Figure A8.1: WCT model structure



A8.24 The demand module forecasts the traffic that will be carried by all fixed networks. A proportion of this traffic is then allocated to the modelled operator based on a market share assumption.

A8.25 The network module was created for Ofcom by CSMG¹⁸ in 2013. This module incorporates two sections:

- **Network build:** This section uses the traffic volumes from the demand module to forecast how much network infrastructure will be required. It builds the hypothetical efficient operator according to expected traffic. We have maintained the original CSMG network dimensioning algorithms for the 2016 WCT model. The network is dimensioned to carry the projected traffic in both the voice and data busy hour.
- **Network cost:** This section takes the output from the network build calculations and calculates the cost (both operating and capital) of building that network. In the 2016 WCT model, historical asset prices are maintained at the level at which they were set in the 2013 NCC model, but the forecast period from the 2013 NCC model has been updated using appropriate cost trends based on data received from CPs. We have taken into account changes in the investment and maintenance costs associated with each asset type, as well as technological developments that improve asset productivity.

A8.26 The economic module includes two sections:

- **Depreciation:** This section uses an economic depreciation algorithm (“Original ED”) to examine how costs are recovered over time. Original ED calculates a cost per unit of output in each year for every asset in the model. The costs per unit of output for each asset are used to estimate the unit service cost for each service modelled, using service routing factors.
- **Service costing:** This stage calculates the yearly costs to be recovered from traffic services based on how much each service uses the network.

A8.27 In order to calculate LRIC, the 2016 WCT model is run according to the decremental approach. The demand, network and cost modules are run twice; initially with all traffic services and subsequently with all traffic services excluding off-net call termination. The difference in network costs between the two runs of the model is

¹⁸ CSMG has since been renamed Cartesian.

then used as an input to the economic module to calculate the unit LRIC of termination.

Traffic volumes

A8.28 In an NGN, because voice calls are one service among a number that are provided using a common transport medium (packets routed using IP), the equipment routing calls will, to a large extent, be shared between voice and data services. The common transport protocol creates greater scope for sharing equipment than in a TDM network. Given the considerable growth in packet data traffic (and expected future growth), we expect that data service volumes will be a significant cost-driver in an NGN. It is therefore necessary not only to produce forecasts for voice services but also for data services.

Voice forecasts

A8.29 The model generates forecasts by extrapolating trends underlying the number of active phone/broadband lines per household and business and the amount of calls made per line each year. The model uses the average growth rate over the past three years of historical data to establish trends, with a dampening factor applied.¹⁹

A8.30 We have updated our dampening factors to account for differences between the forecasts in the 2013 NCC model and the outturn data. Generally, we have reduced the dampening factors so that existing trends are smoothed less aggressively into the steady state.

A8.31 Figure A8.2 below shows our high, medium and low forecasts for the total number of lines (residential + business).²⁰ The medium scenario is our base case and assumes a slight increase in the number of lines until 2024/25 (our steady state date), after which the number of lines is held constant. However, this masks two opposing trends, i.e. an increase in the total number of residential lines, and a fall in the total number of business lines.

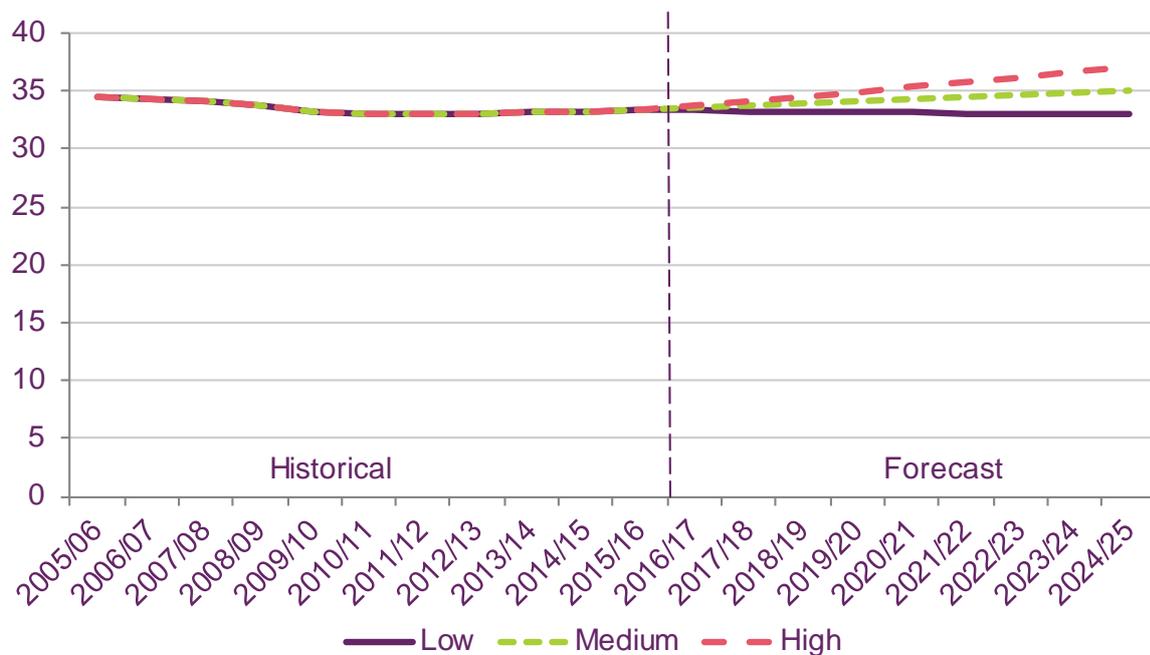
A8.32 In particular, there has been a greater increase in the number of residential voice lines per household than that anticipated (in the 2013 NCC model)²¹, and a greater than anticipated reduction in the number of business lines and channels per business. This is because the forecasts in the 2013 NCC model were based on data at the time which showed a relatively flat number of lines per household and lines/channels per business. Since then, growth in lines has been slightly faster than household growth, and the reduction in business lines/channels has continued along a trend only seen in one year of data available when the 2013 NCC model was published.

¹⁹ For example, the forecast for annual residential voice usage per line is calculated as: [Total households] * [Voice lines per household] * [Minutes of voice calls per line per year]. A dampening factor is applied to the growth rate in order to reduce the year-on-year change. We apply a dampening factor in order to smooth the transition to the steady state, and to account for the fact that a linear downward trend (such as in call volumes in recent years) is unlikely to continue in the long run (as this would result in forecasting zero or negative volumes in later years).

²⁰ This excludes large business sites, as they are likely to be using leased lines. "Total business lines" includes business voice lines, business ISDN 2 channels and business ISDN 30 channels. "Total residential lines" includes total residential voice lines and total residential ISDN 2 channels. However, the latter is very small (in 2014/15 there were 184 residential ISDN 2 channels).

²¹ We have increased the dampening factor used to calculate the forecasts for residential lines per household to smooth the path to a steady state which has no greater than one line per household.

Figure A8.2: Forecast for total number of lines (millions)

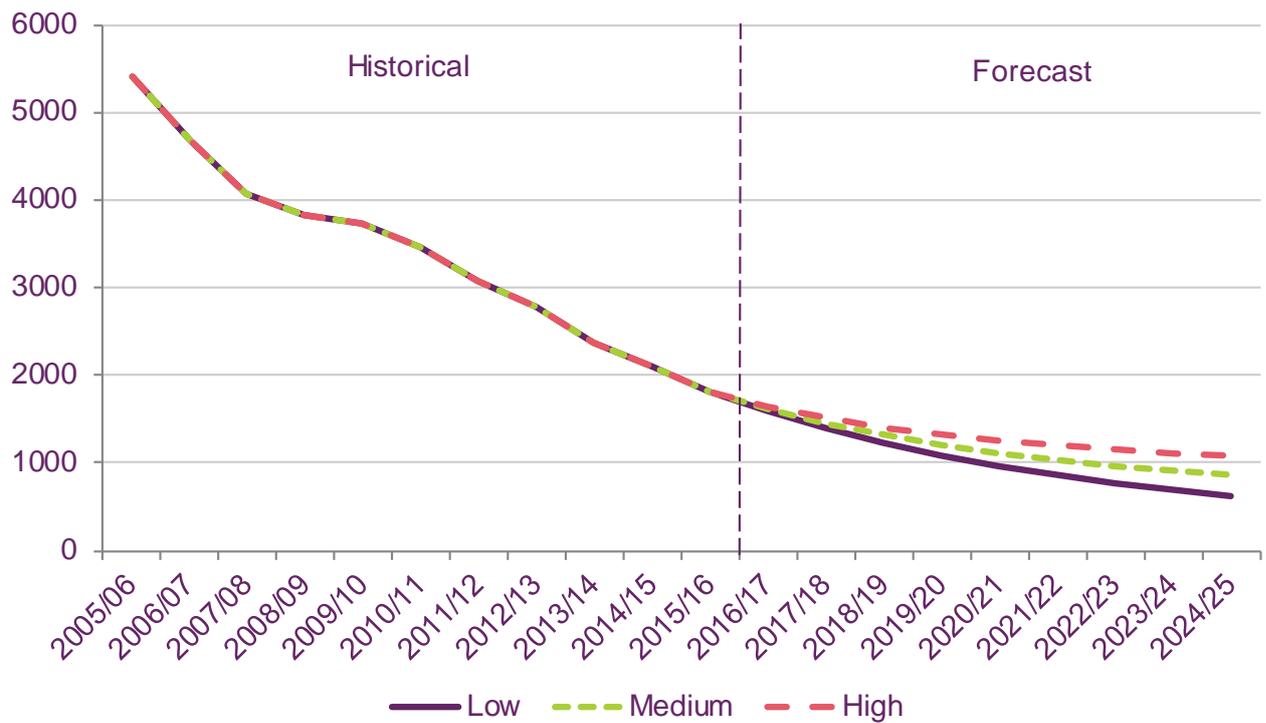


Source: Ofcom forecasts based on data collected from fixed operators.

A8.33 Figures A8.3 and A8.4 below show our forecasts for the average annual outgoing voice usage per line for residential and business users respectively. The medium scenario is our base case.

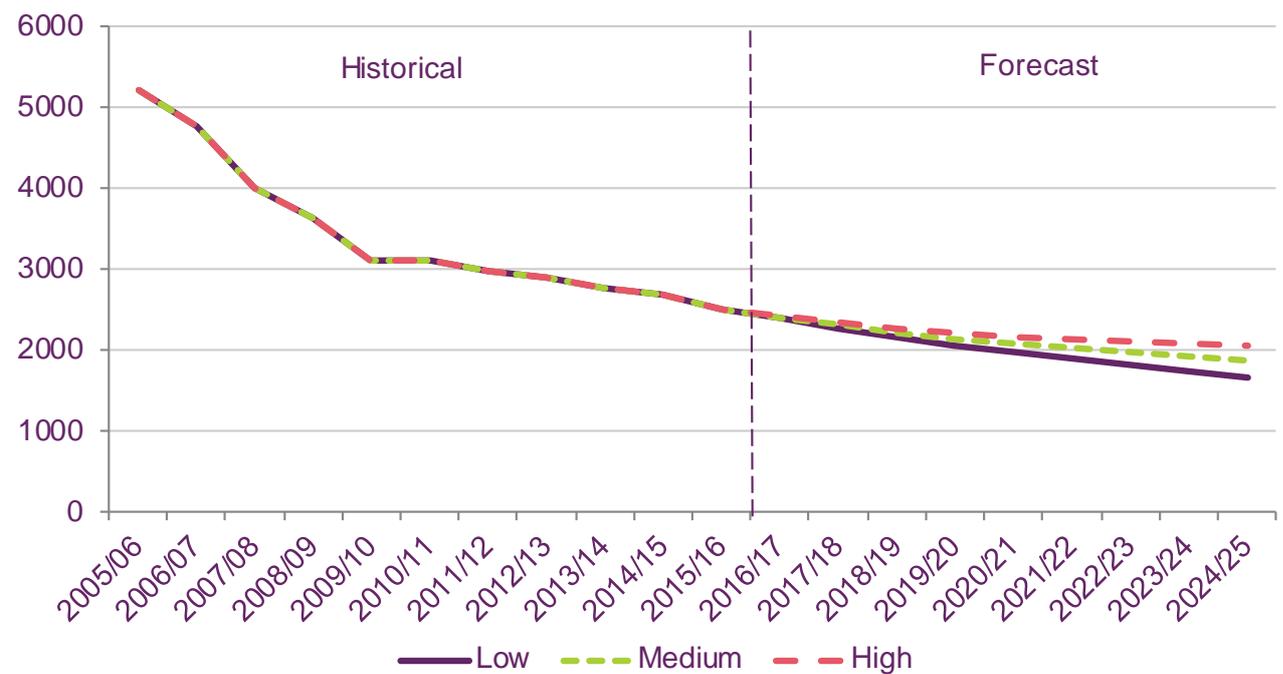
A8.34 The last three years have seen a continued reduction in average residential usage per line across all call types. As such, our forecast gradual decline in residential usage going forward starts from a lower base than the 2013 NCC model. Similarly, we forecast a continuing decline of business call usage per line which flattens as we reach the steady state in 2024/25.

Figure A8.3: Forecast for annual average residential outgoing voice usage per line (minutes)



Source: Ofcom forecasts based on data collected from fixed operators.

Figure A8.4: Forecast for annual average business outgoing voice usage per line (minutes)



Source: Ofcom forecasts based on data collected from fixed operators. Historical data exclude VoIP and are an approximation as they are based on data from a large number of small providers.

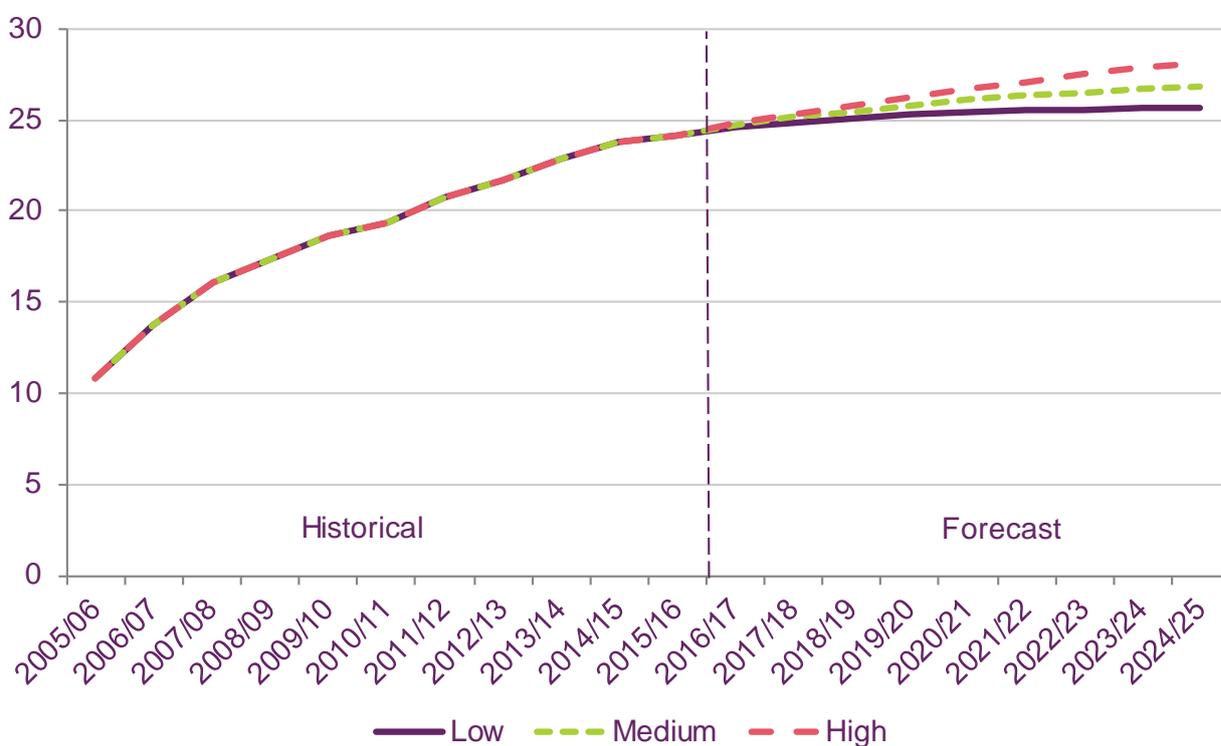
A8.35 We have performed a sensitivity analysis on voice lines and usage (see Annex 9) in which we found that the LRIC of WCT is relatively insensitive to changes in traffic volumes.

Broadband forecasts

A8.36 We present our broadband lines forecast in Figure A8.5 below. We continue not to include leased line services in the model. We are modelling a hypothetical efficient national fixed CP rather than any specific CP, and not all national or near-national fixed CPs have built leased lines infrastructure as part of their network. Were we to include leased line services in the model we would expect this to increase the number of services using common network elements, but we believe it would have a small impact on model outputs. This is particularly the case now the 2016 WCT model is focused on calculating the LRIC of WCT, which does not include common costs across multiple services. Given the above we continue to believe that it would not be appropriate to include leased line services in the model.

A8.37 The number of broadband lines has continued to increase over the last three years. In our base case medium scenario, we continue to forecast a gradual decline in this increase towards a terminal value of 28.6 million lines in 2024/25.²²

Figure A8.5: Forecast number of broadband lines (millions)



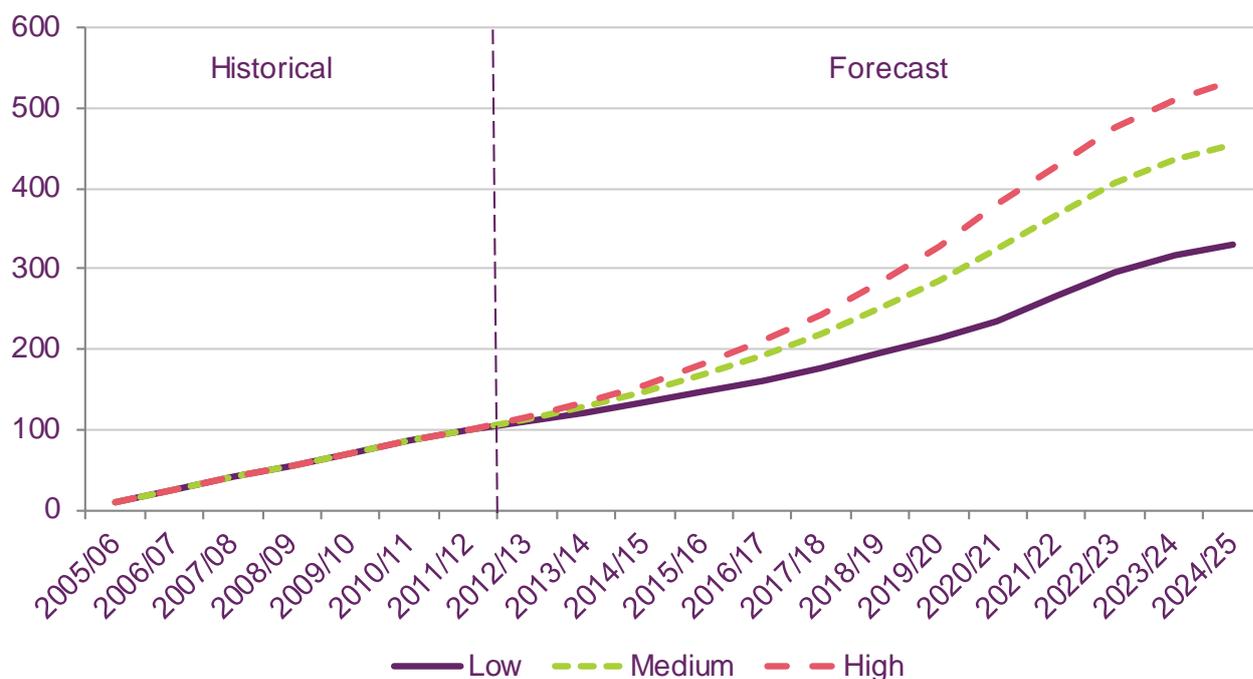
Source: Historical data collected from providers by Market Intelligence, Ofcom forecasts based on data collected from fixed operators.

A8.38 Figure A8.6 below shows our low, medium and high forecast of peak bit rate per broadband line (Kbit/s). We propose to use the same forecast as in the 2013 NCC.

²² This translates to approximately 93% residential broadband penetration. We have incorporated an additional constraint in our model that the forecast number of residential broadband lines cannot exceed the forecast number of residential households.

This is because LRIC of WCT is not materially affected by changes in the forecast broadband usage. This is shown in our sensitivity analysis in Annex 9.

Figure A8.6: Forecast peak Kbit/s per line



Source: Ofcom forecasts based on data collected from fixed operators.

Market share

A8.39 The market share assumption affects the share of total traffic which will be carried by the modelled operator. This assumption is not explicitly based on any single CP – rather, it is intended to provide a reasonable proxy of the market share an efficient national entrant to the market would expect to reach. We have assumed that the modelled operator will have the same market share for all network services (i.e. voice and broadband). As market share increases, the operator will need to build a larger network in order to handle increased volumes of traffic.

A8.40 The 2009 EC Recommendation is not specific in the approach to be applied in the case of market share for WCT cost modelling. The annex to the 2009 EC Recommendation states:

“To determine the efficient scale of an operator for the purposes of the cost model, NRAs should take into account that in fixed networks operators have the opportunity to build their networks in particular geographic areas and to focus on high-density routes and/or to rent relevant network inputs from the incumbents. When defining the single efficient scale for the modelled operator, NRAs should therefore take into account the need to promote efficient entry while also recognising that under certain conditions smaller operators can produce at low unit costs in smaller geographic areas. Furthermore, smaller operators that cannot match the largest operators’ scale advantages over broader geographic areas can be assumed to

purchase wholesale inputs rather than self-provide termination services.”²³

- A8.41 In the 2013 NMR Statement we used a base case market share of 33%. We considered it appropriate to use only a market share which would reflect that which a hypothetical network operator could realistically achieve across the market as a whole. We considered evidence of the deployments of different CPs from the 2013 WBA Consultation, which showed that four CPs (BT, Sky, TalkTalk and Virgin Media) had a major presence in a large number of exchanges across the UK.²⁴ These CPs were deemed to be “Principal Operators” (POs). In this analysis, Vodafone was excluded from the list of POs due to its low national share of lines, despite having a relatively high (~60%) national coverage.
- A8.42 Only BT is present at all exchanges, with the other POs present at a majority (but not all) exchanges. Based on the coverage of the POs, we estimated that across the whole country and weighting by premises served by each exchange, an ‘average exchange’ would have 3.3 POs present. We rounded this to the nearest whole number of operators per area, concluding that on average an exchange would have 3 operators present, and therefore that a hypothetical national operator would face competition from 2 other operators at an average exchange.²⁵ On that basis we considered a 33% market share to be appropriate.
- A8.43 Repeating this analysis with updated data on network coverage for these POs produces a similar result, with an average of 3.4 operators per exchange. In the 2014 WBA Statement, we decided to include Vodafone on the list of POs following responses from stakeholders stating that Vodafone still provided a competitive constraint in the residential broadband market given its well established sales network, retail-focused marketing and advertising, and mobile customer base to which it could cross-sell a broadband product.²⁶ Including Vodafone as a PO would bring the average number of operators up to around 3.9.
- A8.44 However, we do not believe that Vodafone being considered a PO from the perspective of the WBA analysis automatically reads across to it being considered a relevant competitor for the purposes of our market share assumption for the 2016 WCT model. We understand that Vodafone buys WLR from BT to serve its fixed voice subscribers, which means that at present calls to Vodafone’s customers will terminate on BT’s network. We are primarily interested in voice market share in order to determine the appropriate level of voice traffic to be carried across the modelled network, and voice traffic terminating to all WLR lines (including BT’s own supply as well as external customers) should be considered as traffic terminating on a single network for the purposes of this analysis.

²³ A similar wording is set out in the Explanatory Note to the 2009 EC Recommendation, see section 5.1.3.

²⁴ In this analysis, we considered two major factors: the national coverage of the operators, measured as the proportion of UK premises served by exchanges at which an operator has an unbundled presence; and the national share of lines, measured as the proportion of all fixed lines owned by a given CP across all exchanges.

²⁵ For further detail see paragraphs A6.88 to A6.104 of the 2013 NMR Statement.

²⁶ Paragraphs 4.95 and 4.96 of the 2014 WBA Statement, available online:

<http://stakeholders.ofcom.org.uk/binaries/consultations/review-wba-markets/statement/WBA-Statement.pdf>

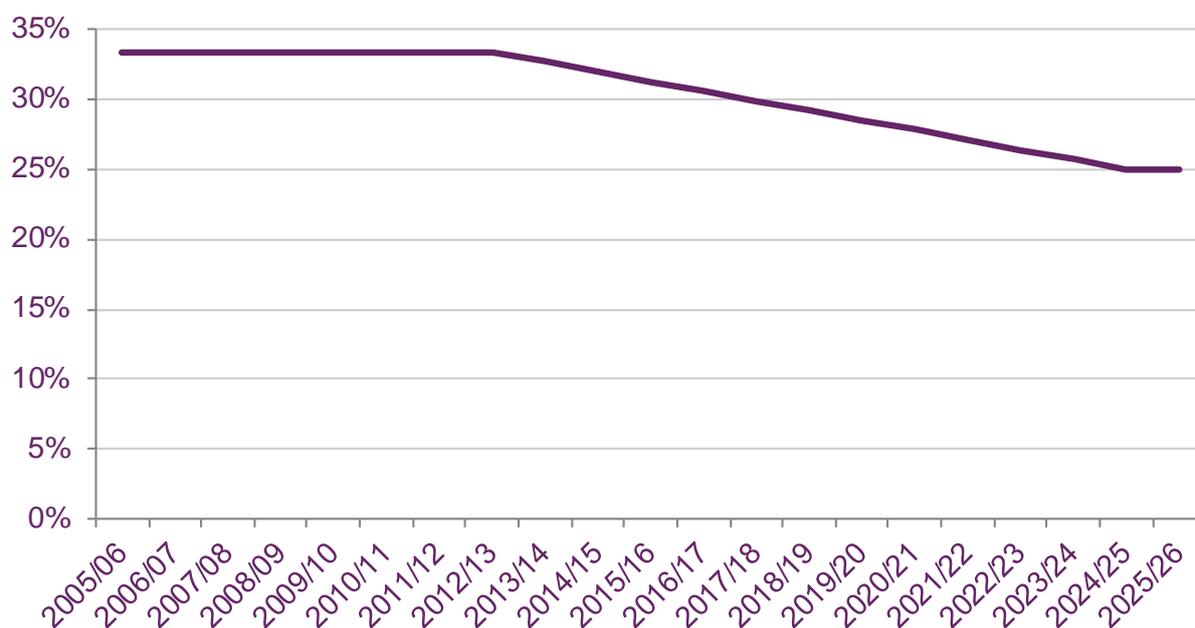
A8.45 On 13 February 2015 Virgin announced plans to roll out its cable network to approximately four million additional premises over the next five years.²⁷ According to its press release, Virgin currently has a network footprint covering roughly 50% of premises. This is planned to increase to roughly 60% of premises by 2020. This has the effect of slightly increasing the number of operators at an average exchange, bringing the total to 3.5. This lies directly between the assumptions of a 25% and a 33% market share.

A8.46 However, we did not consider the effect of business ISDN lines provided by other operators, such as Vodafone and KCOM, in the 2013 NMR. These operators were not considered POs, but would have a material amount of voice traffic terminating on their infrastructure. We have not quantified the exact impact of including business ISDN lines in our analysis, but we would expect this to add to the average number of operators in each exchange.

A8.47 Taken in the round, we consider that the above factors point to rounding up the number of competing operators to 4 rather than down to 3. Therefore, in the long run we propose that the model assumes there to be 4 rather than 3 terminating networks present in an average exchange, which implies an average market share of 25%.

A8.48 We propose to introduce this change in the forward-looking market share assumption in a gradual manner over the period from 2013/14 to 2024/25 to reflect the developments since the 2013 NMR and those expected in the future.

Figure A8.7: Proposed hypothetical operator market share²⁸



Source: 2016 WCT model.

²⁷ <http://about.virginmedia.com/press-release/9467/virgin-media-and-liberty-global-announce-largest-investment-in-uks-internet-infrastructure-for-more-than-a-decade>

²⁸ The proposed market share is held constant from 2024/25 for the remainder of the modelling period.

Network build

- A8.49 In June 2012, we commissioned CSMG to develop network build and cost modules as part of the 2013 NMR. The network module takes the traffic forecasts from the demand module and dimensions a network to carry this traffic. We have used the CSMG network modules in the 2016 WCT model.
- A8.50 The 2016 WCT model assumes the operator builds an NGN in which multiple services are transported over a shared IP network. The model dimensions equipment to carry the network traffic based on various dimensioning parameters. The number of elements required in the network is based on up to three drivers: the minimum required of an element, and up to two drivers that determine how the elements are scaled according to demand.
- A8.51 In the 2013 NCC model we included a capacity utilisation assumption of 70% for all network equipment. This means that when the traffic passed over a network element reaches 70% of the maximum possible for that element, a new element is deployed. We do not propose to change this assumption as it is consistent with data received from CPs using our statutory information-gathering powers. It applies to elements which are directly dimensioned by demand drivers. We consider that this is reflective of operators' real-world network planning approach to determining when capacity needs to be expanded.
- A8.52 We have reviewed asset lives with reference to information from CPs and do not believe any change is needed in the model.
- A8.53 Table A8.8 summarises the key network dimensioning parameters in the model.

Table A8.8: Key network dimensioning parameters

Parameter	Description
Voice busy hour	Occurs during the working day, 9% of daily voice traffic
Network busy hour	Occurs in the early evening, 8% of daily voice traffic, 9% of data traffic
Voice call requirement	Requires 135 kbps in each direction at the IP layer
Market share	33% prior to 2014/15, trending down to 25% by 2024/25
Unsuccessful calls	31%
Capacity utilisation threshold ²⁹	70%
Incoming: outgoing ratio ³⁰	125%

- A8.54 The model assumes there are 1.45 call attempts per successful call to account for unsuccessful calls (which implies that ~31% of calls are unsuccessful).

²⁹ Applies to components which are dimensioned directly by demand drivers.

³⁰ This is a parameter that dimensions the amount of incoming traffic terminating on the network as a proportion of the outgoing traffic originated on the network. It was added to the model to fix an issue where the total traffic across the whole market was dependent on the market share assumption in an earlier version of the model. We have maintained the use of this parameter in the 2016 WCT model.

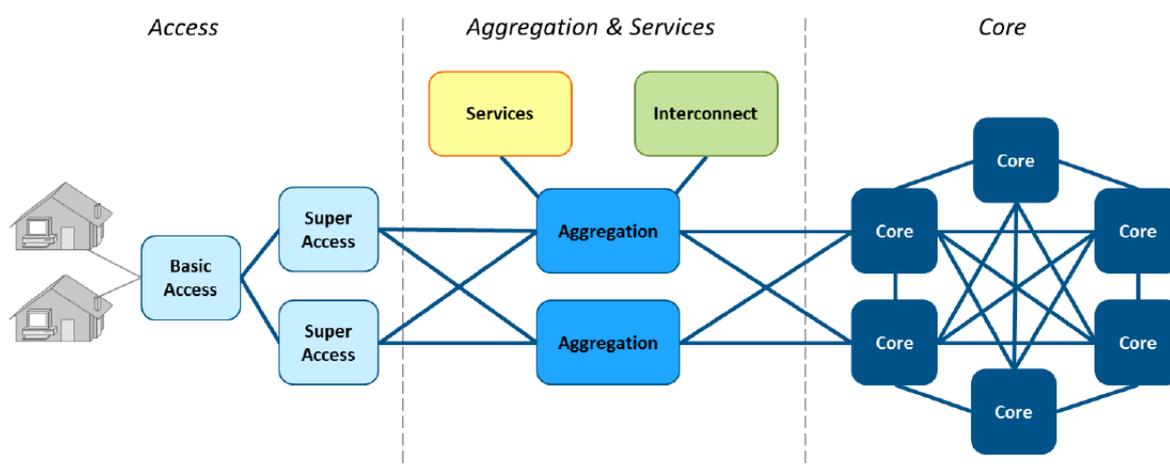
A8.55 Property costs are not modelled on a bottom-up basis. Instead, property costs are included with capital costs more generally by calculating an average capital cost per rack and applying this proportionately to the network equipment based on rack space occupancy. Opex for these items is estimated and applied in the same manner; as opex is calculated as a proportion of capex, the uplifted capex of assets to account for property costs will also uplift opex for those assets.

Node design

A8.56 The network module is based on a 'scorched-node' approach. This approach takes account of existing network topology. The 2016 WCT model uses the same location and serving area as the 2013 NCC model, which was based on the topology of BT's network exchanges. BT's existing topology was chosen because we believed that BT's existing local exchange topology provided an appropriate proxy for an efficient national local exchange network. We have not updated the location and serving area data since 2013 as any changes in BT's network topology have been and are likely to be minor and would therefore have a minimal effect on the dimensioned network.

A8.57 Figure A8.9 provides an illustrative overview of the network architecture showing the relationship between the logical nodes.

Figure A8.9: NGN logical architecture



Source: CSMG, Annex 7 of the 2013 NMR Statement, page 6, Figure 2.

A8.58 The modelled NGN consists of a number of interconnected nodes. Access nodes are the physical locations which aggregate physical access connections from end-users. Each node includes a number of different pieces of network equipment and performs a specific function as follows:

- **Basic access node:** The basic access node is the node closest to the end-user at which the copper access lines terminate. There are approximately 4,000 basic access nodes.
- **Remote access node:** The remote access node is a specific kind of basic access node, serving remote and/or hard-to-reach locations. There are approximately 1,600 remote access nodes.
- **Super access node:** The super access nodes are co-located with the basic access node and aggregate traffic from basic access nodes before passing it on to the aggregation node. There are approximately 1,100 super access nodes.

- **Aggregation node:** The aggregation node aggregates traffic from the super access nodes and passes it on to the core node or to other CP networks via the interconnect nodes (see below). There are 106 aggregation nodes.
- **Interconnect node:** The interconnect node supports voice interconnection between the modelled NGN and other CP networks on an IP basis. As in the 2013 NCC model, we propose to model a network with 20 Pols.³¹ These 20 Pols are assumed to be co-located with the core nodes described below (which in turn are co-located with aggregation nodes).
- **Core node:** The core node transports traffic between aggregation nodes. There are 20 core nodes.
- **Service node:** The service nodes house the servers providing the service functionality, such as call servers, directory servers etc. There are two service nodes in the 2013 and 2016 models.

Network cost

CFI responses

A8.59 One respondent [3<] argued that the WACC included in our modelling is too high as it is based on BT's WACC, and that this "amounts to BT's competitors funding its Premiership TV rights over and above recovering its efficient WACC on regulated assets."³²

A8.60 BT argued that due to the costs reallocated to the narrowband markets according to the recommendations in the Cost Attribution Review, the regulated termination and origination rates should be increased to account for these higher costs. BT estimates that these regulated rates should be increased by around 0.02ppm each to allow recovery of these additional costs.³³

Cost of capital

A8.61 The 2016 BCMR Statement outlines the approach to estimating the WACC.³⁴ The approach estimates disaggregated WACCs for different parts of BT to reflect variations in systematic risk between different activities. In that Statement we refined our approach to disaggregation and defined three separate parts of BT: 'Openreach copper access', 'other UK telecoms', and 'rest of BT' (RoBT).

A8.62 The 2016 BCMR Statement considered the point raised by [3<] above, that BT's asset beta is biased upwards because it includes BT's pay TV operations which [3<] considers to be higher risk than telecoms operations. In paragraphs A30.229 to A30.233 of the 2016 BCMR Statement we assessed evidence from NERA regarding the range of asset betas of comparator pay TV operators and concluded that it was

³¹ Discussed in detail in paragraphs A5.64 to A5.73 of the 2013 NMR Statement.

³² [3<]

³³ Letter from Ed Piggott to Louise Marriage regarding Narrowband Market Review and Network Charge Controls, 25 October 2016.

³⁴ Annex 30, available online at: <http://stakeholders.ofcom.org.uk/consultations/bcmr-2015/final-statement/>

not sufficiently clear that typical (vertically integrated) pay TV businesses are associated with higher systematic risk than telcos.³⁵

A8.63 We do not think there are any specific circumstances of this review that would cause us to change the position taken in the 2016 BCMR Statement and therefore do not propose to modify this approach to estimating the WACC for UK telecoms.

A8.64 For the purposes of this consultation, we propose that the appropriate WACC to use for the purposes of the WCT charge control is the 'other UK telecoms' WACC published in the 2016 BCMR Statement; this was estimated to be 9.8% on a pre-tax nominal basis.

A8.65 As discussed in Section 15, we propose to switch from using RPI to using CPI as the inflation index for the charge control, and in the model. Consistent with this, we have calculated a pre-tax real WACC of 7.6%. We have also calculated the historical pre-tax WACC series using CPI. For this we have used the pre-tax nominal WACC used in previous NCC models and combined them with CPI inflation for the year in which each WACC was published, and maintained that figure over the duration for which that WACC is used. This is consistent with the approach taken when updating the 2015 MCT model from RPI to CPI. The time series of WACC used is shown in Figure A8.10 below.

Figure A8.10: Real (CPI) pre-tax WACC time-series³⁶

	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14	2014/15	2015/16	Forecast (all years) ³⁷
Pre-tax real WACC	9.2%	9.2%	9.2%	9.2%	7.0%	7.0%	7.0%	7.0%	8.0%	8.0%	8.0%	7.6%

Cost trends

A8.66 The base year in the 2013 NCC model was 2012/13, with cost trends then applied to generate asset costs for the subsequent years. We have not explicitly updated the base year in the model for the present review; instead, we have updated the historical asset price trends as described below. This has the same effect as updating the base year without changing the overall structure of the model.

A8.67 We have flattened the capex and opex trends for forecast periods, such that after 2025/26 they are assumed to remain constant during the remainder of the modelling period in real terms. Cost trends are subdivided into seven categories as presented in Table A8.11 below. Based on data collected from CPs, we have used consistent asset price trends for all categories apart from active equipment, with the difference in real per annum change for these trends being due to adjusting for CPI rather than RPI for the 2016 WCT model. All cost trends in the model are progressively flattened

³⁵ Furthermore, in the 2016 BCMR Statement we noted that even if there was stronger evidence that pay TV operations should have a different asset beta from telecoms, it may not have a significant impact on our WACC estimates due to the relatively small scale of BT's current pay TV operations compared to all other BT operations and the bundling of pay TV services with broadband (see Annex 30, footnote 400).

³⁶ Pre-tax nominal WACC estimates are taken from the August 2005 Ofcom approach to risk (for 05/06 to 08/09), the May 2009 OR financial framework (for 09/10 to 11/12), the March 2013 LLCC Statement (for 12/13 to 14/15) and the April 2016 LLCC Statement (for 15/16 onwards).

³⁷ From 2016/17, the WACC is held constant at 7.6% in pre-tax real terms in perpetuity.

to zero over the period from 2016/17 to 2025/26. Starting in 2026/27 the real input trends are held at 0% per annum as the model has reached the 'steady state'.

Table A8.11: Cost trend model inputs, 2016/17 to 2018/19

	Real capex and opex trend (annual change in costs)
Property	0.0%
Racks and cooling	-1.5%
Software and platforms	-2.5%
Active equipment	-6.0%
Passive equipment	-1.0%
Labour	+1.0%
Incremental admin costs	-1.0% ³⁸

A8.68 We have maintained the historical cost trends for active equipment as used in the 2013 NCC model of -3.0% per annum in nominal terms, which equates to -5.2% in real terms in the 2016 WCT model.³⁹ However, based on data from CPs, we have updated these to -9.0% (in real terms) from 2013/14 to 2015/16 and -6.0% from 2016/17 to 2018/19, which is reduced gradually to reach 0% in the steady state.

A8.69 We have maintained the historical cost trends for labour as used in the 2013 NCC model of +3.5% per annum in nominal terms, which equates to +1.1% in real terms in the 2016 WCT model. We have updated these to +3.0% (in nominal terms) – i.e. +1.0% (in real terms) – from 2016/17 to the steady state on the basis of data from the OBR and ONS.⁴⁰ This is the same assumption as was made in the 2016 LLCC Statement.⁴¹

A8.70 As discussed in Section 15, we are proposing to switch from using RPI to using CPI as the inflation index to use in the model. Due to the functioning of the economic depreciation algorithm described later in this annex, the output cost recovery profile can be erratic when using volatile input price trends. In order to avoid this, we do not use historical annual CPI data to calculate historical price trends; instead, we use the geometric mean (2.3%) of the historical data so we have a single historical rate to maintain stability for cost recovery. The model assumes long-term forecast CPI inflation will be 2% p.a. in line with the Bank of England target. These assumptions are consistent with the approach used to calculate the real pre-tax WACC, as explained in paragraphs A8.60 to A8.64 above.

³⁸ This is only applied in forecast years and is discussed in further detail in paragraphs A8.78 to A8.83 below.

³⁹ In the 2013 NCC model this was -6.2% in real terms as RPI tends to have been higher than CPI historically.

⁴⁰ See March 2016 OBR Economic and Fiscal Outlook, available online:

<http://budgetresponsibility.org.uk/efo/economic-fiscal-outlook-march-2016/>

and ONS change in average gross weekly earnings, available online:

<https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours>

⁴¹ 2016 LLCC Statement, paragraph 5.222, available online:

<http://stakeholders.ofcom.org.uk/binaries/consultations/bcmr-2015/statement/bcmr-final-statement-volume-two.pdf>

Other modelled costs

- A8.71 We do not agree with BT that the regulated FTR should be increased to account for costs reallocated in line with the CAR recommendations. We calculate the cost of WCT by modelling a hypothetical network that does not reflect the specific cost allocations of BT or any other CP. Furthermore, as discussed in Section 13, we are proposing to regulate FTRs on a LRIC basis, and as such they should only include those costs that are incremental to WCT. Any costs reallocated by the CAR recommendation will be costs common across multiple services. We therefore do not propose to account for these costs in any way in our modelling of the costs of WCT.⁴²
- A8.72 Installation costs are captured in the model through estimates of man-hours and labour rates. Equipment retirement costs have been included as part of capital expenditure. This cost to decommission each network element is based on the number of man hours required and the cost of labour.
- A8.73 The capital costs of Operations and Business Support Systems (OSS/BSS) have been included. They have been modelled in the same way as in the 2013 NCC model, with a fixed cost component based on per-subscriber data received from CP information requests and including the cost of pre-launch feasibility tests.
- A8.74 Excluding power, operating costs for each element are typically assumed to be 14% of the initial capex each year.⁴³
- A8.75 The cost of power per kWh is based on ONS data. We have forecast electricity prices to rise based on the trend of the past five years, at 4.1% p.a.; this is consistent with data from National Grid.⁴⁴
- A8.76 The power usage assumptions and air conditioning requirements have not been updated from the 2013 NCC model. We assume that each kW required by network equipment produces heat that requires 0.8 kW of cooling. In the 2013 NCC model these assumptions were based on equipment vendor guidelines and CP responses to information requests. We believe that these assumptions remain reasonable for the current review period.

Treatment of “passive” network elements

- A8.77 We have not updated modelling of passive network assets. In the 2013 NCC model these were treated as common costs and contributed to the LRIC+ of WCT and WCO, but not the LRIC of WCT. We have maintained this approach for the 2016 WCT model.

Incremental administrative costs

- A8.78 Prior to the 2013 NMR administration costs were charged for as a different service called PPP (Product management, policy and planning). Analysis from the February 2013 Consultation suggested that PPP costs were driven by factors other than the

⁴² We also note that we are proposing that WCO not be subject to a charge control. Therefore, regulation will not constrain common cost recovery (other than via the fair and reasonable obligation to avoid margin squeeze) for narrowband services as a whole, it will merely prevent the recovery of these costs from WCT.

⁴³ Some specific assets have different opex percentages where the evidence we have collected from CPs suggests this is appropriate.

⁴⁴ See Figure 5 in National Grid's *Future Energy Scenarios 2015*, available online at <http://www2.nationalgrid.com/WorkArea/DownloadAsset.aspx?id=41952>

provision of wholesale call termination. Between 2007 and 2012 external WCT volumes fell by 22% even though PPP total costs increased by almost 10%.

A8.79 In response to the February 2013 Consultation BT provided a list of PPP activities which it suggested were incremental to WCT. These included:

- setting prices and issuing Network Charge Change Notices (NCCNs);
- the cost of volume measurement systems to identify where calls come from;
- maintenance of the Element Based Charging (EBC) matrix;
- maintenance of the price list and website; and
- processing of WCT invoicing.

A8.80 Following subsequent analysis, we determined that only maintenance of the EBC matrix was incremental to WCT. The EBC was used to identify at each of BT's switches which charge should be applied on a call-by-call basis. Without WCT, the EBC could be a much cheaper and simpler system and so we included part of the EBC costs (£3.5m) within the LRIC of WCT.

A8.81 Since then, we understand that BT has retired the EBC system and absorbed its functions into the A-Z Telephony Event Charging (AZTEC) system. We have sought data from BT to assess whether the existing assumption of non-network incremental costs of WCT remains appropriate. We have not sought data from other CPs as we understand that other major CPs do not calculate charges on a call-by-call basis in the same way as BT; they instead choose to either simply apply the FTR at all nodes, or agree a blended rate to apply with other CPs. While we acknowledge the cost savings in such an approach, we think it appropriate for CPs to recover the efficient costs of call-by-call charging if they choose to charge in this manner. As BT is the only major CP we are aware of that charges in such a manner, we have based this input assumption within the model on BT's costs.

A8.82 Having examined these costs, we have concluded that the assumption included in the 2013 NCC of £3.5m is no longer a reasonable estimate of the incremental non-network costs of WCT. We believe a reasonable estimate of these costs for the review period is £0.85m⁴⁵ per annum. We show a comparison of the EBC and AZTEC costs in Table A8.12 below. We have updated the model so that it uses the previous assumption of £3.5m in historical years, and trends down to the new assumption of £0.85m in 2015/16.

Table A8.12: Change in BT's incremental administrative costs

Activity	Cost (2013)	Cost (2015)
Main system (EBC / AZTEC)	[X]	[X]
Other systems	[X]	[X]
FTE	[X]	[X]
Depreciation	[X]	[X]
Total	[X]	[X]

⁴⁵ This number differs from Table A8.12 as we have rounded to a reasonable level of accuracy for this modelling assumption.

A8.83 These costs are given a bespoke cost trend in the 2016 WCT model:

- Prior to 2012/13, they follow the same asset price trend as the OSS/BSS asset, in keeping with the approach taken in the 2013 NCC model;
- From 2012/13 these costs are trended down from £3.5m to reach £0.85m in 2015/16;
- In forecast years, they follow a real asset price trend of -1% per annum. The asset price trend represents the average reduction in cost expected of the asset every year; as we are now explicitly modelling a major reduction in these costs based on BT's data, this average reduction does not seem to be an appropriate assumption going forward. After such a significant change in system costs, we would expect these to remain more stable over the forecast period.

Network build and cost module outputs

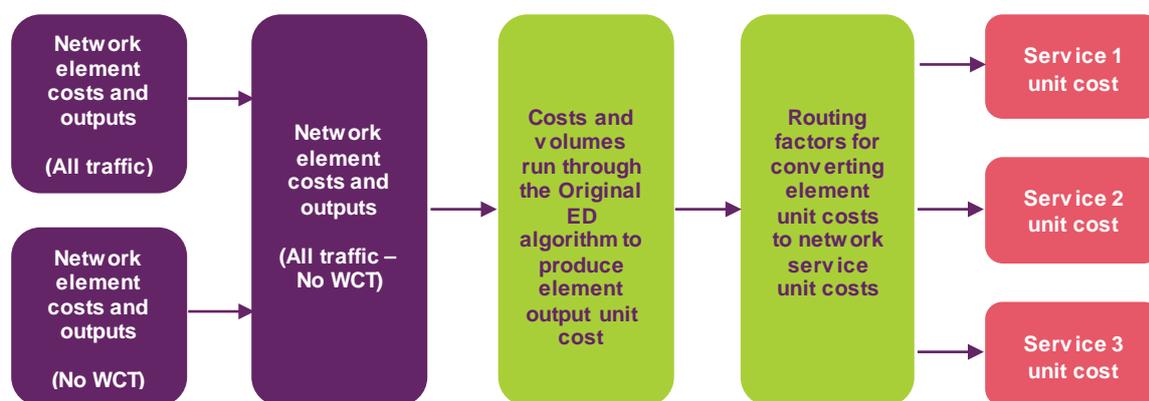
A8.84 The total annual capital and operating expenditure are calculated by multiplying the total element demand each year by the unit capex or opex for the year.

A8.85 The cost outputs provide inputs to the economic depreciation algorithm in the economic module. The routing factors from the network module are also used in the economic module to allocate the costs of network element output to network services.

Depreciation and service costing

A8.86 Once the total costs of the hypothetical NGN have been established from the cost module, the economic module determines how these costs are recovered over time. An illustration of how costs are recovered both over time and across services is shown in Figure A8.13 below.

Figure A8.13: Cost recovery over time and across services⁴⁶



A8.87 There are two main approaches to depreciation for cost recovery: accounting depreciation and economic depreciation. An accounting approach to depreciation would usually involve taking the price that would be paid for equipment (or was paid,

⁴⁶ The figure shows a 3 service model, relating to the three services that make up WCT: off-net incoming calls (passing over a single aggregation node), off-net incoming calls (passing across the core) and off-net incoming international calls. These three services are weighted by their respective volumes to produce a unit cost output for WCT.

under historical cost accounting) and dividing this value by the expected equipment life to reach a depreciation charge for that year. As a result, in periods of low utilisation unit costs are relatively high and in periods of high utilisation unit costs are low. An economic approach to depreciation considers costs over the entire economic life of the network and attempts to match the profile of cost recovery of an asset to the profile of its utilisation.

A8.88 As for the 2013 NCC model, we consider that economic depreciation is more appropriate than accounting depreciation. Due to the inverse relationship between in-year utilisation and unit costs that usually results from accounting depreciation, we believe it is a less suitable option for calculating cost recovery. In our view, economic depreciation better reflects the forward-looking economic value of an asset. Using economic depreciation in bottom-up cost modelling is also consistent with the 2009 EC Recommendation, which states that

“The recommended approach for asset depreciation is economic depreciation wherever feasible.”⁴⁷

A8.89 An alternative way to characterise economic depreciation is as a cash flow analysis to answer the question: what time series of prices, consistent with trends in the underlying costs of production and given forecast traffic, yield an expected present value equal to the capital and operating cash flows arising from building and running the network? In order to answer this question, Ofcom has previously used an approach to economic depreciation described as Original ED.⁴⁸ Original ED comprises the following three stages of calculation:

- **Stage 1:** A constant unit cost is calculated as if the final year utilisation and input costs applied over the entire lifetime of the network.
- **Stage 2:** A second component is added to recover the additional costs caused by earlier under-utilisation of the network compared to the final year level.⁴⁹ This step is also applied as a constant unit price for all years.
- **Stage 3:** A third component is added to recover the remaining un-recovered (or over-recovered) costs due to input costs, including the WACC, being above (or below) the final year level. The shape of this component is determined by the arithmetic difference between in-year and final-year input costs (each scaled by the WACC in the relevant year), and is therefore zero in the final year (or any year that shares the same level of input costs and WACC as the final year).⁵⁰ More costs are recovered in years when asset prices and the WACC are higher than the final year.

A8.90 We propose to use Original ED to calculate cost recovery for the WCT charge control.

⁴⁷ 2009 EC Recommendation, Recital (7).

⁴⁸ Original ED was developed as a depreciation approach by Oftel see <http://www.ofcom.org.uk/static/archive/oftel/publications/mobile/depr0901.htm> We also used this form of economic depreciation in the 2015 MCT cost model.

⁴⁹ If utilisation is decreasing then this could be a negative value.

⁵⁰ The “input costs” for a particular year are the asset price (or operating cost) for that year and the WACC. The arithmetic difference between in-year and final year inputs cost can be written as $(\text{Asset price}_t \times \text{WACC}_t) - (\text{Asset price}_n \times \text{WACC}_n)$. Where (t) is the current year and (n) is the final year.

Verification of model outputs

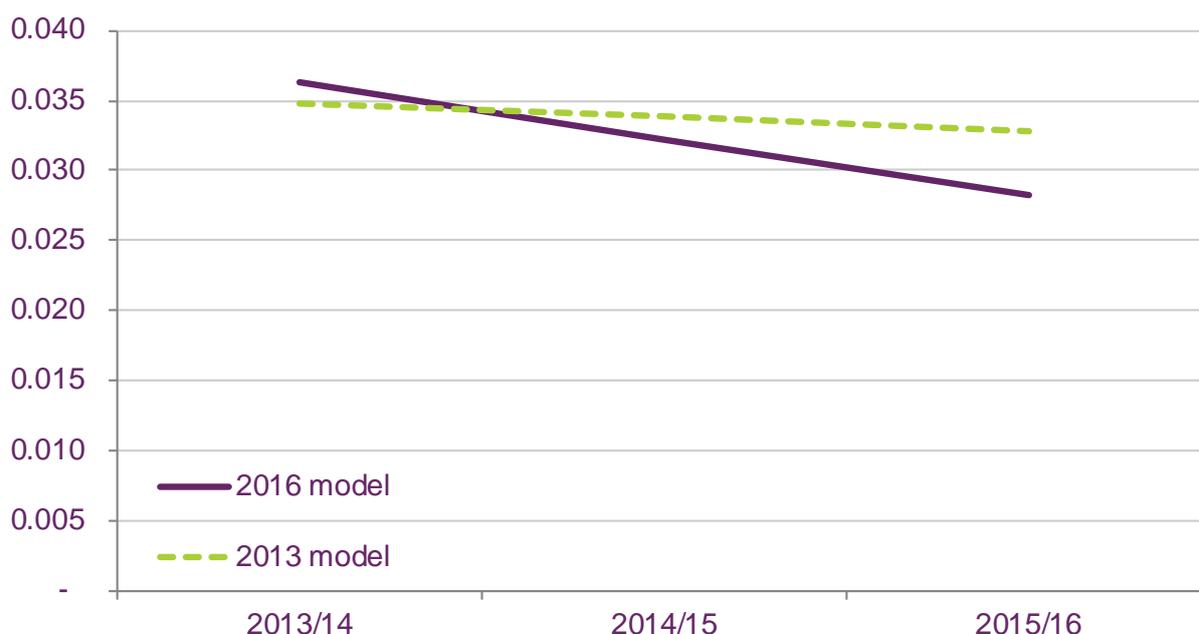
A8.91 In building our bottom-up model, we have relied on data collected from stakeholders to establish asset costs. When we have built bottom-up cost models for other charge controls, we have also sought to calibrate the model outputs against network operator data. When we built the 2013 NCC model we identified that we would not be able to calibrate the model because there were no fully national NGN operators present in the UK. Rather than calibrate the 2013 NCC model, we set two conditions on the way the model recovered costs:

- First, the model should not recover more costs in historical periods than was possible given the regulated charges prevailing at the time; and
- Second, the model unit cost estimates for the regulated services combined should be no lower over the next charge control period than the unit cost of a heavily depreciated TDM network.

A8.92 We have taken account of these conditions when verifying the outputs of the 2016 WCT model. As we have only updated the model to calculate a LRIC FTR, we are unable to compare the outputs of the model to periods prior to 2013 as these were not set on a LRIC basis. Therefore, we have compared the outputs of the model with the outputs of the 2013 NCC model to ensure consistency. The 2013 NCC model underwent further verification as it produced a wider set of outputs which could be used to check against prior periods.

A8.93 Figure A8.14 below compares the WCT LRIC outputs of the 2013 NCC and 2016 WCT models for the previous charge control period. The current model produces a slightly higher LRIC FTR in 2013/14 than was produced by the 2013 NCC, and a slightly lower FTR in 2014/15 and 2015/16. Across the period, under-recovery from the rates in 2013/14 would be more than recovered in the following two years. Therefore, we do not believe there has been cost under-recovery and we believe there is no need for us to consider this issue further.

Figure A8.14: WCT LRIC outputs of 2013 NCC and 2016 WCT models, 2013/14 to 2015/16, real 2012/13 terms⁵¹



A8.94 Due to a lack of reliable data regarding TDM costs, it is difficult to undertake the second test in a robust manner. However, the 2016 WCT model is a modified version of the 2013 NCC model which did meet this test.⁵² Therefore, providing an efficient TDM made returns at or around WACC during the last charge control period we would have some comfort with regard to the calibration of the 2016 WCT model. While it is difficult to be sure what an efficient TDM would look like without reliable data, we have used BT's returns as a proxy for this exercise as it provides the closest approximation we have available to such a network.

A8.95 Our analysis in Section 13 suggests that there has not been a historical issue of under-recovery of costs on a fully allocated cost basis. There is a slight drop in the ROCE during and since the full implementation of LRIC, but across WCT and WCO alone, BT's returns are still above the benchmark WACC. This analysis excludes data from BT's 2015/16 RFS as we do not believe the RFS reflect costs on a basis appropriate for a historical cost recovery assessment.

A8.96 However, the CAR has since resulted in BT reallocating costs to the narrowband markets which results in a reported ROCE lower than the benchmark WACC. As discussed in paragraph A8.71 above we do not believe it is appropriate for these costs to be recovered from FTRs as these will be set on a LRIC basis.

A8.97 Moreover, as set out in Section 7 we are proposing to remove the charge control on WCO and give BT greater pricing freedom in light of our proposed finding of reduced SMP. To the extent that BT has greater common costs allocated to the narrowband markets, it should now have the freedom to rebalance its prices on WCO to accommodate this. In addition, as discussed further in Section 17 we

⁵¹ Outputs converted into charge control years, so 2013/14 refers to the period from 01 October 2013 to 30 September 2014. 2013 NCC model outputs rebased from real 2012/13 in RPI terms to real 2012/13 in CPI terms.

⁵² In the 2013 NMR we noted that "we recognised the high level of uncertainty that exists in relation to the future cost of BT's actual TDM network. We therefore believed that the results of this cross-check should be treated with caution" and we did not consider the test to be binding in the same way as our first test was considered binding. See paragraph A6.177 of the 2013 NMR Statement.

propose to maintain the current regulation on interconnection circuits only at the DLE and leave BT freedom to price interconnection circuits at the tandem layer, which should give BT further pricing freedom to recover common costs allocated to narrowband services in future years.

A8.98 Finally, only a small proportion of BT's conveyance and transit services are now charge-controlled. For example, local-tandem conveyance/transit, inter-tandem conveyance/transit and single transit were all deregulated in previous reviews and we do not propose to change this in the present review. Therefore, it seems most unlikely that regulation of termination at LRIC would compromise cost recovery on BT's depreciated TDM network as a whole even with an additional allocation of common costs in line with the recommendations in the CAR.

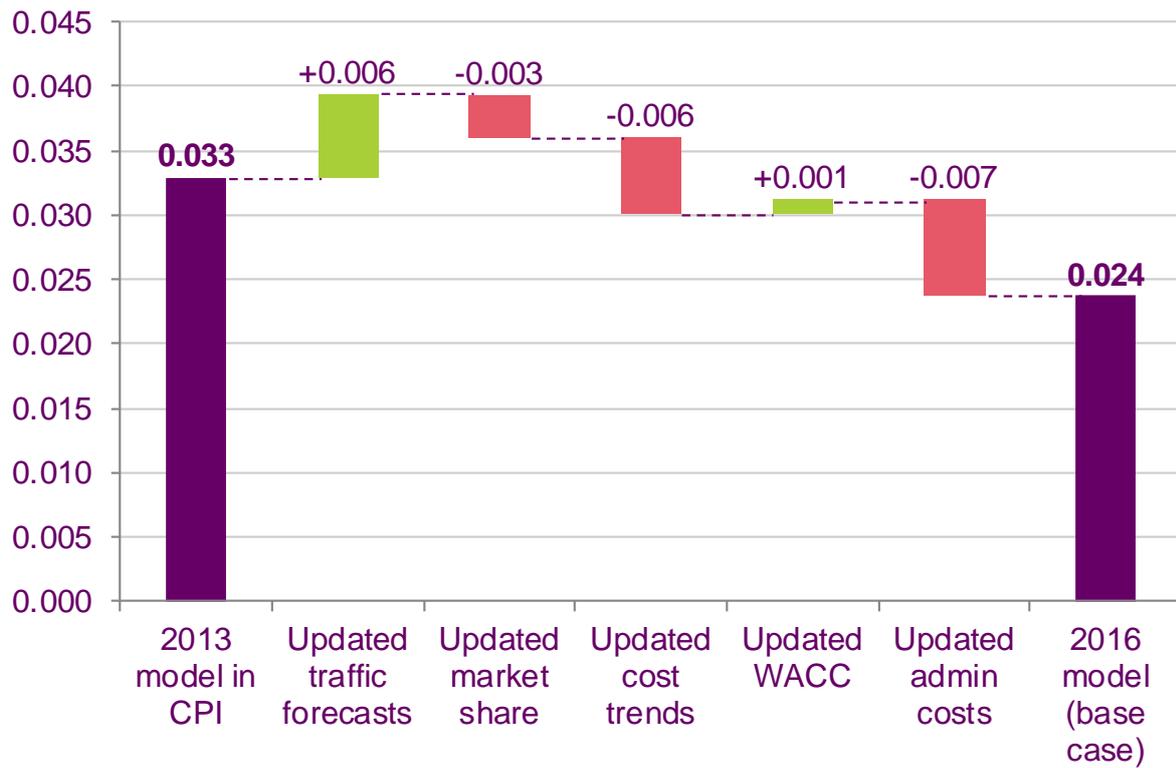
Summary of base case output and changes since the 2013 NCC model

A8.99 For illustrative purposes, we have presented the main changes between the FTR outputs of the 2013 NCC model and the 2016 WCT model. These are presented in Figure A8.15 below. The drivers of change shown are the updated traffic forecasts, the move to a 25% forward-looking market share assumption, the reduction in cost trends, the reduced WACC and the reduced incremental administrative costs.

A8.100 As a result, the real (CPI deflated) LRIC of WCT for 2017/18 is lower than projected in 2013 by around 27% (i.e. around 0.009ppm). This amounts to an overall reduction in revenue of around £7.7m over the three years of the control, or about 8p per year per line on average.⁵³

⁵³ This is based on assuming 37.2bn minutes of net incoming traffic per year based on data from 2015 (33.1bn minutes of mobile-to-fixed traffic and ~4.1bn minutes of incoming international traffic) and 33.7m exchange lines per year. Data is taken from the quarterly telecoms data tables.

Figure A8.15: Waterfall chart of changes to the modelled LRIC of WCT for 2017/18, ppm in real 2015/16 prices



WCT cost model outputs and sensitivities

Introduction

A9.1 We have updated the 2013 NCC model to calculate the LRIC of WCT by updating or modifying some assumptions in the current model version. This annex discusses the main assumptions and outputs of our model as well as how outputs change under a number of different scenarios. It examines the base case scenario, how the model reacts to changes in the underlying assumptions and the model's outputs under low cost and high cost scenarios.

Model results for the base case

A9.2 The 2016 WCT model uses the following assumptions:

- an operator with 20 points of interconnect;
- one voice server node⁵⁴;
- NGN services start to be offered in 2008/09 with full migration lasting four years;
- the medium demand forecast remains the selected forecast used in line and usage per line assumptions;
- the assumed market share for the efficient operator starts at 33% and trends down to reach 25% in the steady state;
- WACC is set at a real pre-tax rate of 7.6% on a forward-looking basis⁵⁵; and
- costs are calculated in real terms for 2012/13 prices and presented in real terms for 2015/16 prices using historic CPI inflation data.

Sensitivity analysis: demand assumptions

A9.3 This section examines the impact of changes in demand parameters on the model's outputs. The four demand sensitivities are:

- **Voice traffic:** high, medium and low values for all voice traffic inputs;
- **Data traffic:** high, medium and low values for the number of broadband lines and peak bandwidth use;
- **Market share:** assumptions of a constant 25%, a trend down from 33% to 25%, and a constant 33% market share (with all other assumptions held at the base case scenario level); and

⁵⁴ In order to maintain resilience, the voice server nodes are doubled and so an input of one voice server node equates to two voice server nodes being built.

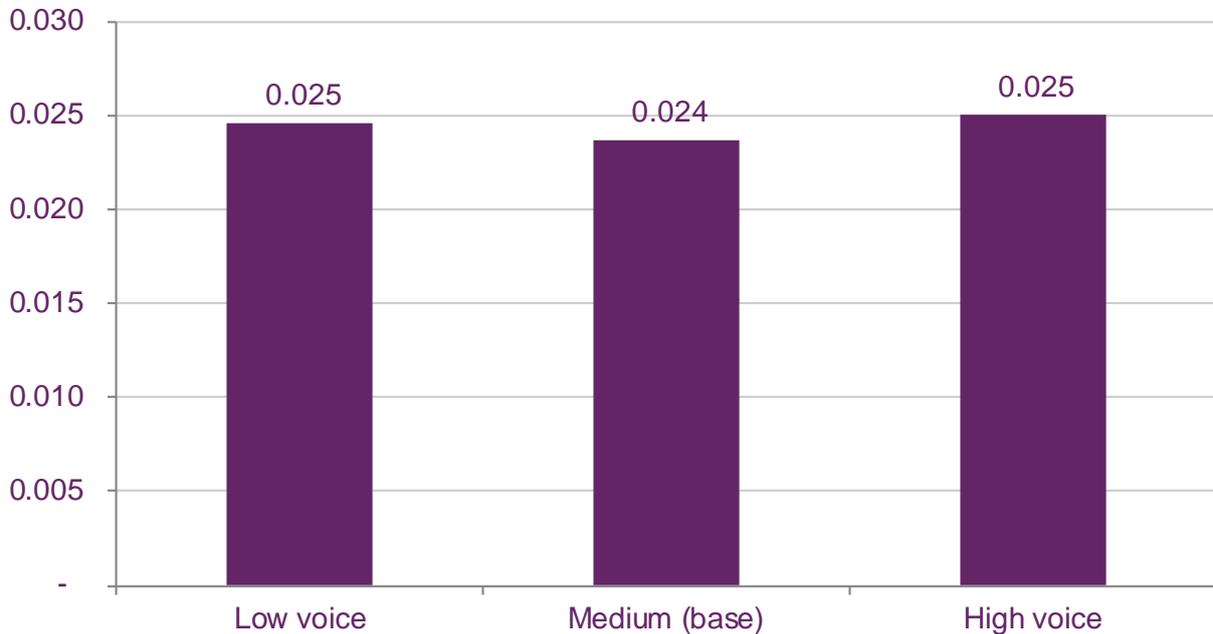
⁵⁵ The historic WACC is taken as given and not flexed in the sensitivity analysis.

- **All traffic:** high, medium and low values for voice traffic, data traffic, and market share.

Voice traffic and lines

A9.4 Figure A9.1 below shows the impact on the unit LRIC of WCT (in 2015/16 prices) from adjusting the volume of voice traffic and number of lines.

Figure A9.1: Model sensitivity to changes in voice traffic and lines, ppm in 2015/16 prices



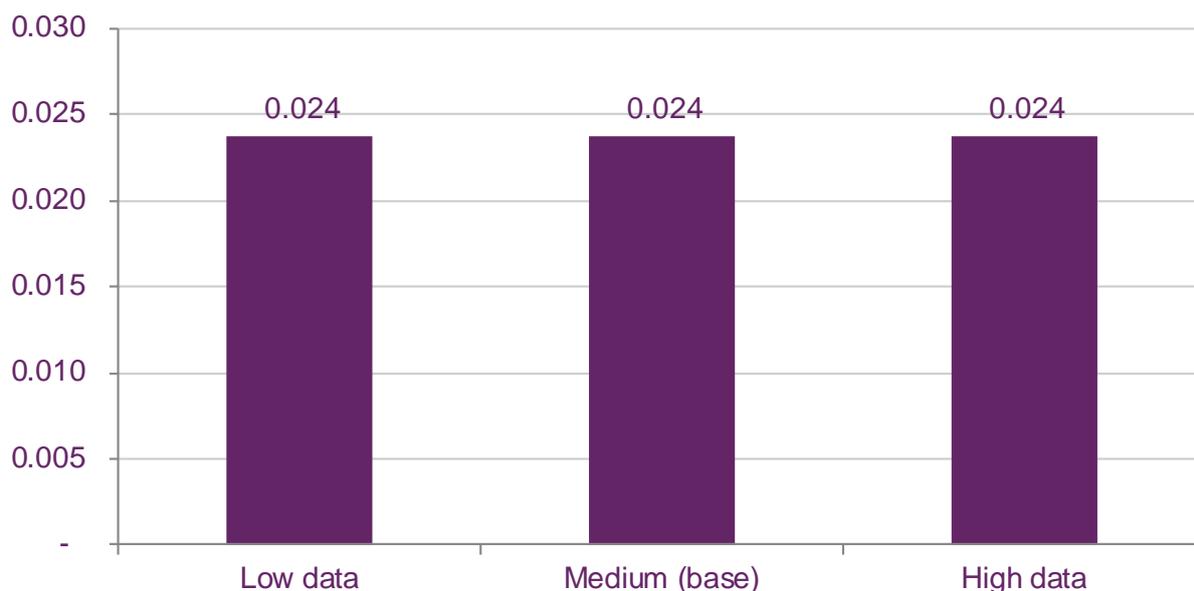
Source: Ofcom modelling.

A9.5 Generally, increasing voice traffic and line volumes reduces the output LRIC FTR, as costs generally increase more slowly than volumes due to the presence of fixed costs. However, this can be offset by increases in costs if the volumes increase causes a key modelled asset to cross a modularity threshold. This is the reason that both the low and high voice sensitivities cause the modelled unit LRIC to increase slightly; the reduction in the unit LRIC caused by higher volumes in the high sensitivity case is offset by an increase in costs due to an asset modularity threshold.

Data traffic and broadband lines

A9.6 Figure A9.2 below shows the impact of changing assumptions about peak broadband usage and the number of broadband lines on the unit LRIC of WCT.

Figure A9.2: Model sensitivity to changes in data traffic and broadband lines, ppm in 2015/16 prices



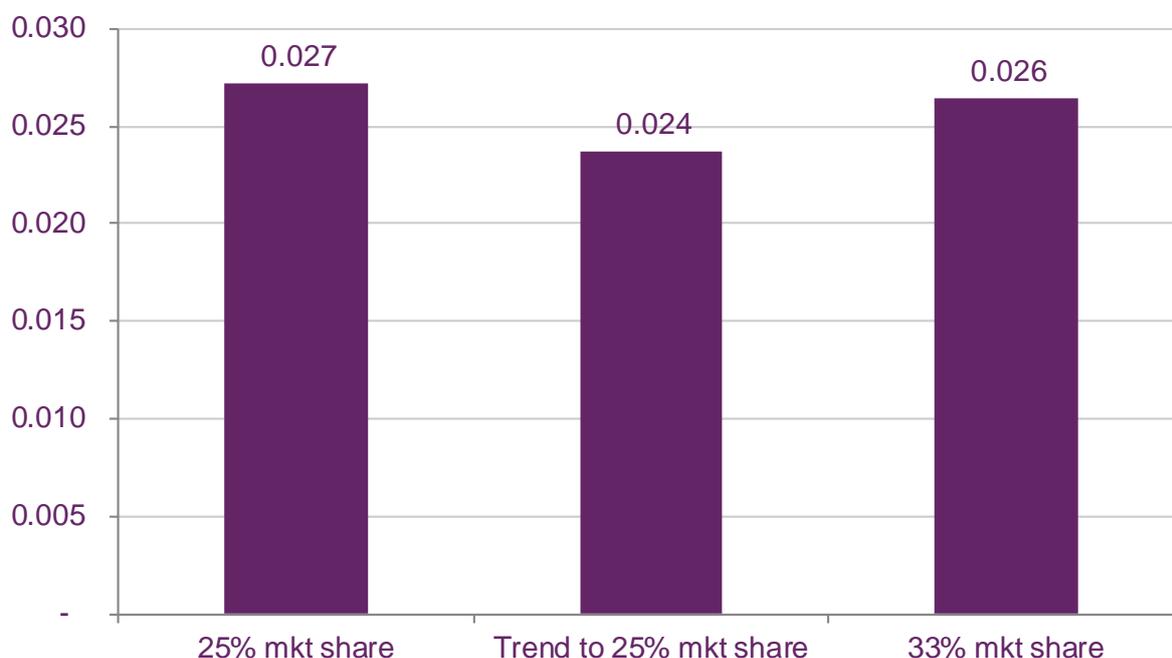
Source: Ofcom modelling.

A9.7 The unit LRIC of WCT from the model is almost entirely insensitive to changes in data traffic and broadband lines.

Market share

A9.8 Figure A9.3 below shows the change in the unit LRIC of WCT resulting from changes in the market share assumption.

Figure A9.3: Model sensitivity to changes in market share, ppm in 2015/16 prices



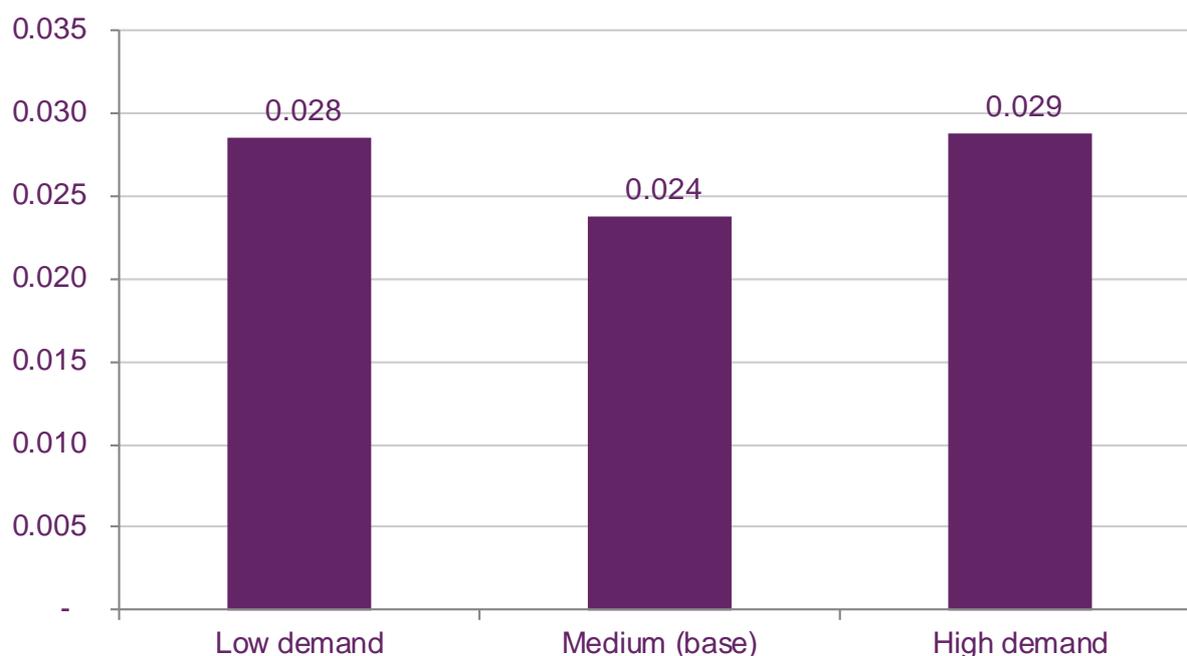
Source: Ofcom modelling.

A9.9 In general, we would expect that as market share increases, the unit LRIC of WCT should decrease due to the presence of fixed costs (i.e. for the same reasons discussed above relating to voice call volumes). However, similarly to our findings for the sensitivity to voice call inputs, increasing market share also runs into issues of crossing modularity thresholds which shows up as an asymmetry between the low and high unit cost scenarios.

Combination of multiple demand assumption

A9.10 The effect of changing the main demand parameters together is displayed in Figure A9.4 below.

Figure A9.4: Model sensitivity to changes in all demand parameters, ppm in 2015/16 prices



Source: Ofcom modelling.

A9.11 The combination of the key demand parameters being set to “low demand” leads to the expected increase in the unit LRIC of WCT. However, a similar rise is also produced by setting these parameters to “high demand”. This is due to the combined increase in network volumes leading to more call servers being considered incremental, which leads to a significant increase in network costs. This outweighs the volume effects that tend to reduce the unit LRIC of WCT.

Sensitivity analysis: network and input cost assumptions

A9.12 In this section we discuss the impact of the variation in a number of non-demand related assumptions. The seven network and input cost assumptions are:

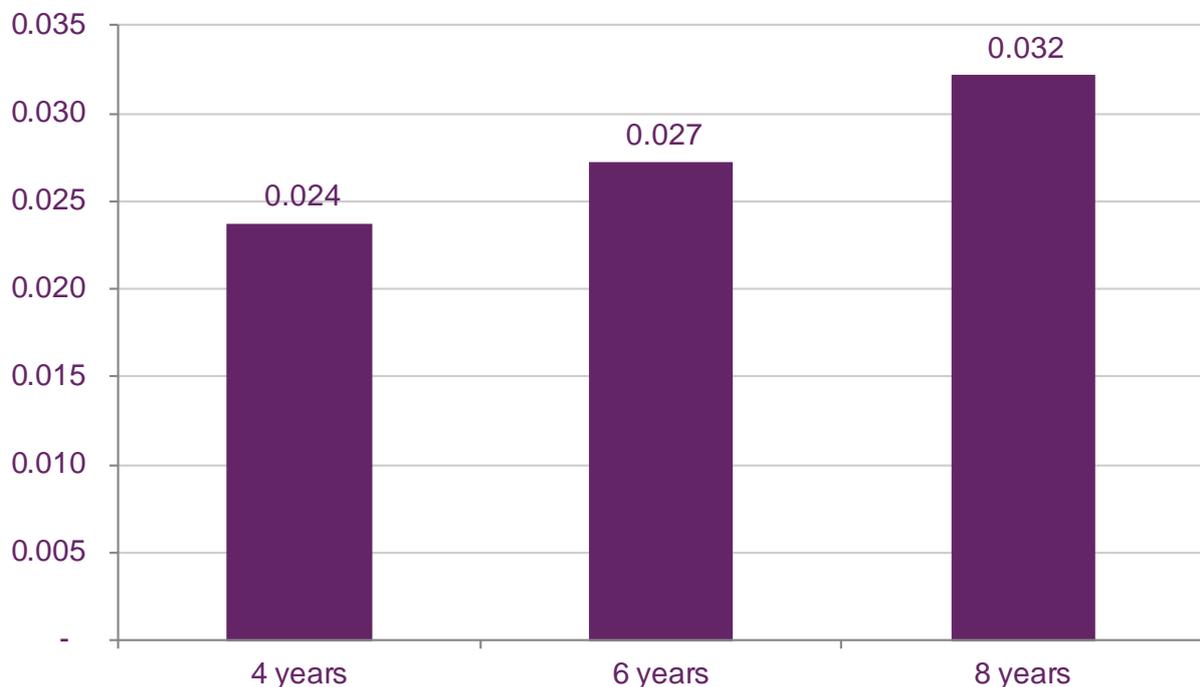
- **Speed of network deployment:** the modelled network rolls out over four, six or eight years;
- **Start of network roll-out:** the modelled network is deployed from 2005/06, 2007/08 or 2012/13;

- **Number of points of interconnect:** 20, 30 or 100 points of interconnect;
- **Asset utilisation:** assets in the model are planned to run at 65%, 70% or 75% utilisation;
- **WACC:** the cost of capital is assumed to be 6.6%, 7.6% or 8.6%;
- **Incremental admin costs:** these costs are assumed to be £650k, £850k or £1.05m; and
- **Busy hour call length:** Calls in the busy hour assumed to last on average 2.2, 2.9 or 3.8 minutes.

Speed of network deployment

A9.13 In the model we assume that deployment of the NGN begins in 2007/08 and lasts for four years. Figure A9.5 shows the impact of changing the deployment period on the model's outputs. Increasing the speed of deployment reduces the unit LRIC of WCT.

Figure A9.5: Model sensitivity to changes in network deployment period, ppm in 2015/16 prices

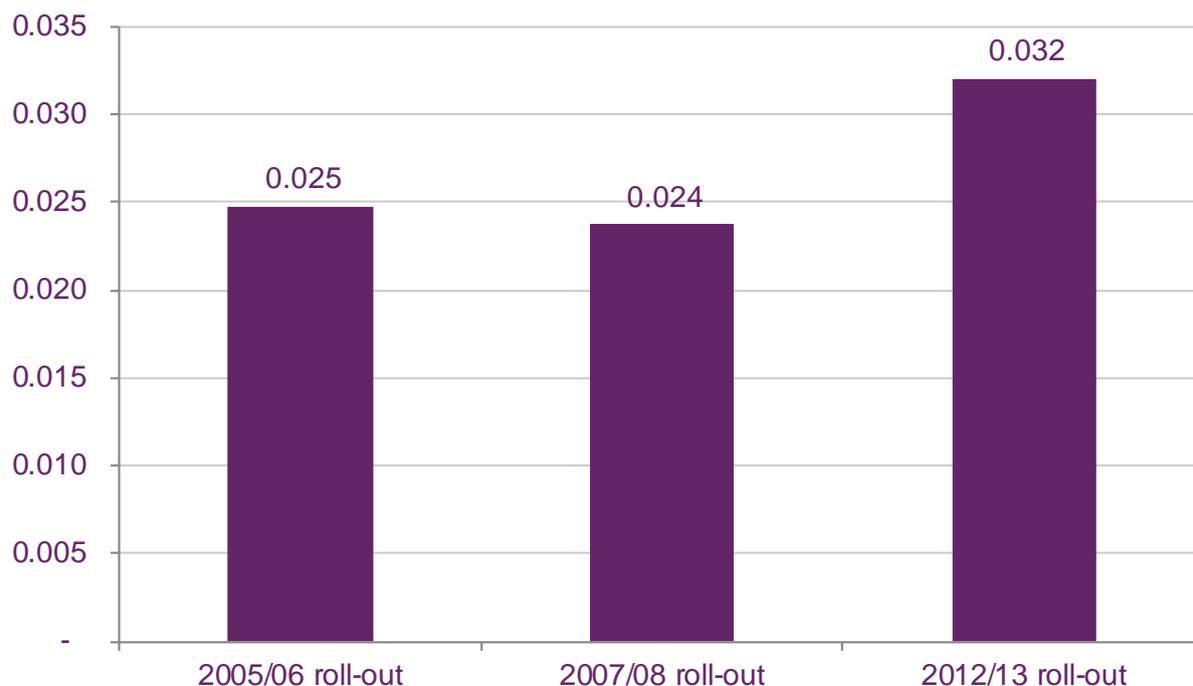


Source: Ofcom modelling.

Start of network roll-out

A9.14 The model begins network deployment in 2007/08. The impact of changing the date of deployment is shown in Figure A9.6. In each of these cases the deployment period is held constant at the base case assumption of 4 years.

Figure A9.6: Model sensitivity to changes in network deployment date, ppm in 2015/16 prices



Source: Ofcom modelling.

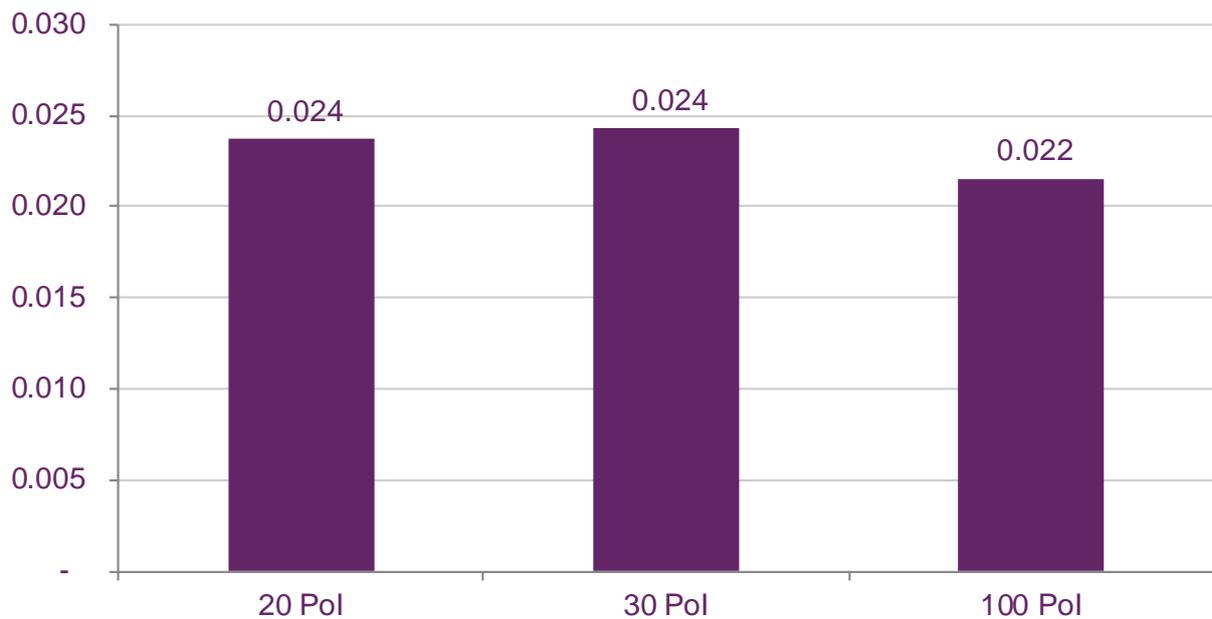
A9.15 The sensitivity of the WCT unit cost when we move to a 2012/13 start date is due to two factors:

- first, due to declining volumes, delaying the rollout of the network means that over the modelling period the network carries lower average volumes per year and therefore generally unit costs are higher in each year.
- second, due to the way Original ED recovers the costs of assets over time, and the way the network is deployed. By moving the deployment start date later we delay the first year of cost recovery, which is the point at which input costs are highest. Costs trend down from this maximum point to the terminal unit cost. Therefore, the charge control period occurs at a higher point on this downward trend the later the network deployment rate.

Number of points of interconnect

A9.16 Figure A9.7 below shows the sensitivity of the model to changes in the number of points of interconnect. The model assumes 20 Pol as a base case. Changing the number of Pols has no consistent impact on the unit LRIC of WCT. This is to be expected as increasing the number of Pol will increase the amount of interconnection assets required (which increases network costs), but decrease the amount of assets required for carrying the call around the network (which reduces network costs). The overall effect on the unit LRIC of WCT therefore depends on the extent to which these effects offset.

Figure A9.7: Model sensitivity to changes in number of points of interconnection, ppm in 2015/16 prices

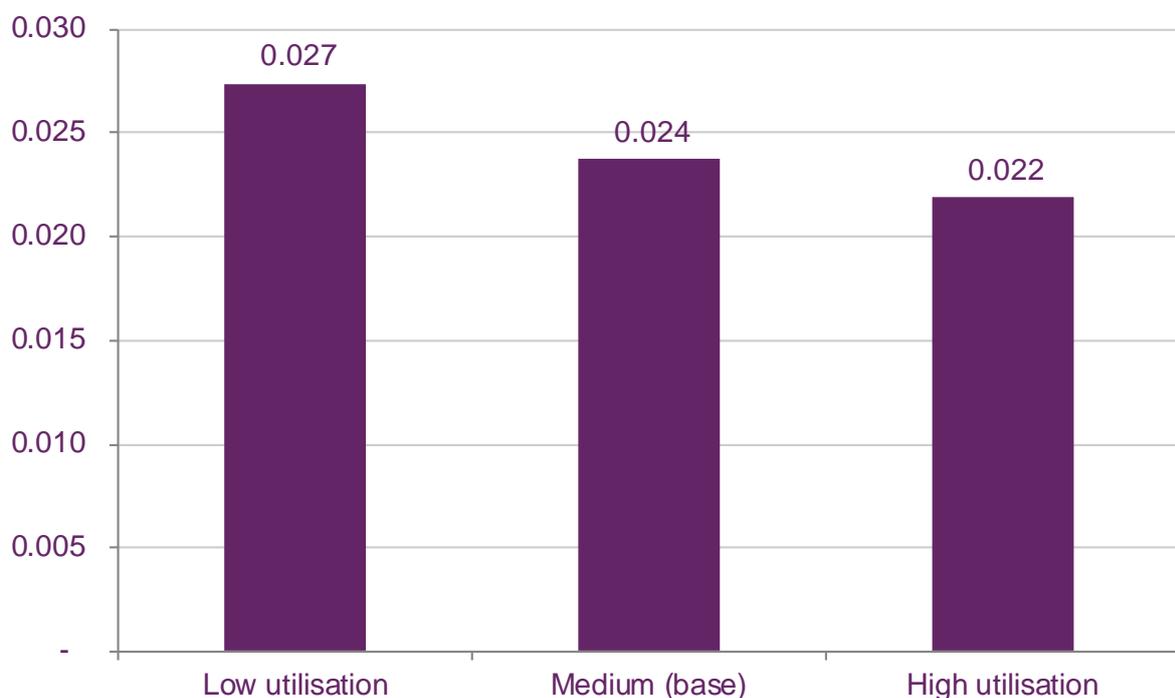


Source: Ofcom modelling.

Asset utilisation

A9.17 Figure A9.8 below shows the sensitivity of the model to changes in the asset utilisation. The asset utilisation rate in the model is assumed to be 70% in the base case, with high and low sensitivities of 75% and 65% respectively.

Figure A9.8: Model sensitivity to changes in asset utilisation, ppm in 2015/16 prices



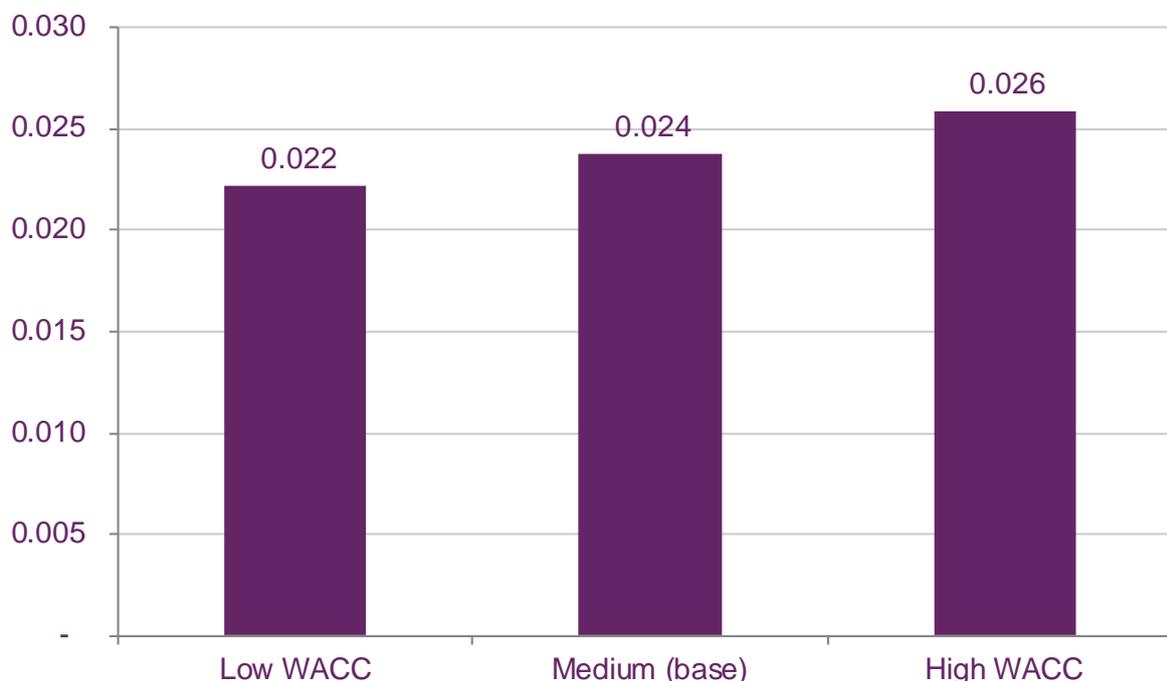
Source: Ofcom modelling.

A9.18 Increasing the utilisation rate reduces the unit LRIC of WCT estimate as fewer assets are required to provide a given set of volumes, because each asset can carry higher volumes before an additional asset is deployed.

WACC

A9.19 Figure A9.9 below shows the model's sensitivity to changes in the WACC assumption which is 7.6% in pre-tax real terms (CPI adjusted). We then apply a sensitivity adjustment of $\pm 1\%$ to this assumption.

Figure A9.9: Model sensitivity to changes in the pre-tax real WACC, ppm in 2015/16 prices



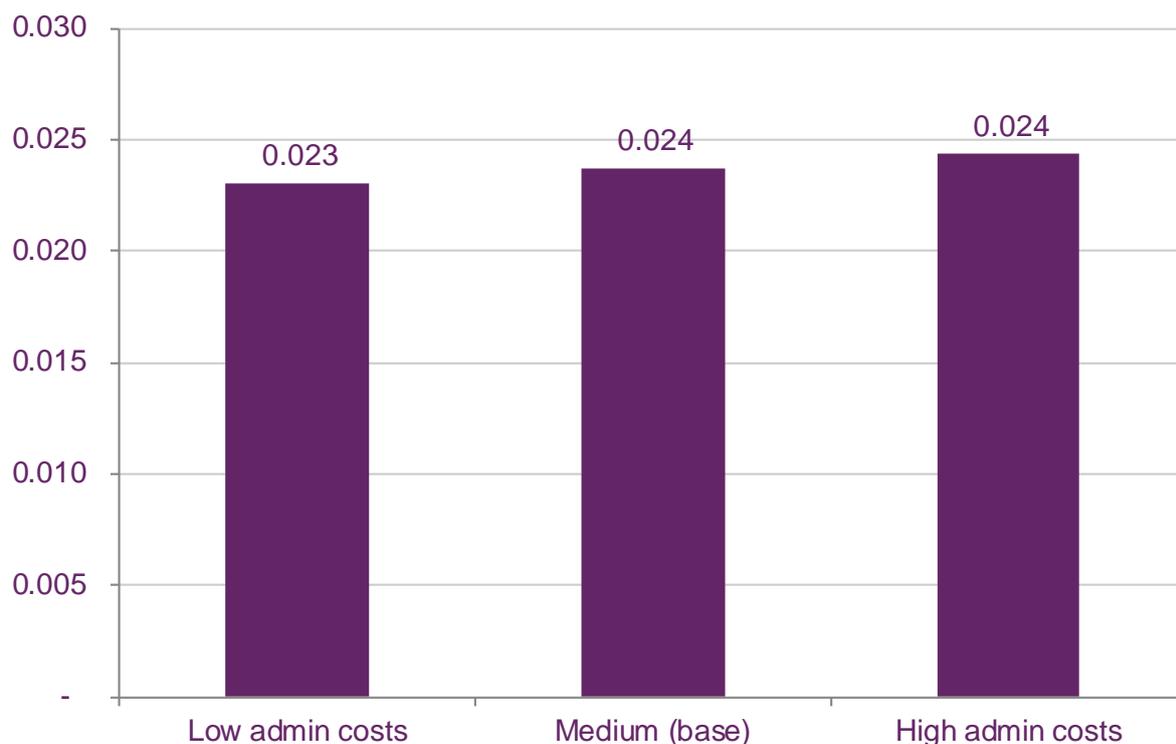
Source: Ofcom modelling.

A9.20 The model outputs are as we would expect, with an increase in the WACC increasing the amount of cost to be recovered through the unit LRIC of WCT.

Incremental admin costs

A9.21 Figure A9.10 below shows the model's sensitivity to changes in the assumption of incremental admin costs which are £850,000 in the base case in 2015/16. We then apply a sensitivity adjustment of $\pm£200,000$ to this assumption.

Figure A9.10: Model sensitivity to changes in incremental admin costs, ppm in 2015/16 prices



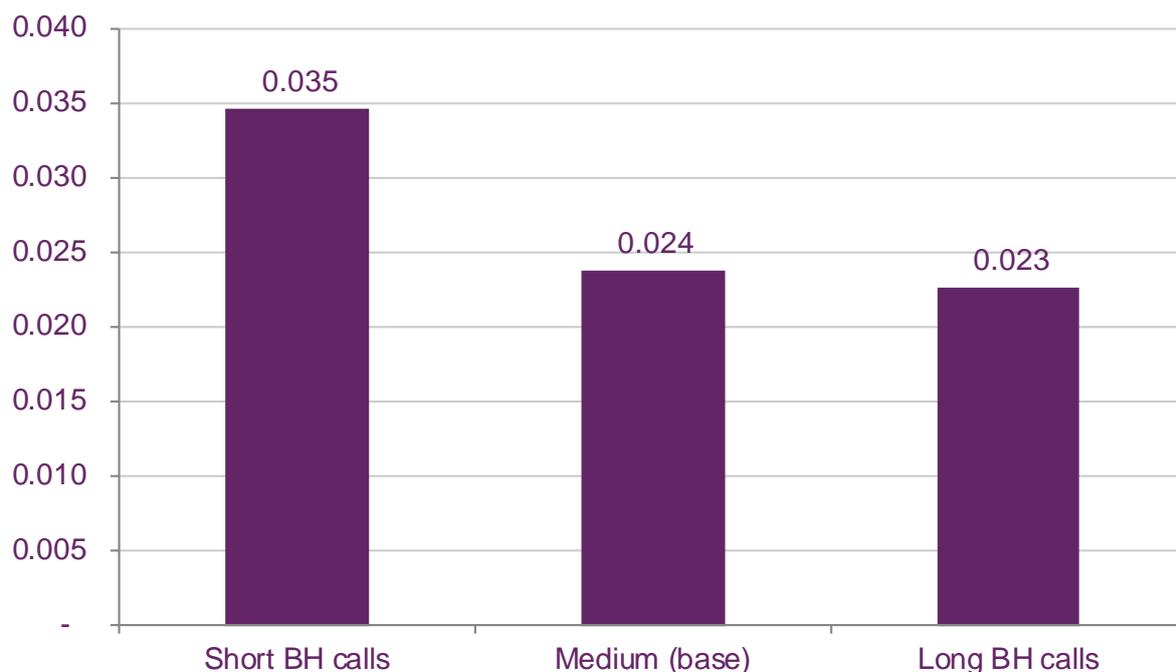
Source: Ofcom modelling.

A9.22 The model is relatively insensitive to changes in the incremental admin costs of the scale that we have tested. Spread across all volumes, changes of £200,000 have little effect on the unit LRIC of WCT.

Busy hour call length

A9.23 Figure A9.11 below shows the sensitivity of results to changes in the average call length of calls in the busy hour. The model assumes calls in the busy hour last 2.9 minutes, with high and low sensitivities of 3.6 minutes and 2.2 minutes respectively.

Figure A9.11: Model sensitivity to changes in busy hour (BH) call length, ppm in 2015/16 prices



Source: Ofcom modelling.

A9.24 The model is relatively sensitive to reducing the busy hour call length, as it is a key dimensioning parameter driving the number of assets required in the network. This assumption determines how the fixed volumes across the network are divided into individual calls, with a shorter busy hour call length meaning that there are more individual calls made on the network. Setting up calls is a key dimensioning variable for certain incremental assets, such as call servers. Therefore, a shorter busy hour call length means more of these assets are required, and the unit cost of WCT is higher. The reverse is true for shorter call lengths, though the effect is mostly offset by modularity effects.

Base case, high cost and low cost scenarios

A9.25 In order to produce a range of possible values, the rates are also considered in the context of high cost and low cost scenarios. Each scenario represents a set of assumptions. These are illustrated in Table A9.1 below.

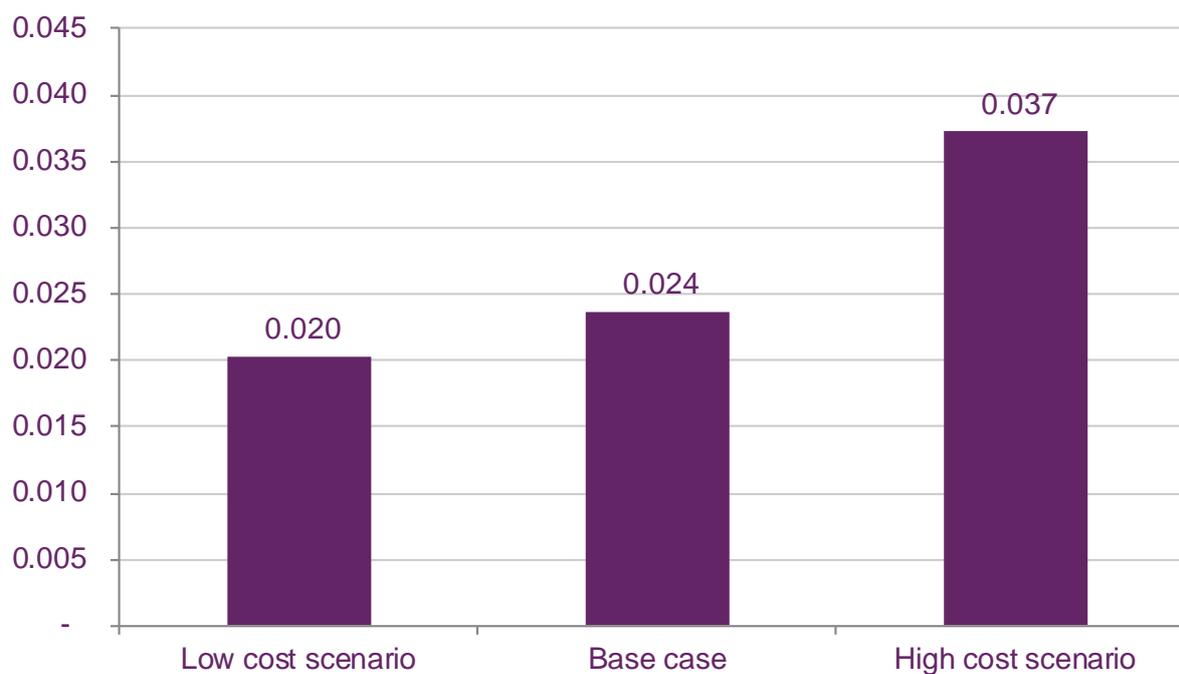
Table A9.1: Summary of assumptions for the three scenarios

	Base case	High cost scenario	Low cost scenario
Demand	Medium	Low	High
Market share	33% trend to 25%	25%	33%
Network element utilisation	70%	65%	75%
Busy hour call length	2.9 mins	2.2 mins	3.6 mins
Incremental admin costs	£850,000	£1,050,000	£650,000
WACC	7.6%	8.6%	6.6%

Source: Ofcom.

A9.26 The resulting unit LRIC of WCT for each one of the three scenarios can be seen in Figure A9.12 below.

Figure A9.12: Wholesale call termination LRIC scenarios, ppm in 2015/16 prices



Source: Ofcom modelling.

Regulatory framework

Introduction

- A10.1 This annex provides an overview of the market review process to give some additional context and understanding of the matters discussed in this Consultation, including the draft legal instruments published at Annex 6.
- A10.2 Market review regulation is technical and complex, and requires us to apply legislation and take into account a number of relevant recommendations and guidelines. This overview identifies some of the key aspects of materials relevant to this market review, but does not purport to give a full and exhaustive account of all materials that we have considered in reaching our proposals on this market.

Market review concept

- A10.3 A market review is a process by which, at regular intervals, we identify relevant markets appropriate to national circumstances and carry out analyses of these markets to determine whether they are effectively competitive. Where an operator has significant market power (SMP) in a market, we impose appropriate remedies, known as SMP obligations or conditions, to address this. We explain the concept of SMP below.
- A10.4 In carrying out this work, we act in our capacity as the sector-specific regulator for the UK communications industries, including telecommunications. Our functions in this regard are to be found in Part 2 of the Act.⁵⁶ We exercise those functions within the framework harmonised across the European Union for the regulation of electronic communications by the Member States (known as the CRF), as transposed by the Act. The applicable rules⁵⁷ are contained in a package of five EC Directives, of which two Directives are particularly relevant for present purposes, namely:
- Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (the Framework Directive); and
 - Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the Access Directive).
- A10.5 The Directives require that NRAs (such as Ofcom) carry out reviews of competition in communications markets to ensure that SMP regulation remains appropriate and proportionate in the light of changing market conditions.
- A10.6 Each market review normally involves three analytical stages, namely:
- the identification and definition of the relevant markets (the market definition procedure);

⁵⁶ <http://www.legislation.gov.uk/ukpga/2003/21/contents>

⁵⁷ The Directives were subsequently amended on 19 December 2009. The amendments have been transposed into the national legislation and applied with effect from 26 May 2011 and any references in this document to the Act should be read accordingly.

- the assessment of competition in each market, in particular whether the relevant market is effectively competitive (the market analysis procedure); and
- the assessment of appropriate regulatory obligations (the remedies procedure).

A10.7 These stages are normally carried out together.

Market definition procedure

A10.8 The Act provides that, before making a market power determination⁵⁸, we must identify “*the markets which in [our] opinion, are the ones which in the circumstances of the United Kingdom are the markets in relation to which it is appropriate to consider whether to make such a determination*” and analyse those markets.

A10.9 The Framework Directive requires that NRAs shall, taking the utmost account of the 2014 EC Recommendation⁵⁹ and SMP Guidelines⁶⁰ published by the EC, define the relevant markets appropriate to national circumstances, in particular relevant geographic markets within their territory, in accordance with the principles of competition law.

A10.10 The 2014 EC Recommendation identifies a set of product and service markets within the electronic communications sector in which *ex ante* regulation may be warranted. Its purpose is twofold. First, it seeks to achieve harmonisation across the single market by ensuring that the same markets will be subject to a market analysis in all Member States. Second, the 2014 EC Recommendation seeks to provide legal certainty by making market players aware in advance of the markets to be analysed.

A10.11 However, NRAs are able to regulate markets that differ from those identified in the 2014 EC Recommendation where this is justified by national circumstances by demonstrating that three cumulative criteria referred to in the 2014 EC Recommendation (the three-criteria test) are satisfied and where the EC does not raise any objections.

A10.12 The three criteria, which are cumulative, are:

- the presence of high and non-transitory structural, legal or regulatory barriers to entry;
- a market structure which does not tend towards effective competition within the relevant time horizon, having regard to the state of infrastructure-based and other competition behind the barriers to entry; and

⁵⁸ The market power determination concept is used in the Act to refer to a determination that a person has SMP in an identified services market.

⁵⁹ EC, *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 communications networks and services, (2007/879/EC)*,

⁶⁰ EC, *Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (2002/C 165/03)*, 11 July 2002, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2002:165:0006:0031:EN:PDF>.

- competition law alone is insufficient to adequately address the identified market failure(s).

A10.13 The fact that an NRA identifies the product and service markets listed in the 2014 EC Recommendation or identifies other product and service markets that meet the three-criteria test does not automatically mean that regulation is warranted. Market definition is not an end in itself but rather a means of assessing effective competition.

A10.14 The relationship between the market definitions identified in this review and those listed in the 2014 EC Recommendation is discussed in relevant parts of this Consultation.⁶¹

A10.15 The SMP Guidelines make clear that market definition is not a mechanical or abstract process. It requires an analysis of any available evidence of past market behaviour and an overall understanding of the mechanics of a given market sector. As market analysis has to be forward-looking, the SMP Guidelines state that NRAs should determine whether the market is prospectively competitive, and thus whether any lack of effective competition is durable, by taking into account expected or foreseeable market developments over the course of a reasonable period.⁶² The SMP Guidelines clarify that NRAs enjoy discretionary powers which reflect the complexity of all the relevant factors that must be assessed (economic, factual and legal) when identifying the relevant market and assessing whether an undertaking has SMP.

A10.16 The SMP Guidelines also describe how competition law methodologies may be used by NRAs in their analysis. In particular, there are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market. Ofcom's approach to market definition follows that used by the UK competition authorities, which is in line with the approach adopted by the EC.

A10.17 While competition law methodologies are used in identifying the relevant markets *ex ante*, the markets identified will not necessarily be identical to markets defined in *ex post* competition law cases, especially as the markets identified *ex ante* are based on an overall forward-looking assessment of the structure and the functioning of the market under examination. Accordingly, the economic analysis carried out for the purpose of this review, including the markets we have identified, is without prejudice to any analysis that may be carried out in relation to any investigation pursuant to the Competition Act 1998⁶³ (relating to the application of the Chapter I or II prohibitions or Article 101 or 102 of the Treaty on the Functioning of the European Union⁶⁴) or the Enterprise Act 2002.⁶⁵

⁶¹ See, in particular, where we set out how we consider the three criteria test is cumulatively satisfied for each of the relevant markets which are not included in the Relevant Markets Recommendation, but for which we have concluded are markets in which *ex ante* regulation is warranted.

⁶² The SMP Guidelines provide that the actual period used should reflect the specific characteristics of the market and the expected timing for the next review of the relevant market by the NRA.

⁶³ <http://www.legislation.gov.uk/ukpga/1998/41/contents>

⁶⁴ Previously Article 81 and Article 82 of the EC Treaty, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2010:083:FULL:EN:PDF>.

⁶⁵ <http://www.legislation.gov.uk/ukpga/2002/40/contents>

Market analysis procedure

Effective competition

A10.18 The Act requires that we carry out market analyses of identified markets for the purpose of making or reviewing market power determinations. Such analyses are normally to be carried out within two years from the adoption of a revised recommendation on markets, where that recommendation identifies a market not previously notified to the EC, or within three years from the publication of a previous market power determination relating to that market. Exceptionally, the three-year period may be extended for up to three additional years where the NRA notifies the EC, and it does not object.

A10.19 In carrying out a market analysis, the key issue for an NRA is to determine whether the market in question is effectively competitive. The 27th recital to the Framework Directive clarifies the meaning of that concept:

“[it] is essential that *ex ante* regulatory obligations should only be imposed where there is not effective competition, i.e. in markets where there are one or more undertakings with significant market power, and where national and Community competition law remedies are not sufficient to address the problem”.

A10.20 The definition of SMP is equivalent to the concept of dominance as defined in competition law. In essence, it means that an undertaking in the relevant market is in a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers, and ultimately consumers. The Framework Directive requires that NRAs must carry out their market analysis taking the utmost account of the SMP Guidelines, which emphasise that NRAs should undertake a thorough and overall analysis of the economic characteristics of the relevant market before coming to a conclusion as to the existence of SMP.

A10.21 In that regard, the SMP Guidelines set out, additionally to market shares, a number of criteria that can be used by NRAs to measure the power of an undertaking to behave to an appreciable extent independently of its competitors, customers and consumers, including:

- the overall size of the undertaking;
- control of infrastructure not easily duplicated;
- technological advantages or superiority;
- absence of or low countervailing buying power;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;
- vertical integration;

- highly developed distribution and sales network;
- absence of potential competition; and
- barriers to expansion.⁶⁶

A10.22 A dominant position can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

Sufficiency of competition law

A10.23 As part of our overall forward-looking analysis, we also assess whether competition law by itself (without *ex ante* regulation) is sufficient, within the relevant markets we have defined, to address the competition problems we have identified. Aside from the need to address this issue as part of the three-criteria test, we also consider this matter in our assessment of the appropriate remedies which, as explained below, are based on the nature of the specific competition problems we identify within the relevant markets as defined. We also note that the SMP Guidelines clarify that, if NRAs designate undertakings as having SMP, they must impose on them one or more regulatory obligations.

A10.24 In considering this matter, we bear in mind the specific characteristics of the relevant markets we have defined. Generally, the case for *ex ante* regulation is based on the existence of market failures which, by themselves or in combination, mean that the establishment of effective competition might not be possible if the regulator relied solely on *ex post* competition law powers which are not specifically tailored to the sector. Therefore, it may be appropriate for *ex ante* regulation to be used to address such market failures along with any entry barriers that might otherwise prevent effective competition from becoming established within the relevant markets we have defined. By imposing *ex ante* regulation that promotes competition, it may be possible to reduce such regulation over time as markets become more competitive, allowing greater reliance on *ex post* competition law.

A10.25 *Ex post* competition law is also unlikely in itself to bring about (or promote) effective competition, as it prohibits the abuse of dominance rather than the holding of a dominant position itself. In contrast, *ex ante* regulation is normally aimed at actively promoting the development of competition through attempting to reduce the level of market power (or dominance) in the identified relevant markets, thereby encouraging the establishment of effective competition.

A10.26 We generally take the view that *ex ante* regulation provides additional legal certainty for the market under review and may also better enable us to intervene in a timely manner. We may also consider that certain obligations are needed as competition law would not remedy the particular market failure, or that the specific clarity and detail of the obligation is required to achieve a particular result.

Remedies procedure

Powers and legal tests

A10.27 The Framework Directive prescribes what regulatory action NRAs must take depending upon whether or not an identified relevant market has been found effectively competitive. Where a market has been found effectively competitive,

⁶⁶ SMP Guidelines, paragraph 78.

NRAs are not allowed to impose SMP obligations and must withdraw such obligations where they already exist. On the other hand, where the market is found not effectively competitive, the NRAs must identify the undertakings with SMP in that market and then impose appropriate obligations.

A10.28 NRAs have a suite of regulatory tools at their disposal, as reflected in the Act and the Access Directive. Specifically, the Access Directive specifies a number of SMP obligations, including transparency, non-discrimination, accounting separation, access to and use of specific network elements and facilities, price control and cost accounting. When imposing a specific obligation, the NRA will need to demonstrate that the obligation in question is based on the nature of the problem identified, proportionate and justified in the light of the policy objectives as set out in Article 8 of the Framework Directive.

A10.29 Specifically, for each and every SMP obligation, we explain why it satisfies the requirement in section 47(2) of the Act that the obligation is:

- objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
- not such so as to discriminate unduly against particular persons or against a particular description of persons;
- proportionate to what the condition or modification is intended to achieve; and
- transparent in relation to what is intended to be achieved.

A10.30 Additional legal requirements may also need to be satisfied depending on the SMP obligation in question. For example, in the case of price controls, the NRA's market analysis must indicate that the lack of effective competition means that the CP concerned may sustain prices at an excessively high level or may apply a price squeeze to the detriment of end-users and that the setting of the obligation is appropriate for the purposes of promoting efficiency, promoting sustainable competition and conferring the greatest possible benefits on the end-users of public electronic communications services. In that instance, NRAs must take into account the investment made by the CP and allow it a reasonable rate of return on adequate capital employed, taking into account any risks specific to a particular new investment, as well as ensure that any cost recovery mechanism or pricing methodology that is mandated serves to promote efficiency and sustainable competition and maximise consumer benefits. Where an obligation to provide third parties with network access is considered appropriate, NRAs must take into account factors including the feasibility of the network access, the technical and economic viability of creating networks⁶⁷ that would make the network access unnecessary, the investment of the network operator who is required to provide access⁶⁸, and the need to secure effective competition⁶⁹ in the long term.

A10.31 To the extent relevant to this review, we demonstrate the application of these requirements to the SMP obligations in question in the relevant parts of this document. In doing so, we also set our assessment of how, in our opinion, the

⁶⁷ Including the viability of other network access products, whether provided by the dominant provider or another person.

⁶⁸ Taking account of any public investment made.

⁶⁹ Including, where it appears to us to be appropriate, economically efficient infrastructure-based competition.

performance of our general duties under section 3 of the Act is secured or furthered by our regulatory intervention, and that it is in accordance with the six Community requirements in section 4 of the Act. This is also relevant to our assessment of the likely impact of implementing our conclusions.

Ofcom's general duties – section 3 of the Act

A10.32 Under the Act, our principal duty in carrying out functions is 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.

A10.33 In doing so, we are required to secure a number of specific objectives and to have regard to a number of matters set out in section 3 of the Act.

A10.34 In performing our duties, we are also required to have regard to a range of other considerations, as appear to us to be relevant in the circumstances. For the purpose of the NMR, we consider that a number of such considerations are relevant, in particular:

- the desirability of promoting competition in relevant markets; and
- the desirability of encouraging investment and innovation in relevant markets.

A10.35 We have also had regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, as well as in the interest of consumers in respect of choice, price, quality of service and value for money.

A10.36 Ofcom has, however, a wide measure of discretion in balancing its statutory duties and objectives. In doing so, we take account of all relevant considerations, including responses received during our consultation process, in reaching our conclusions.

European Community requirements for regulation – sections 4 and 4A of the Act and Article 3 of the BEREC Regulation

A10.37 As noted above, our functions exercised in this review fall under the CRF. As such, section 4 of the Act requires us to act in accordance with the six European Community requirements for regulation. In summary, these six requirements are:

- to promote competition in the provision of electronic communications networks and services, associated facilities and the supply of directories;
- to contribute to the development of the European internal market;
- to promote the interests of all persons who are citizens of the EU;
- to take account of the desirability of Ofcom's carrying out of its functions in a manner which, so far as practicable, does not favour one form of or means of providing electronic communications networks, services or associated facilities over another (i.e. to be technologically neutral);
- to encourage, to such extent as Ofcom considers appropriate for certain prescribed purposes, the provision of network access and service interoperability, namely securing efficient and sustainable competition, efficient investment and innovation, and the maximum benefit for customers of CPs; and

- to encourage compliance with certain standards in order to facilitate service interoperability and secure freedom of choice for the customers of CPs.

A10.38 We consider that the first, third, fourth and fifth of those requirements are of particular relevance to the matters under review and that no conflict arises in this regard with those specific objectives in section 3 of the Act that we consider are particularly relevant in this context.

A10.39 Section 4A of the Act requires Ofcom, in carrying out certain of its functions (including, among others, Ofcom's functions in relation to market reviews under the CRF) to take due account of applicable recommendations issued by the EC under Article 19(1) of the Framework Directive. Where we decide not to follow such a recommendation, we must notify the EC of that decision and the reasons for it.

A10.40 Further, Article 3(3) of the Regulation establishing BEREC⁷⁰ requires NRAs to take utmost account of any opinion, recommendation, guidelines, advice or regulatory best practice adopted by BEREC.

A10.41 Accordingly, we have taken due account of the applicable EC recommendations and utmost account of the applicable opinions, recommendations, guidelines, advice and regulatory best practices adopted by BEREC relevant to the matters under consideration in this review.

Impact assessment – section 7 of the Act

A10.42 The analysis presented in the whole of this document represents an impact assessment, as defined in section 7 of the Act.

A10.43 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best practice policy-making. This is reflected in section 7 of the Act, which means that generally Ofcom has to carry out impact assessments where there is likely to be a significant effect on businesses or the general public, or when there is a major change in Ofcom's activities. However, as a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the great majority of its policy decisions.⁷¹

A10.44 Specifically, pursuant to section 7, an impact assessment must set out how, in our opinion, the performance of our general duties (within the meaning of section 3 of the Act) is secured or furthered by or in relation to the regulation we impose.

A10.45 Ofcom is separately required by statute to assess the potential impact of all our functions, policies, projects and practices on race, disability and gender equality. This assessment is set out in Annex 12.

⁷⁰ Regulation (EC) No 1211/2009 of the European Parliament and of the Council of 25 November 2009 establishing the Body of European Regulators of Electronic Communications (BEREC) and the Office (the BEREC Regulation) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2009:337:0001:0010:EN:PDF>.

⁷¹ For further information about Ofcom's approach to impact assessments, see the guidelines, *Better policy-making: Ofcom's approach to impact assessment*, which are on the Ofcom website: http://stakeholders.ofcom.org.uk/binaries/consultations/better-policy-making/Better_Policy_Making.pdf.

Regulated entity

- A10.46 The power in the Act to impose an SMP obligation by means of an SMP services condition provides that it is to be applied only to a ‘person’ whom we have determined to be a person having SMP in a specific market for electronic communications networks, electronic communications services or associated facilities (i.e. the ‘services market’).
- A10.47 The Framework Directive requires that, where an NRA determines that a relevant market is not effectively competitive, it shall identify ‘undertakings’ with SMP in that market and impose appropriate specific regulatory obligations. For the purposes of EU competition law, ‘undertaking’ includes companies within the same corporate group (for example, where a company within that group is not independent in its decision making).⁷²
- A10.48 We consider it appropriate to prevent a dominant provider to whom an SMP services condition is applied, which is part of a group of companies, exploiting the principle of corporate separation. The dominant provider should not use another member of its group to carry out activities or to fail to comply with a condition, which would otherwise render the dominant provider in breach of its obligations.
- A10.49 To secure that aim, we apply the SMP conditions to the person in relation to which we have made the market power determination in question by reference to the so-called ‘Dominant Provider’, which we define as “[X plc], whose registered company number is [000] and any [X plc] subsidiary or holding company, or any subsidiary of that holding company, all as defined in section 1159 of the Companies Act 2006”.

⁷² *Viho v Commission*, Case C-73/95 P [1996] ECR I-5447, <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:61995CJ0073:EN:PDF>.

Annex 11

General analytical approach to market definition, SMP assessment and remedies

Introduction

A11.1 This annex sets out in general terms the processes that we have followed in defining the markets within this review, how and on what basis we assess whether any operator has SMP in a given market, whether SMP conditions should be imposed in a relevant market, and in what form. Sections 4, 5, 6 and 11 (market definition, the three-criteria test and SMP analysis respectively) set out in more detail how we have applied our analytical approach in each of the markets we are considering.

Overview of approach

A11.2 The market review procedure requires us to analyse markets in order to determine whether they are effectively competitive, and then to decide on appropriate remedies if necessary. Before an assessment of competitive conditions is possible it is necessary to define the relevant market.

A11.3 The definition of the relevant market does not simply entail identifying services that resemble each other in some way, but the set of services (and geographical areas) that exercise some competitive constraint on each other. It therefore has two dimensions:

- the relevant products or services to be included within the market; and
- the geographic extent of the market.

A11.4 It is often practical to define the relevant product market before exploring the geographic dimension of the market.

A11.5 The market definition exercise is not an end in itself, but a means to assessing whether there is effective competition and thus whether there is a need for *ex ante* regulation. It is in this light that we have conducted our market definitions in this review.

2014 EC Recommendation and the three-criteria test

A11.6 As explained in Annex 10, in defining markets for market review purposes, we are required to define relevant markets appropriate to national circumstances in accordance with the principles of competition law. In doing so we have taken due account of the 2014 EC Recommendation, the accompanying Explanatory Note and the EC SMP Guidelines.

A11.7 As explained in Annex 10, the 2014 EC Recommendation identifies a set of product and service markets within the electronic communications sector in which *ex ante* regulation may be warranted. NRAs may also identify markets that differ from those in the 2014 EC Recommendation which may be susceptible to *ex ante* regulation having regard to the three-criteria test.

A11.8 The three-criteria test is related to the assessment of SMP and involves the assessment of similar evidence, but is analytically distinct. The three-criteria test focuses on overall market characteristics and structure, for the sole purpose of identifying those markets that are susceptible to *ex ante* regulation. In contrast, assessment of SMP involves determining whether an operator active in a market that has been identified as being susceptible to *ex ante* regulation should be made subject to *ex ante* regulation.⁷³

The time period under review

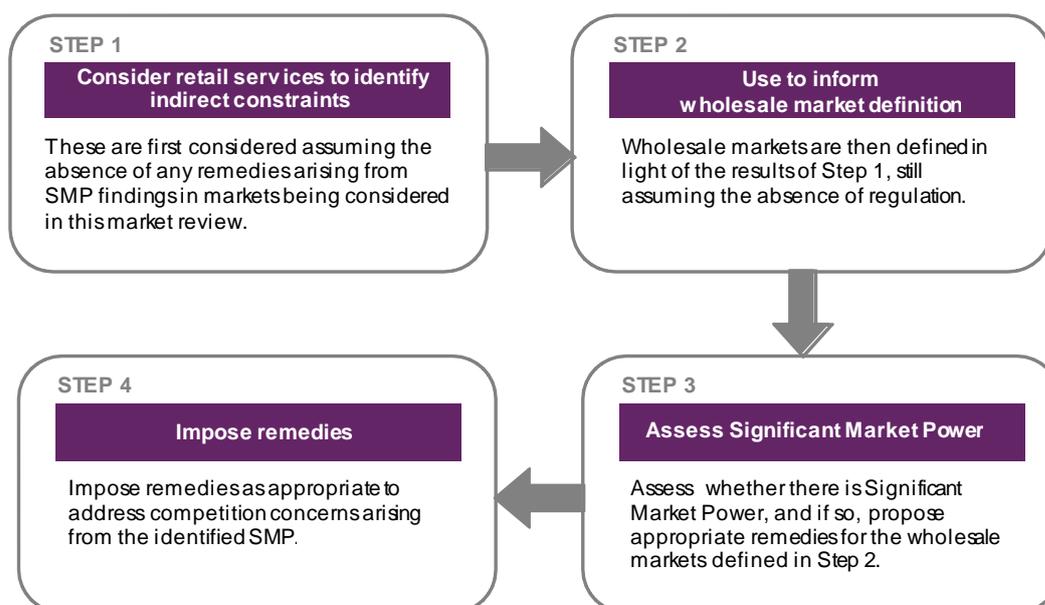
A11.9 Rather than just looking at the current position, market reviews look ahead to how competitive conditions may change in future. Our evaluation of the current market takes into account past developments and evidence, before then considering the foreseeable market changes that we expect to affect its development over the period to September 2020. This forward looking period reflects the period covered by this market review.

A11.10 The forward look period that we have used does not preclude us reviewing the market before that point should the market develop in a way we have not foreseen, to the extent that it is likely to affect the competitive conditions that are operating.

Market review process

A11.11 The market review process can be characterised as having four stages, which are shown in Figure A11.1 below. We begin with consideration of the relevant retail services, both from a product and a geographical point of view, and use this to define the relevant wholesale market. We then assess market power and, where appropriate, propose remedies to address the competition concerns.

Figure A11.1 Sequencing of market definition, SMP and remedies analysis



Source: Ofcom.

A11.12 These steps are explained further in the following sub-sections.

⁷³ See the Commission Explanatory Note accompanying the 2014 EC Recommendation.

Market definition

- A11.13 The starting point for identifying markets which may be susceptible to *ex ante* regulation is the consideration of retail markets from a forward-looking perspective. The wholesale market is defined subsequent to this exercise being carried out. In relevant cases we then consider whether the wholesale market is one in which *ex ante* regulation may be appropriate (if so, we have then formally identified a relevant market).⁷⁴
- A11.14 Consideration of retail markets is logically prior to wholesale market definition because the demand for the upstream wholesale service is a derived demand, meaning that the level of the demand for the upstream input depends on the demand for the retail service.
- A11.15 This link between the retail and wholesale level means that the range of available substitutes at the downstream (retail) level will inform the likely range of competitive constraints acting at the upstream (wholesale) level. This is because a rise in the price of a wholesale service which is passed through to the price of downstream retail services may cause retail customers to switch to substitute retail products, reducing demand for the wholesale input. We refer to this as an indirect constraint.
- A11.16 Consequently, the analysis of the retail and wholesale levels of the supply-chain should be regarded as one exercise, the ultimate purpose of which is to define those wholesale markets in the UK where there may be a requirement for the imposition of *ex ante* regulation.⁷⁵

Demand-side and supply-side substitution

- A11.17 The boundaries between markets are determined by identifying competitive constraints on the price setting behaviour of firms. There are two main constraints to consider:⁷⁶
- 11.17.1 to what extent it is possible for a customer to substitute other services for those in question in response to a relative price increase (demand-side substitution); and
 - 11.17.2 to what extent suppliers can switch, or increase, production to supply the relevant products or services in response to a relative price increase (supply-side substitution).
- A11.18 The hypothetical monopolist test (HMT) is a useful tool often used to identify close demand-side and supply-side substitutes. In this test, a product is considered to constitute a separate market if the hypothetical monopolist supplier could impose a small but significant non-transitory increase in price (SSNIP) above the competitive level without losing sales to such a degree as to make this price rise unprofitable. If such a price rise would be unprofitable, because consumers would switch to other products or because suppliers of other products would begin to compete with the

⁷⁴ See recital 5 and point 2 of the 2014 EC Recommendation.

⁷⁵ See, in this respect, recital 7 of the 2014 EC Recommendation which states that “*the starting point for the identification of wholesale markets susceptible to ex ante regulation is the analysis of corresponding retail markets*”. See also section 2.1 of the Explanatory Note to the 2014 EC Recommendation and paragraph 44 of the SMP Guidelines.

⁷⁶ See paragraph 38 of the SMP Guidelines, which also notes that potential competition also acts as a third source of competitive constraint on an operator’s behaviour, but is taken into account in the SMP assessment.

hypothetical monopolist, then the market definition should be expanded to include the substitute products.

- A11.19 We must first therefore address the issue of which product(s) should form the starting point for the application of the HMT. We refer to this starting point as the ‘focal product’⁷⁷, and start from the narrowest potential market definition.⁷⁸ Paragraph 41 of the SMP Guidelines states that “*As a starting point, an NRA should apply this test firstly to an electronic communications service or product offered in a given geographical area, the characteristics of which may be such as to justify the imposition of regulatory obligations...*”.
- A11.20 Having considered demand-side substitution we then, where relevant, assess supply-side substitution possibilities to consider whether they provide any additional constraints on the pricing behaviour of the hypothetical monopolist which have not been captured by the demand-side analysis. In this assessment, supply-side substitution is considered to be a low-cost form of entry which can take place within a reasonable timeframe (e.g. up to 12 months).
- A11.21 For supply-side substitution to be relevant not only must suppliers be able, in theory, to enter the market quickly and at low cost by virtue of their existing position in the supply of other products or geographic areas, but there must also be an additional competitive constraint arising from such entry into the supply of the service in question.
- A11.22 Therefore, in identifying potential supply-side substitutes, it is important that providers of these services have not already been taken into consideration. There might be suppliers who provide other services but who might also be materially present in the provision of demand-side substitutes to the service for which the hypothetical monopolist has raised its price. Such suppliers are not relevant to supply-side substitution since they supply services already identified as demand-side substitutes. As such, their entry has already been taken into account and so supply-side substitution from these suppliers cannot provide an additional competitive constraint on the hypothetical monopolist. However, the impact of expansion by such suppliers can be taken into account in the assessment of market power.

Relevance of existing regulation – the modified Greenfield approach

- A11.23 When we conduct our analysis we use the modified Greenfield approach.⁷⁹ This requires us to assess whether markets are effectively competitive from a forward-looking perspective in the absence of any regulation that would result from a finding of SMP. To do otherwise would be circular.
- A11.24 However, it remains appropriate to take into account *ex ante* regulation arising from SMP findings in markets either upstream from, or horizontally related to, the services of interest.

⁷⁷ This reflects the terminology used by the OFT (OFT, *Market definition*, December 2004, OFT403, www.of.gov.uk/shared_of/business_leaflets/ca98_guidelines/of403.pdf).

⁷⁸ Paragraph 3.2 of the OFT Market Definition Guidelines explains that ‘previous experience and common sense will normally indicate the narrowest potential market definition, which will be taken as the starting point for the analysis’.

⁷⁹ See also Section 2.5 of the Explanatory Note to the 2014 EC Recommendation.

Bundling

- A11.25 A common feature of the telecoms sector is the supply of bundles of different services. However, the Explanatory Note explains that the fact that bundling is a trend observed at the retail level does not require the definition of retail market(s) for bundles. This is because evidence to date has not indicated that there is a need for *ex ante* regulation of bundles, which may contain a previously regulated input.⁸⁰
- A11.26 The Explanatory Note goes on to explain that what matters in this regard is *“that NRAs are able to ensure that the vertically integrated SMP operator’s regulated elements of the bundle can be effectively replicated (in terms of both technical and economic replicability) at the retail level, without an implicit extension of regulation to other components which are available under competitive conditions”*.

Aggregating markets

- A11.27 In certain circumstances, it may also be appropriate to define a product or geographic market by grouping together services despite the absence of demand- and supply-side substitutability.

Homogeneity of competitive conditions

- A11.28 Aggregating markets on the basis of the homogeneity of competitive conditions can help streamline the subsequent market power analysis by reducing the need to review multiple markets for products, the provision of which is subject to homogeneous competitive conditions.
- A11.29 However, combining products and services based on homogenous competitive conditions, is – by definition – only appropriate where this would not substantively alter any subsequent findings of SMP (relative to defining those markets separately).
- A11.30 Our approach also takes into account the SMP Guidelines. In particular, in the context of geographic market analysis, paragraph 56 of the SMP Guidelines states that:

“According to established case-law, the relevant geographic market comprises an area in which the undertakings concerned are involved in the supply and demand of the relevant products or services, in which area the conditions of competition are similar or sufficiently homogeneous and which can be distinguished from neighbouring areas in which the prevailing conditions of competition are appreciably different...”

- A11.31 Hence, subject to the relevant caveats above, where there are products (or geographic areas) where competitive conditions are sufficiently homogeneous, the definition of the relevant market will include all of those products (or geographic areas) within one market.

Common pricing constraints

- A11.32 Another factor that is sometimes considered in setting market boundaries is whether there exist common pricing constraints across customers, services or

⁸⁰ See Section 3.2 of the Explanatory Note to the 2014 EC Recommendation.

geographic areas (for example, areas in which a firm voluntarily offers its services at a uniform price). Where common pricing constraints exist, the products or geographic areas in which they apply could be included within the same relevant market even if demand-side and supply-side substitution is limited (or absent). Failure to consider the existence of a common pricing constraint could lead to unduly narrow markets being defined.

Geographic market

- A11.33 In addition to the product(s) to be included within a market, market definition requires us to specify the geographic extent of the market. The geographic market is the area within which demand side and/or supply side substitution can take place and is defined using a similar approach to that used to define the product market. We have considered the geographic extent of each product market covered in this market review.
- A11.34 There are a number of possible approaches to geographic market definition. One approach would be to begin with a narrowly defined area and then consider whether a price increase by a hypothetical monopolist in that narrowly defined area would encourage customers to switch to suppliers located outside the area (demand-side substitution) or CPs outside the area to begin to offer services in the area (supply-side substitution). If demand- and/or supply-side substitution is sufficient to constrain prices, then it is appropriate to expand the geographic market boundary.
- A11.35 We recognise that in certain communications (product) markets in the UK, there may be different competitive pressures in different geographic areas. In this case, we therefore have to consider whether it is appropriate to identify separate geographic markets for some services. Defining separate markets by geographic area may be problematic because, due to the dynamic nature of communications markets, the boundary between areas where there are different competitive pressures may be unstable and change over time, rendering the market definition obsolete.
- A11.36 An alternative approach is to define geographic markets in a broader sense. This involves defining a single geographic market but recognising that this single market has local geographic characteristics. That is to say, recognising that within the single market there are geographic areas where competition is more developed than in other geographic areas. This avoids the difficulties of defining and remedying large numbers of markets and instability in the definition over time. Such an approach may also include the aggregation of markets as discussed above.

Market power assessment

- A11.37 Having identified the relevant product and geographic market(s) and, where relevant having identified the market as susceptible to *ex ante* regulation, we go on to analyse each market in order to assess whether any person or persons have SMP as defined in section 78 of the Act (construed in accordance with Article 14 of the Framework Directive). Section 78 of the Act provides that SMP is defined as being equivalent to the competition law concept of dominance in accordance with Article 14(2) of the Framework Directive which provides:

“An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording

it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."

A11.38 Further, Article 14(3) of the Framework Directive states that:

"Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking."

A11.39 Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking or undertakings enjoy a position of dominance. Also, an undertaking may be designated as having SMP where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power.

A11.40 In assessing whether an undertaking has SMP, we take due account of the SMP Guidelines as we are required to do under section 79 of the Act.

The criteria for assessing SMP

A11.41 The SMP Guidelines require NRAs to assess whether competition in a market is effective. This assessment is undertaken through a forward-looking evaluation of the market (i.e. determining whether the market is prospectively competitive), taking into account foreseeable developments and a number of relevant criteria.⁸¹

A11.42 Our assessments of SMP are concerned with the prospects for competition over the review period of three years. Ultimately, we want to understand how the markets are likely to develop, and whether competition is likely to be, or become, effective during this review period. Below we set out certain key factors that we are likely to consider when assessing SMP.⁸²

A11.43 Where a market is found to be competitive then no SMP conditions can be imposed. Section 84(4) of the Act requires that any SMP condition in that market, applying to a person by reference to a market power determination made on the basis of an earlier analysis, must be revoked.

Market shares

A11.44 In the SMP Guidelines, the EC discusses market shares as being an indicator of (although not sufficient to establish) market power:

"...Market shares are often used as a proxy for market power. Although a high market share alone is not sufficient to establish the possession of significant market power (dominance), it is unlikely that a firm without a significant share of the relevant market would be in a dominant position. Thus, undertakings with market shares of no more than 25% are not likely to enjoy a (single) dominant position on

⁸¹ See, for example, paragraphs 19 and 20, and the opening words of paragraph 75, of the SMP Guidelines.

⁸² The factors listed in this annex are not intended to be exhaustive and other evidence may be relevant.

*the market concerned. In the Commission's decision making practice, single dominance concerns normally arise in the case of undertakings with market shares of over 40%, although the Commission may in some cases have concerns about dominance even with lower market shares, as dominance may occur without the existence of a large market share. According to established case-law, very large market shares — in excess of 50% — are in themselves, save in exceptional circumstances, evidence of the existence of a dominant position...*⁸³

A11.45 Market shares and market share trends provide an indication of how competitive a market has been in the past. If a firm has a persistently high market share, then that in itself gives rise to a presumption of SMP. However, changes in market share are also relevant to our assessment of prospects for competition. For example, a market share trend which shows a decline may suggest that competition will provide an effective constraint within the time period over which the SMP assessment is being conducted, although it does not preclude the finding of SMP.⁸⁴

Other factors affecting competitive constraints

A11.46 In addition to market shares, the SMP Guidelines set out a number of criteria that can be used by NRAs to measure the power of an undertaking to behave to an appreciable extent independently of its competitors, customers and consumers, including:⁸⁵

- the overall size of the undertaking;
- control of infrastructure not easily duplicated;
- technological advantages or superiority;
- easy or privileged access to capital markets/financial resources;
- product/services diversification (e.g. bundled products or services);
- economies of scale;
- economies of scope;
- vertical integration;
- highly developed distribution and sales network;
- absence of potential competition; and
- barriers to expansion.

A11.47 A dominant position can derive from a combination of these criteria, which when taken separately may not necessarily be determinative.

⁸³ Paragraph 75 of the SMP Guidelines.

⁸⁴ See, for example, paragraph 75 of the SMP Guidelines.

⁸⁵ SMP Guidelines, paragraph 78.

A11.48 An SMP analysis may also take into account the extent to which products or services within the market are differentiated. The constraint from products or services outside the relevant market may also be a relevant factor.

Excessive pricing and profitability

A11.49 In a competitive market, individual firms should not be able to persistently raise prices above costs and sustain excess profits. As costs fall, we would expect prices to fall too if competition is effective.

A11.50 The ability, therefore, to price at a level that keeps profits persistently and significantly above the competitive level is an important indicator of market power. The SMP Guidelines refer to the importance, when assessing market power on an *ex ante* basis, of considering the power of undertakings to raise prices without incurring a significant loss of sales or revenue (factors that may explain excess profits in the short term, such as greater innovation and efficiency, or unexpected changes in demand, should however be considered in interpreting high profit figures).⁸⁶

A11.51 The reverse is not true: consistently low profits, i.e. profits at or below the cost of capital, cannot be taken as evidence of an absence of market power. It may simply be evidence of inefficiency or other factors such as predatory pricing. For example, if a firm with SMP were to have inefficiently high costs, it may charge a price above the level we would expect to see in a competitive market but this would not result in high profits. In addition, price regulation exists in many of the wholesale markets considered, and therefore low profits may simply be the result of existing regulation rather than a reflection of the underlying competitive conditions.

Barriers to entry and expansion

A11.52 Entry barriers are important in the assessment of potential competition.⁸⁷ The lower entry barriers are, the more likely it is that potential competition will prevent undertakings already within a market from profitably sustaining prices above competitive levels. Moreover, the competitive constraint imposed by potential entrants is not simply about introducing a new product to the market. To be an effective competitive constraint, a new entrant must be able to attain a large enough scale to have a competitive impact on undertakings already in the market. This may entail entry on a small scale, followed by growth. Accordingly, whether there are barriers to expansion is also relevant to an SMP assessment. Many of the factors that may make entry harder might also make it harder for undertakings that have recently entered the market to expand their market shares and hence their competitive impact.

A11.53 A related factor is the growth in demand in the market. In general, CPs are more willing to invest in a growing market (and less willing in a declining market). As a result, barriers to entry and expansion tend to be less of an impediment to competition in rapidly growing markets.

Countervailing buyer power

A11.54 A concentrated market need not lead to harmful outcomes if buyers have sufficient countervailing buyer power to curtail the exercise of market power. In general,

⁸⁶ Paragraph 73 of the SMP Guidelines.

⁸⁷ Paragraph 80 of the SMP Guidelines.

purchasers may have a degree of buyer power where they purchase large volumes and can make a credible threat to switch supplier or to meet their requirements through self-supply to a significant degree. It is important to note, however, that the volumes involved must be large enough to make a material difference to the profitability of the current supplier. That is, an individual wholesale customer must represent a significant proportion of the total volume supplied by the relevant CP.

Remedies

A11.55 Where we find SMP, we must impose appropriate *ex ante* remedies based on the nature of the competition problem(s) identified in the relevant markets.

A11.56 The Access Directive specifies a range of such SMP obligations, each of which must be demonstrably based on the nature of the problem identified, proportionate and justified in the light of the policy objectives as set out in Article 8 of the Framework Directive.⁸⁸ We do this in accordance with the procedure set out in Annex 10.

⁸⁸ See Article 8(4) of the Access Directive.

Equality impact assessment

Introduction

- A12.1 Ofcom⁸⁹ is required by statute to assess the potential impact of all our functions, policies, projects and practices on equality.⁹⁰ An equality impact assessment (EIA) also assists us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- A12.2 Unless we state otherwise in this document, it is not apparent to us that our proposed remedies will have a differential impact on any equality group.
- A12.3 Further, we have not considered it necessary to carry out separate EIAs in relation to race or sex equality or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our regulatory intervention will not have a differential impact on people of different sexes or ethnicities, consumers with protected characteristics in Northern Ireland⁹¹ or disabled consumers compared to consumers in general.

Equality impact assessment

- A12.4 We have considered whether the proposed remedies would have an adverse impact on promoting equality. In particular, we have considered whether the remedies would have a different or adverse effect on UK consumers and citizens with respect to the following equality groups: age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation, and, in Northern Ireland, political opinion and persons with dependants.
- A12.5 The intention behind our approach to regulating the narrowband markets is to impose a set of regulatory obligations on CPs with SMP that will promote competition by, for example, requiring them to provide other CPs with access to their networks on regulated terms, and to protect consumers by preventing abusive conduct such as excessive pricing or a margin squeeze.
- A12.6 To understand how our proposals may affect equality groups, we have considered how different groups in society engage with communications services. In particular, we conducted market research that enabled us to assess the potential impact of future regulation on certain equality groups, particularly older consumers.⁹² While our research identifies differences in take-up and use of fixed line services by different groups within society our proposed regulation is aimed at promoting competition across the range of fixed voice telephony services.

⁸⁹ We explain why we undertake an Equality Impact Assessment (EIA) and how we have done it in Section 2 of this consultation.

⁹⁰ Ofcom has a general duty under the 2010 Equality Act to advance equality of opportunity in relation to age, disability, sex, gender reassignment, pregnancy and maternity, race, religion or belief and sexual orientation.

⁹¹ In addition to the characteristics outlined in the 2010 Equality Act, in Northern Ireland consumers who have dependents or hold a particular political opinion are also protected.

⁹² Jigsaw, *Narrowband Review 2015/16 Research: Consumer and SME Markets*, 14 August 2015.

- A12.7 We consider that our proposals will not have a detrimental impact on any defined equality group. Further, we do not propose to carry out separate EIAs in relation to race, gender equality or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we anticipate that our proposed regulatory intervention would not have a differential impact on people of different genders or ethnicities, consumers with protected characteristics in Northern Ireland or on disabled consumers compared to consumers in general. Therefore, we do not propose to carry out separate EIAs in relation to race or gender equality or equality schemes under the Northern Ireland Disability Equality Schemes.
- A12.8 Rather, we consider that our proposals will further the aim of advancing equality of opportunity between different groups in society by furthering the interest of all consumers in the retail fixed voice markets.