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Office of Communications
(OFCOM)

Riverside House
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United Kingdom

For the attention of:
Mr Ed Richards
Chief Executive Officer

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Dear Mr Richards,

Subject: Commission Decision concerning Case UK/2013/1428:
Market for wholesale terminating segments of leased lines in the United Kingdom;
Markets for wholesale trunk segments of leased lines in the United Kingdom;
Market for retail leased lines in the United Kingdom.
Comments pursuant to Article 7(3) of Directive 2002/21/EC

I. PROCEDURE

On 21 February 2013, the Commission registered a notification from the United Kingdom's national regulatory authority, the Office of Communications (OFCOM),¹ concerning the retail provision of leased lines² and the wholesale provision of trunk segments³ and terminating segments of leased lines⁴ in the United Kingdom.

¹ Under Article 7 of 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 (Framework Directive), OJ L 108, 24.4.2002, p. 33, as amended by Directive 2009/140/EC, OJ L 337, 18.12.2009, p. 37, and Regulation (EC) No 544/2009, OJ L 167, 29.6.2009, p. 12.

² Corresponding to Market 7 of Commission Recommendation 2003/311/EC replaced by Commission Recommendation 2007/879/EC.

³ Corresponding to Market 14 of Commission Recommendation 2003/311/EC replaced by Commission Recommendation 2007/879/EC.

⁴ Corresponding to Market 6 in 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 (Recommendation on Relevant Markets), OJ L 344, 28.12.2007, p. 65.

OFCOM conducted three separate national consultations,⁵ which ran from 18 June to 24 August 2012 (June BCMR Consultation), from 5 July to 30 August 2012 (LLCC Consultation) and from 15 November to 17 December 2012 (November BCMR Consultation).

On 4 March 2013, a request for information⁶ was sent to OFCOM and a response was received on 7 March 2013.

Pursuant to Article 7(3) of the Framework Directive, national regulatory authorities (NRAs), the Body of European Regulators for Electronic Communications (BEREC) and the Commission may make comments on notified draft measures to the NRA concerned.

II. DESCRIPTION OF THE DRAFT MEASURE

II.1. Background

The market for wholesale terminating segments of leased lines (Market 6) in the UK was previously notified to and assessed by the Commission under Cases UK/2008/0747 and UK/2008/0787.⁷ The market for retail leased lines in the UK (former Market 7) was previously notified to and assessed by the Commission under Case UK/2008/0749. The UK also notified, at the same time, a review of the market for wholesale trunk segments of leased lines (former Market 14) in the UK (Case UK/2008/0748).

In the retail market, OFCOM imposed a set of specific remedies for the low bandwidth retail market (i.e. up to and including 8 Mbit/s).⁸

In the wholesale market, OFCOM decided to segment the product markets according to interface type (traditional interface or 'TI' and alternative interface, or 'AI'), geographic area and bandwidth breaks. OFCOM identified different geographic segmentations for the Hull area, for the rest of the UK and for the Central and East London Area (CELA) and found BT to have SMP in four identified markets in the UK (excluding Hull and CELA) and KCOM to have SMP in the Hull area.⁹

OFCOM proposed to impose the following remedies on the wholesale Traditional Interface Symmetric Broadband Origination (TISBO) and Alternative Interface Symmetric Broadband Origination (AISBO) markets: (i) obligation to provide network access; (ii) obligation of non-discrimination; (iii) obligation of cost orientation; (iv)

⁵ In accordance with Article 6 of the Framework Directive.

⁶ In accordance with Article 5(2) of the Framework Directive.

⁷ SG-Greffe (2008) D/201387 (for Decisions UK/2008/0747 and UK/2008/0748) and SG-Greffe (2008) D/201412 (for Decision UK/2008/0749). The UK submitted an initial notification on market 6 (UK/2008/0747), but as it was forced to change some of the remedies in the light of the national consultation results, which arrived after the notification, it decided to partially re-notify (UK/2008/0787).

⁸ The remedies imposed include: (i) obligation to provide network access; (ii) obligation of non-discrimination; (iii) conditional obligation of cost orientation; (iv) transparency obligations and publication of a reference offer. In addition, it took account of BT's voluntary undertakings relating to the supply of new analogue and new sub 2 Mbit/s retail circuits and to the level of analogue services.

⁹ BT had SMP on the following markets: low bandwidth TISBO, high bandwidth TISBO up to 45 Mbit/s in the rest of the UK, very high bandwidth 155 Mbit/s TISBO in the UK excluding CELA and the Hull area and low bandwidth AISBO (up to and including 1 Gbit/s). KCOM had SMP on the following leased lines markets (for the Hull area only): low bandwidth TISBO, high bandwidth TISBO up to 45 Mbit/s in the rest of the UK, very high bandwidth TISBO above 45 Mbit/s, very high bandwidth 155 Mbit/s TISBO in the Hull area, low bandwidth AISBO (up to and including 1 Gbit/s) and high bandwidth AISBO (above 1 Gbit/s).

obligation of charge control; (v) transparency obligations. The same remedies were proposed for the wholesale market for very high bandwidth 155 Mbit/s TISBO in the UK excluding CELA and the Hull area.

As for the wholesale market for trunk segments in the UK, OFCOM identified only one market for trunk segments in the UK, where BT had SMP, imposing the same set of remedies.

The Commission made comments on the three criteria test, the existence of barriers to entry and to the development of competition and the geographic segmentation of markets.

Since the last full market analysis in 2008 OFCOM notified several amendments to the remedies imposed in the relevant markets.¹⁰

II.2. Market definition

II.2.1 Product market definition

(a) Retail markets

At retail level, OFCOM identifies distinct markets based on (a) the type of interface:¹¹ TI, AI or MI (Multiple Interface),¹² (b) the bandwidth provided and (c) the geographic area. OFCOM does not consider the three different interfaces to be sufficiently close substitutes to be deemed part of the same economic market. This is particularly the case concerning TI and AI services, where OFCOM's analysis is based on evidence concerning relative pricing,¹³ patterns of demand, investment cost and potential

¹⁰ Cf. UK/2008/0858, UK/2008/0859, UK/2011/1179, UK/2011/1247.

¹¹ TI comprises services which use legacy analogue and digital interfaces. This includes two broad types of circuits: (i) analogue interface leased lines, commonly used for voice transmission but also low bandwidth data transmission; (ii) digital interface leased lines, including Plesiochronous Digital Hierarchy (PDH) and Synchronous Digital Hierarchy (SDH), which are currently the most common type of leased line, being available in bandwidths ranging from 64 kbit/s up to 10 Gbit/s. The TI segment is broken down into five different bandwidths: (i) below 2 Mbit/s (very low); (ii) from 2 Mbit/s up to and including 8 Mbit/s (low); (iii) above 8 Mbit/s up to and including 45 Mbit/s (medium); (iv) above 45 Mbit/s up to and including 155 Mbit/s (high); (v) 622 Mbit/s (very high). AI uses modern interfaces suitable for transmission of Internet Protocol (IP) data. The interfaces used in AI include: (i) Ethernet, currently available in a range of bandwidths from 10 Mbit/s to 10 Gbit/s; (ii) Fibre Channel, a high bandwidth technology primarily used for data storage network applications. The AI segment includes only bandwidths up to and including 1 Gbit/s. OFCOM considered that differences between Ethernet and SDH/PDH services, on a forward-looking assessment, are becoming progressively less important as mainstream enterprise applications migrate to Ethernet/IP technologies. It also noted that there have been significant structural changes in demand for business connectivity services, with a shift away from analogue and SDH/PDH leased lines towards Ethernet since the 2007/2008 review. OFCOM also made specific reference to the fact that key users of low bandwidth TI leased lines include services such as Airwave (Police/Fire radio systems) and network monitoring and protection applications for power and water utilities. MI includes services with bandwidths greater than 1 Gbit/s, as well as services delivered with Wavelength Division Multiplexing (WDM) equipment at customers' premises at any bandwidth. WDM is a transmission technology originally used by network operators to provide optical fibre links with very high capacity within their networks. It is increasingly being used by businesses that have very high bandwidth requirements, particularly for data centre and data storage network applications and in the media and broadcast industries.

¹² Within retail markets, OFCOM identifies three types of interface: TI, AI and MI. For wholesale markets, however, these markets are combined. These combined markets exist for wholesale access and backhaul products, because OFCOM considers that communication providers (CPs) are likely to continue to purchase access and backhaul together. Therefore, they are referred to as TI Symmetric Broadband Origination (TISBO), AI Symmetric Broadband Origination (AISBO) and MI Symmetric Broadband Origination (MISBO).

disruption.

OFCOM clarified in its reply to our request for information that retail markets in very low bandwidth TI leased lines should be regulated because of the critical nature of some of the services that use these leased lines and of the groups of retail customers least able to switch to AI services, such as utility companies.¹⁴ As for low bandwidth retail TI and AI in the Hull area, OFCOM indicated that the incumbent's (KCOM's) market share is likely to remain high, despite the availability of regulated upstream wholesale services. In all cases, OFCOM considered there would be risks if *ex ante* regulation were not implemented at retail level.

(b) Wholesale markets

- Wholesale terminating segments

Based on its finding on the retail level, OFCOM maintains the distinction between TISBO and AISBO services and identifies separate markets depending on bandwidth and also on geographic areas.

For TISBO, OFCOM identifies the following markets: (i) low bandwidth TISBO below 8 Mbit/s; (ii) medium bandwidth TISBO between 8 Mbit/s and 45 Mbit/s; (iii) high bandwidth TISBO between 45 Mbit/s and 155 Mbit/s; and (iv) very high bandwidth TISBO at 622 Mbit/s. AISBO includes only low bandwidth below or equal to 1 Gbit/s.

In comparison with the 2008 market analysis OFCOM now adds a third interface service for multiple interface symmetric broadband origination ('MISBO'), which is for bandwidths over 1 Gbit/s irrespective of interface and services of any bandwidth delivered with WDM equipment at the customers' premises.

- Wholesale trunk segments

OFCOM identifies one TI regional trunk market at all bandwidths, reflecting the location-specific nature of these services. OFCOM considers that the characteristics of the regional trunk market are very similar to those of symmetric broadband origination and very different from national trunk routes, which are no longer regulated.

II.2.2. Geographic market definition

For the retail market, OFCOM identifies two separate geographic areas: (i) UK excluding Hull (for very low bandwidth TI retail markets — analogue and sub 2 Mbit/s); (ii) Hull (for TI low bandwidth retail markets up to and including 8 Mbit/s and AI low bandwidth markets up to and including 1 Gbit/s).

OFCOM determines that separate geographic markets exist for the wholesale market: (i) in the UK excluding the Hull area (for TISBO low bandwidth up to and including 8 Mbit/s) and TISBO very high bandwidth (above 155 Mbit/s); (ii) in the Hull area for all

¹³ OFCOM did not see any evidence that the price differentials between the two services were closing, which would be the case if they were close demand-side substitutes and both were competitively supplied.

¹⁴ OFCOM specifies that in relation to analogue services, there are no upstream wholesale analogue services available to CPs and that BT's service share of retail analogue services is 99%, almost unchanged since the previous review. Besides, for sub 2 Mbit/s leased lines OFCOM considers that competition prospects over a three-year period remain weak due to the legacy nature of these services. OFCOM further clarifies that analogue leased lines are a very old technology and consequently wholesale remedies in relation to them were not included when wholesale regulation was originally introduced. Finally, BT also adds that the integrity of the UK electricity supply would be at risk if *ex ante* retail regulation was not imposed, because BT may withdraw its retail services without sufficient notice for users.

wholesale leased lines (TISBO, AISBO and MISBO) and (iii) in a defined area of London, including West, East and Central London plus Slough, (WECLA+) for all the defined wholesale leased lines product markets.

II.3. Three criteria test

OFCOM identifies a set of markets at retail and wholesale level that are no longer listed by the Commission as markets susceptible to *ex ante* regulation. These markets are the following: (i) the retail market for very low bandwidth leased lines in the UK excluding the Hull area; (ii) the wholesale market for TI regional trunk segments in the UK; (iii) the retail market for low bandwidth TI leased lines in the Hull area; (iv) the retail market for low bandwidth AI leased lines in the Hull area. OFCOM carried out the three criteria test and considers that the three criteria for continued regulation in these markets are all met.

II.4. Finding of significant market power

The main criteria used by OFCOM to assess SMP include: (i) market shares and market share trends; (ii) profitability; (iii) control of infrastructure not easily duplicated; (iv) economies of scale and scope; (v) barriers to entry and expansion; (vi) countervailing buyer power; (vii) prospects for competition; (viii) impact of vertical integration. OFCOM proposes that BT and KCOM have SMP in the following wholesale markets in their respective areas as set out in the table below (respective market shares in brackets):

		Retail services		Wholesale segments			
				Symmetric broadband origination			Trunk
Interface technology	Bandwidth (Mbit/s)	UK ex Hull	Hull	WECLA +	UK ex WECLA+ and Hull	Hull	UK
Traditional (TI)	Very low: <2	BT (Analogue: 99%; Sub 2 Mbit: 54%)	KCOM (Analogue: 92%; Sub 2 Mbit: 67%)	BT (86%)		KCOM (100% or close)	National: NO SMP Regional: BT (88%)
	Low: <=8					KCOM (100% or close)	
	Med: 8-45			NO SMP	BT (74%)	KCOM (100% or close)	
	High: 45-115			NO SMP	BT (49%)	KCOM (100% or close)	
	V high: 622			NO SMP		KCOM (100% or close)	
Alternative (AI)	Low: <=1 000		KCOM (>75%)	BT (45%-55%)	BT (67%)	KCOM (100% or close)	
Multiple (MI)	>1 000 and any if WDM at user's site			NO SMP	BT (59%)		

II.5 Regulatory remedies

OFCOM's approach to remedies is to provide incentives to invest in alternative infrastructure to that of BT while ensuring the regulated provision of leased line services by both BT and KCOM.

General overview of remedies applied in this market review

	Wholesale TI markets	Retail very low bandwidth TI market (only analogue circuits and sub 2 Mbit/s digital circuits) ¹⁵	Wholesale AI services within the WECLA and elsewhere in the UK except Hull	Wholesale MI services outside the WECLA	Retail low bandwidth TI and AI services in the Hull area	Wholesale AI and TI services in the Hull area
Requirement to provide network access on reasonable request, including fair and reasonable charges, terms and conditions	X		X ¹⁶	X ¹⁷		X ¹⁸
Non-discrimination	X	X	X	X	X	X
Publication of reference offer	X	X ¹⁹	X	X	X	X
Notification of changes to prices, terms and conditions	X					
Publication of Quality of Service (QoS) information	X		X	X		
Notification of changes to technical information	X ²⁰		X	X		X
Accounting separation and cost accounting obligation	X	X ²¹	X	X		
Charge control ²²	X		X ²³	X ²⁴		
Requirements relating to requests for new network access	X		X	X		

¹⁵ All *ex ante* regulation removed from very low bandwidth TI market between 2 Mbit/s and 8 Mbit/s digital circuits.

¹⁶ Also including: (i) disaggregated Ethernet access and backhaul; (ii) end-to-end Ethernet products.

¹⁷ Also including: (i) disaggregated single-service Ethernet access and backhaul; (ii) end-to-end single-service Ethernet products; (iii) end-to-end and backhaul services with WDM equipment at the customer's premises.

¹⁸ Not including fair and reasonable charges, terms and conditions.

¹⁹ Including prices, terms and conditions.

²⁰ Within 90 days' notice.

²¹ Only cost accounting obligations for this specific case.

²² Charge controls applied on BT.

²³ Separate controls apply within and outside the WECLA+.

²⁴ On single-service Ethernet products.

	Wholesale TI markets	Retail very low bandwidth TI market (only analogue circuits and sub 2 Mbit/s digital circuits) ¹⁵	Wholesale AI services within the WECLA and elsewhere in the UK except Hull	Wholesale MI services outside the WECLA	Retail low bandwidth TI and AI services in the Hull area	Wholesale AI and TI services in the Hull area
A direction under the network access obligation requiring BT to provide Partial Private Circuits	X					
A direction under the network access obligation requiring BT to provide Radio Base Station (RBS) backhaul	X					
Requirements to provide accommodation in BT exchanges and to provide specific types of interconnection services	X ²⁵		X ²⁶	X ²⁷		
Requirement to provide network access on the basis of Equivalence of Inputs (EoI)			X ²⁸	X ²⁹		
Notification of changes to charges, terms and conditions			X ³⁰	X ³¹		X
A direction under the network access obligation relating to service-level guarantees			X			
Requirement to supply retail leased lines					X	
Accounting separation obligation						X
Safeguard cap on retail prices		X ³²				
Obligation to supply existing services, with at least a year's notice of withdrawal		X				

²⁵ These include: (i) Customer Sited Handover; (ii) In Span Handover; (iii) In Span Handover extension; (iv) In Building Handover.

²⁶ These include: (i) Customer Sited Handover; (ii) In Building Handover.

²⁷ These include: (i) Customer Sited Handover; (ii) In Building Handover.

²⁸ Except for certain specified exceptions including accommodation services.

²⁹ Except for certain specified exceptions including accommodation services.

³⁰ 28 days' notice for new services and price reductions, 90 days for all other clarifications.

³¹ 28 days' notice for new services and price reductions, 90 days for all other clarifications.

³² For analogue circuits only.

In addition to the traditional remedies described in the table above, OFCOM is proposing to implement charge controls³³ starting from 1 April 2013 for a three-year period. Furthermore, OFCOM proposes not to impose any cost orientation obligations.³⁴

OFCOM considered the possibility of imposing passive remedies,³⁵ but in the end decided not to propose such an approach for the following reasons: (i) it would represent a major departure from the current regulatory model; (ii) facilitating the transition from the current regulatory regime to one where competition based on passive remedies is sustainable and effective would require a significant degree of regulatory support and intervention; (iii) there is a lack of concrete evidence that transition would lead to a better overall outcome and more competition; (iv) active remedies and price controls can achieve the same benefits; (v) there is a lack of evidence that CPs would invest substantially in competition using passive remedies; (vi) investing in passive remedies could carry significant risks of delivering worse outcomes than simply continuing to impose active remedies alone.

III. COMMENTS

The Commission has examined the notification and the additional information provided by OFCOM and identified the following issues:

Retail markets

The Commission notes that, pursuant to Article 17(1)(b) of the Universal Service Directive, NRAs should impose appropriate regulatory obligations on undertakings with SMP at retail level only when obligations imposed at wholesale level do not result in the achievement of the objectives of the regulatory framework.

In its previous market review,³⁶ OFCOM identified and imposed remedies on BT at retail level despite the retail market(s) for leased lines having been removed in 2007 from the list of markets recommended for *ex ante* regulation. At the time, OFCOM argued that the infrastructure control of BT created a barrier to entry for the retail leased lines market, which was only partially alleviated by wholesale regulation. In principle it was expected that this would have been solved once the relevant wholesale remedies had been fully implemented. In the current market review, however, OFCOM continues to propose regulation at retail level, albeit now for a much smaller segment of the market, i.e. very low bandwidth TI leased lines (excluding the Hull area), and low bandwidth TI and AI retail leased lines in the Hull area. Concerning the case of very low bandwidth TI leased lines, OFCOM justifies retail intervention by the fact that in relation to analogue services there are no upstream wholesale analogue services available to CPs and that BT's service share of retail analogue services is 96%, almost unchanged since the previous review. OFCOM also points out that because analogue leased lines are a very old technology, wholesale remedies in relation to them were not included when wholesale regulation was originally introduced. OFCOM adds that

³³ The previous ones expired on 30 September 2012.

³⁴ Cf. par. 9.19: 'BT is currently subject to a package of remedies in relevant wholesale TISBO and AISBO markets, which remedies include obligations to provide network access (but excluding fair and reasonable charges), not to unduly discriminate, cost orientation and charge controls.'

³⁵ For example, requiring BT to provide access to its ducts, poles or dark fibre.

³⁶ Cf. UK/2008/0749.

the integrity of the UK electricity supply would be at risk if *ex ante* retail regulation was not imposed, because of the risk of BT withdrawing its retail services without sufficient notice for end-users.³⁷ Furthermore, no effective competition was found and the market is in long-term decline, with BT intending to close its Digital Private Circuit Network (DPCN) in 2018. This means that many users of sub 2 Mbit/s and analogue services will have to migrate before this period, thus limiting the amount of time available for investment recovery, rendering market entry unattractive. OFCOM finally considers there are risks of anti-competitive practices by BT.

While, in principle, the retail markets for leased lines no longer prove to be susceptible to *ex ante* regulation, the Commission takes note of the analysis and the data provided by OFCOM, which appear to indicate a necessity to continue regulation in the relevant retail markets for a limited period. Nevertheless, while the Commission recognises OFCOM's arguments for maintaining retail regulation, in particular with regard to the specific needs of certain captive customers who provide key services and who are currently still in the process of migrating from the regulated retail product to different services, the Commission requests OFCOM to monitor the evolution of this migration closely and to withdraw retail regulation as soon as migration has occurred to a sufficient degree, which would render continued retail regulation obsolete.

SMP assessment

The SMP Guidelines determine that the existence of significant market power cannot be established on the sole basis of large market shares, determining a set of criteria that can be used to complement the market share figures in an SMP assessment. Among these criteria is the absence of prospective competition.

For the wholesale Alternative Interface Symmetrical Broadband Origination Market (AISBO) in the West, East and Central London Area including Slough (WECLA+), OFCOM proposes that BT has SMP. It determined a 45 % to 55 % market share.

Furthermore, it determined: (i) the existence of more physical connections to business sites by BT, (ii) barriers to switching, (iii) the stability of BT's market shares for the past three years, (iv) no sufficient countervailing buyer power.

OFCOM added, however, that there was also considerable alternative infrastructure within WECLA+, supporting both existing and potential new entrants. It also determined that barriers to entry were lower than outside the WECLA, and that there was a stronger countervailing buyer power due to the existence of alternative CPs. It found that BT's advantages were not as strong in the WECLA+ as outside this geographic market, although they existed.

In the light of the fact that OFCOM itself considers the competitive prospects to be 'positive' and that this market is likely to show prospective competition in the medium- to long-term future, the Commission requests OFCOM to strengthen in its final measure its reasons for finding SMP in the relevant market.

³⁷ Even where CPs can replicate BT's retail products effectively, they have to rely on regulated wholesale inputs, which still requires incurring sunk costs and achieving economies of scale.

Pursuant to Article 7(7) of the Framework Directive, OFCOM shall take the utmost account of the comments of other NRAs, BEREC and the Commission and may adopt the resulting draft measure; where it does so, it shall communicate it to the Commission.

The Commission's position on this particular notification is without prejudice to any position it may take *vis-à-vis* other notified draft measures.

Pursuant to Point 15 of Recommendation 2008/850/EC³⁸ the Commission will publish this document on its website. The Commission does not consider the information contained herein to be confidential. You are invited to inform the Commission³⁹ within three working days following receipt whether you consider that, in accordance with EU and national rules on business confidentiality, this document contains confidential information which you wish to have deleted prior to such publication.⁴⁰ You should give reasons for any such request.

Yours sincerely,
For the Commission,
Robert Madelin
Director-General

³⁸ Commission Recommendation 2008/850/EC of 15 October 2008 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services, OJ L 301, 12.11.2008, p. 23.

³⁹ Your request should be sent either by email: CNECT-ARTICLE7@ec.europa.eu or by fax: +32 2 298 87 82.

⁴⁰ The Commission may inform the public of the result of its assessment before the end of this three-day period.