EUROPEAN COMMISSION

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Office of Communications
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United Kingdom

For the attention of:
Mr Ed Richards, Chief Executive Officer
Fax: 44-20 7981 3504

Dear Mr Richards,

**Subject: Case UK/2006/0498: Voice call termination on individual mobile networks in the UK.**

**Comments pursuant to article 7(3) of Directive 2002/21/EC[1]**

## I. PROCEDURE

On 13 September 2006, the Commission registered a notification by the UK national regulatory authority, the Office of Communications ("Ofcom"), reviewing the wholesale market for voice call termination on individual mobile networks in the UK for the period from 1st April 2007 to 31st March 2011.

The notification at hand is subsequent to the market review[2] previously notified to and assessed by the Commission, where the 2G/3G operators O2, Orange, T-Mobile and Vodafone, as well as the 3G operator Hutchison 3G UK Ltd ("H3G") were found to have significant market power ("SMP") on the wholesale market for voice call termination on their mobile network[3]. The 2G/3G-operators were subjected to, among other, ex-ante price

1 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 (the "Framework Directive"), OJ L 108, 24.4.2002, p. 33.

2 Wholesale mobile voice call termination (case UK/2003/0040).

3 See Commission comments letters of 5 February 2004 (D/200489).

regulation until the end of March 2007. H3G[4] was only obliged to publish price changes for 2G termination.

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

## II. DESCRIPTION OF THE DRAFT MEASURE

### II.1. Market definition

There are five mobile network operators ("MNOs") in the UK: O2, Vodafone, T-Mobile, Orange and H3G. O2, Vodafone, T-Mobile and Orange have both 2G and 3G networks. H3G has only a 3G network[5].

According to Ofcom, the annual retail revenues of the mobile industry in the UK amount to approximately £16.6 billion, out of which £13 billion correspond to retail revenues and £3.6 billion, correspond to wholesale revenues. Annual revenue from mobile call termination services is of the order of £2.5 billion, which represents approximately 15% of the revenue of the sector. Around two thirds of the revenue from mobile call termination (£1.5 billion) relates to calls between MNOs and the remaining sum (£1 billion) to calls from fixed operators.

Each of the 2G/3G MNOs reports having between 12 million and 18 million subscribers. H3G currently reports more than 3.5 million subscribers. Volumes of voice call minutes terminated by each of the five MNOs are roughly proportionate to the volume of subscribers, although there are some material variations between MNOs. According to Ofcom, indeed, if the flow of termination minutes between MNOs is broadly in balance, there are some MNOs which are material net providers of inter-MNO termination minutes (and, therefore, net receivers of inter-MNO revenues).

Due to a lack of substitutability between termination services on the different networks, Ofcom considers that the provision of wholesale voice mobile call termination by each MNO constitutes a separate economic market.

The product market definition is in line with the Recommendation on relevant markets[6]. SMS termination is excluded from the relevant product market. The geographic scope of each product market coincides with the geographic coverage of the network concerned.

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[4] In November 2005, the Competition Appeals Tribunal annulled Ofcom's decision and ordered it to reconsider whether H3G has SMP in the market at hand. On 13 September 2006, Ofcom notified to the Commission a new measure replacing the annulled decision for the period up to 31 March 2007.

[5] H3G provides voice termination over its 3G network where it has coverage. Out of coverage, H3G currently relies on O2's network to terminate calls to its subscribers and has announced that it has also awarded a contract to Orange for the provision of similar facilities.

[6] Commission Recommendation 2003/311/EC of 11 February 2003 on relevant product and services markets within the electronic communications sector susceptible for *ex ante* regulation in accordance with the Framework Directive, OJ L 114, 8.5.2003, p. 45.

## II.2. Finding of significant market power ("SMP")

In its notification Ofcom assesses SMP, including the existence of countervailing buying power, in accordance with the methodology set out in the Recommendation on relevant markets and in the Commission's Guidelines on market analysis and the assessment of significant market power.[7]

Ofcom intends to designate Vodafone, O2, Orange, T-Mobile and H3G as having individual SMP on their respective markets. When reaching its conclusion on SMP, Ofcom considered the following criteria: (1) market shares (the monopoly position of each MNO on its own network has not changed since 2003 and is not likely to change by 2011); (2) control of an infrastructure not easily duplicated and absence of potential competition[8]; (3) the absence of countervailing buying power, as well as (4) related criteria concerning the overall costs and barriers to switching.

In respect of the absence of countervailing buying power, Ofcom notes that no purchaser of call termination services, including British Telecom Ltd ("BT"), has been able and is unlikely over the period of assessment to be able to exert countervailing buying power through a threat either to purchase the service from an alternative source or to self-supply.

## II.3. Regulatory remedies

In order to remedy market power on the respective wholesale markets, Ofcom proposes to impose the following set of obligations on each MNO:

- Obligation to provide access and interconnection on reasonable request
- Non-discrimination
- Transparency (publication of a reference offer)
- Price control and cost accounting

Ofcom intends to implement the price control obligation with a view to reduce mobile termination rates ("MTRs") to target prices in a timeframe of three years, starting on 1 April 2007. For that purpose, Ofcom developed a cost model based on Long Run Incremental Costs ("LRIC")[9] with a "bottom-up"[10] approach.

The target prices resulting from the model are respectively 5.3 pence per minute ("ppm") for the 2G/3G MNOs (i.e. Vodafone, O2, Orange and T-Mobile), and 6.0 ppm for H3G. Ofcom

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7 Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services, OJ C 165, 11.7.2002, p. 6.

8 Ofcom considers that actual competitive entry or the threat thereof does not provide competitive pressure on the MNOs due to the lack of competition between MNOs in supplying wholesale mobile termination. Ofcom does not foresee any changes to the current "Call Party Pays" arrangements nor the introduction of new or developing technologies that will allow another provider to offer termination on another mobile network, other than the MNO providing that network.

9 LRIC means that the model forecasts costs in the long run and allocates costs to services based on increments.

10 Bottom-up means that the model uses as costs inputs the cost of an efficient operator that would develop its network on the basis of the existing technologies.

then submits to consultation several options for reaching these target prices, as illustrated in the following table:

| Pence per minute | Option | 2006 | 01-avr.-07 | 01-avr.-08 | 01-avr.-09 | 01-avr.-10 | Variation (relative) 2006/2010 | Variation (absolute) 2006/2010 |
|---|---|---|---|---|---|---|---|---|
| VODAFONE / O2 | Smooth glide path | 5,6 ppm | 5,5 ppm | 5,5 ppm | 5,4 ppm | 5,3 ppm | -5,4% | -0,3 ppm |
| | One-off cut | 5,6 ppm | 5,3 ppm | 5,3 ppm | 5,3 ppm | 5,3 ppm | -5,4% | -0,3 ppm |
| ORANGE / T-MOBILE | Smooth glide path | 6,3 ppm | 6,1 ppm | 5,8 ppm | 5,6 ppm | 5,3 ppm | -15,9% | -1,0 ppm |
| | One-off cut | 6,3 ppm | 5,3 ppm | 5,3 ppm | 5,3 ppm | 5,3 ppm | -15,9% | -1,0 ppm |
| H3G | Smooth glide path | *confidential* | 9,5 ppm | 8,1 ppm | 7,0 ppm | 6,0 ppm | | |
| | One-off cut+glide path | *confidential* | 8,3 ppm | 7,4 ppm | 6,7 ppm | 6,0 ppm | | |
| | Cost based glide path | *confidential* | 6,8 ppm | 6,5 ppm | 6,3 ppm | 6,0 ppm | | |

| | |
|---|---|
| British Pound / Euro | 1,48 |

| € cent per minute | | 2006 | 01-avr.-07 | 01-avr.-08 | 01-avr.-09 | 01-avr.-10 | Variation (relative) 2006/2010 | Variation (absolute) 2006/2010 |
|---|---|---|---|---|---|---|---|---|
| VODAFONE / O2 | Smooth glide path | 8,3 € ct | 8,2 € ct | 8,1 € ct | 8,0 € ct | 7,8 € ct | -5,4% | -0,4 € ct |
| | One-off cut | 8,3 € ct | 7,8 € ct | 7,8 € ct | 7,8 € ct | 7,8 € ct | -5,4% | -0,4 € ct |
| ORANGE / T-MOBILE | Smooth glide path | 9,3 € ct | 9,0 € ct | 8,6 € ct | 8,2 € ct | 7,8 € ct | -15,9% | -1,5 € ct |
| | One-off cut | 9,3 € ct | 7,8 € ct | 7,8 € ct | 7,8 € ct | 7,8 € ct | -15,9% | -1,5 € ct |
| H3G | Smooth glide path | *confidential* | 14,1 € ct | 12,0 € ct | 10,4 € ct | 8,9 € ct | | |
| | One-off cut+glide path | *confidential* | 12,3 € ct | 11,0 € ct | 9,9 € ct | 8,9 € ct | | |
| | Cost based glide path | *confidential* | 10,1 € ct | 9,6 € ct | 9,3 € ct | 8,9 € ct | | |

The current differential charge control between providers who use 1800 MHz (Orange and T-Mobile) as opposed to 900 MHz (Vodafone and O2) spectrum would be removed. According to Ofcom, the average charges proposed for H3G by the final year of the price control reflects exogenous cost differences between H3G and the 2G/3G MNOs.[11]

Ofcom will decide on the proposed final level[12] of the charge and the glide path cap (in respect of each MNO separately) in the light of responses to the consultation at hand.

The model assumes that 3G costs[13], in particular 3G spectrum costs are relevant to the assessment of cost-orientated MTR. With the introduction of spectrum trading, MNOs will be able to sell spectrum to other interested parties. Therefore MNOs' spectrum holdings will have a realizable value on a forward-looking basis and consequently Ofcom considers that it may not be appropriate in a context of a forward looking cost model to treat spectrum as a sunk cost. According to Ofcom, the inclusion of 3G spectrum costs is considered in relation to the following objectives: (1) providing appropriate price signals to consumers for efficient consumption of services using mobile termination; (2) the impact on cost recovery by MNOs; and (3) the incentive for operators to use spectrum efficiently.

In practice, Ofcom's model allocates spectrum costs in proportion to lifetime radio traffic. On this basis about 20%-25% of the appropriate cost of 3G spectrum is allocated to mobile voice termination.

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11 According to Ofcom, this is due to the fact that the unit costs of 3G call termination (specifically when a contribution to 3G spectrum costs is included) are higher than for 2G call termination. However, Ofcom notes that, absent 3G spectrum costs, 3G costs are lower than those of 2G such that the 2G/3G operators will be incentivised to migrate to the lower-cost 3G technology in future.

12 According to Ofcom, the final level should be within +/-0.5ppm of 5.3ppm in respect of the 2G/3G MNOs, and between +/- 0.65ppm. of 6.0ppm in respect of H3G.

13 The 3G licence fees that MNOs paid in 2000 were the following: H3G (£4.3847bn for 2*15MHz paired + 5MHz unpaired), Vodafone (£5.9640bn for 2*15MHz paired), O2 (£4.0301bn for 2*10MHz paired), T-Mobile (£4.0036bn for 2*10MHz paired + 5MHz unpaired), and Orange (£4.0950bn for 2*10MHz paired + 5MHz unpaired).

Ofcom indicates that the inclusion of 3G spectrum costs for the assessment of MTR has an average impact of 1.1 pence (1.63€ cent) per minute in respect of the 2G/3G MNOs and 1.9 pence (2.81€ cent) per minute for the 3G-only operator, on the basis of the preferred scenario for allocating these costs.

## III. COMMENTS

The Commission has examined the notification and has the following comment:

**3G spectrum costs**

The value of 3G licences should be calculated at current value on a forward looking basis[14] and not on the basis of spectrum values which approximate year 2000 levels. Termination rates should be set at the cost which would be faced by an efficient operator to provide the relevant service. What should be considered in the LRIC model, from today's perspective, are all the cost elements that are not sunk today.

It is important that LRIC models use current costs[15] and not historical costs which risks overestimating the appropriate costs considerably. This consideration is particularly relevant for spectrum fees which have been written off by operators since the relevant frequencies were auctioned and for which Ofcom considers that they may be an overstatement of the opportunity cost of 3G spectrum.

In light of the above and with a view to fulfilling the objectives of the framework and allowing end-users, in particular retail fixed customers to obtain the benefits of the wholesale regulation proposed, the Commission invites Ofcom to reconsider the valuation of 3G licences.

Pursuant to Article 7(5) of the Framework Directive, Ofcom shall take the utmost account of comments of other NRAs and the Commission and may adopt the resulting draft measures and, where it does so, shall communicate them 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 12 of Recommendation 2003/561/EC[16] 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 Commission[17] within three working days following receipt whether you consider, in accordance with Community and national rules on business confidentiality, that this document contains confidential information

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[14] The current value of spectrum will reflect the scale and scope of future spectrum trading possibilities.

[15] See also the ERG Common Position on Remedies where a certain preference for current cost valuation is indicated as this "will tend to be more economically meaningful". ERG (06) 33 Revised ERG Common Position on the approach to appropriate remedies in the ECNS regulatory framework ("Remedies" document), May 2006, page 76.

[16] Commission Recommendation 2003/561/EC of 23 July 2003 on notifications, time limits and consultations provided for in Article 7 of Directive 2002/21/EC, OJ L 190, 30.7.2003, p. 13.

[17] Your request should be sent either by email: INFSO-COMP-ARTICLE7@ec.europa.eu or by fax: +32.2.298.87.82.

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Yours faithfully
For the Commission
Fabio Colasanti
Director General