Re-investigation of a complaint from Floe Telecom Limited against Vodafone Limited

A decision of the Office of Communications under the Competition Act 1998

Case: CW/00805/12/04
28 June 2005

Note: This is the non-confidential version of the decision. Confidential information and data have been redacted. Redactions are indicated by “[X]”.

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Section 1

Summary

1. The Office of Communications (“Ofcom”) has concluded that Vodafone Limited (“Vodafone”) has not infringed Section 18 (“the Chapter II prohibition”) of the Competition Act 1998 (“the Act”) or Article 82 (“Article 82”) of the EC Treaty by disconnecting the services it was providing to Floe Telecom Limited (“Floe”) for use in Floe’s GSM gateways, while allegedly continuing to supply the same services to other companies for use in GSM gateways. There are therefore no grounds for action against Vodafone.

2. Ofcom has concluded that the Chapter II Prohibition and Article 82 do not apply in respect of the particular facts of this case. This is because:

• Floe’s use of GSM gateways was unlawful and the competition rules do not and cannot apply to protect or promote activities which are prohibited by law; and
• by ceasing to supply Floe, Vodafone was complying with a ‘legal requirement’.

3. Ofcom has also concluded that, if the Chapter II Prohibition and/or Article 82 were to apply in respect of the particular facts of this case, Vodafone’s conduct would, in any event, not have infringed the Chapter II Prohibition and/or Article 82 on the basis that Vodafone was objectively justified in refusing to supply Floe and Vodafone did not act in a discriminatory manner in respect of its treatment of Floe.

4. In reaching these conclusions, Ofcom has taken into account the Judgment of the Competition Appeal Tribunal of 19 November 2004, which set aside a previous decision of the Director General of Telecommunications (“the Director”) on the same matter.
Section 2

Procedural History

Floe’s original complaint

5. Floe submitted a complaint to the Director on 18 July 2003, in which it alleged that Vodafone had, among other things, infringed the Chapter II Prohibition by periodically suspending Floe’s GSM gateway services on the grounds of unlawful activity yet still permitting GSM gateway services by others, including its own service providers.

The Director’s decision

6. In his decision of 3 November 2003 (the “Decision”)¹, the Director concluded that Vodafone had not infringed the Chapter II Prohibition. In summary, the basis for this conclusion was that:

- Floe’s use of ‘public’ GSM gateways was illegal;
- Vodafone therefore had an objective justification for refusing to supply Floe’s ‘public’ GSM gateways; and
- Vodafone had not acted in a discriminatory manner in its treatment of ‘public’ GSM gateway operators.

7. In considering the legality of Floe’s use of ‘public’ GSM gateways, the Director assessed whether Vodafone had given written authorisation to Floe to use ‘public’ GSM gateways under the auspices of Vodafone’s own licence issued under section 1(1) of the Wireless Telegraphy Act 1949. The Director concluded that Vodafone had not given Floe written authorisation to use ‘public’ GSM gateways under its licence.

8. As of 29 December 2003, the office of the Director has ceased to exist and his functions have been transferred to Ofcom. Ofcom is empowered to exercise certain functions under the Act by virtue of section 371(1) of the Communications Act 2003.

The Appeal

9. On 2 January 2004, Floe appealed against the Director’s Decision to the Competition Appeal Tribunal (the “Tribunal”).

10. During the appeal, Ofcom realised that the Director had made an error in his original Decision in suggesting that it might be possible for Vodafone to authorise the use of GSM gateways by Floe under the auspices of its licence. Ofcom argued before the Tribunal that Vodafone’s licence did not permit the use of GSM gateways, whether by Vodafone or any other person.

¹ “Competition Act investigation by the Director General of Telecommunications into disconnection of Floe’s Telecom’s Limited’s services by Vodafone Ltd” at http://www.ofcom.org.uk/static/archive/oftel/publications/comp_bull/case_662.pdf
11. The Tribunal issued its judgment on 19 November 2004 (the “Judgment”). The Tribunal concluded that the Director’s decision should be set aside on grounds of incorrect and/or inadequate reasoning. The Tribunal’s principal reasons for setting aside the Director’s Decision are set out at paragraph 3 of the Judgment:

“(a) The Director’s reasoning at paragraphs 49 to 57 of the Decision to the effect that Floe had not been authorised by Vodafone to provide Public GSM Gateway services under the terms of Vodafone’s WTA licence is in our view incorrect and/or flawed. In those circumstances in our view the existing Decision cannot stand.

(b) During the course of the appeal OFCOM in effect abandoned paragraphs 49 to 57 of the Decision and advanced a wholly new argument to the effect that, on the true construction of Vodafone’s WTA licence, Vodafone could never have authorised Floe to provide Public GSM Gateway Services. That new argument does not feature in the Decision, and is contrary to the position taken in the Decision by the Director and the views of the former Radiocommunications Agency (“RA”), the body responsible for spectrum licensing at the time. On the materials before it, the Tribunal is not able to find that OFCOM’s new argument as to the scope of Vodafone’s WTA licence is correct. Since the new argument advanced by OFCOM has potentially wide ramifications for Mobile Network Operators (MNOs) generally, for intermediaries such as Floe, for competition in this sector, and for the management of the spectrum, the Tribunal considers that the proper course in the circumstances is to remit the matter to OFCOM with a view to a new fully reasoned decision being taken on Floe’s original complaint.

(c) Given the uncertainty and complexity of the legal position at the time of Floe’s disconnection by Vodafone, the Tribunal considers that a serious issue arises as to whether Vodafone, in the context of the Chapter II prohibition of the Competition Act, was objectively justified in disconnecting Floe without first referring the matter to the RA or leaving it to the RA to take enforcement action under the WTA. That issue was not investigated by the Director. Remitting the matter will enable OFCOM to take a reasoned decision on that issue”.

The matters identified by the Tribunal for reconsideration by Ofcom

12. In its Judgment, the Tribunal set out various matters which the Director should have considered in his original investigation/which Ofcom should consider in its re-investigation.

13. At paragraph 287 of the Judgment, the Tribunal stated that Ofcom should reconsider the matter in light of Ofcom’s new understanding of Vodafone’s licence as well as the understanding of Vodafone, Floe and the Government as to the scope of the licence at the time of the agreement between Floe and Vodafone (the “Agreement”) and at the time of disconnection. The Tribunal also stated that:

“Ofcom will need to consider whether its new understanding of the scope of Vodafone’s licence, as submitted to us, is the correct construction having regard to the relevant materials, including those to which we have referred above, having made its position clear to the parties in writing and taking into account any submissions that it may receive. Ofcom will also need to consider whether its new interpretation is compatible with the RTTE Directive and the Authorisation Directive.”

14. At paragraph 338 of the Judgment, the Tribunal highlighted a number of matters that it considered that the Director should have taken into account in considering whether Vodafone was objectively justified in disconnecting Floe. These matters were:

“(a) The legal status of GSM gateways and the common understanding in the industry at the time as to the legality or otherwise of GSM gateways and the licensing requirements under the WTA 1949;

(b) the true construction of Vodafone’s licence (if the true construction is not the construction relied upon in the Decision);

(c) the legal status of the representations made by the RA as to the scope of MNOs’ licences under the WTA 1949;

(d) Vodafone’s understanding of the scope of its licence at the time of the Agreement;

(e) that the Agreement properly construed related to the provision by Vodafone of SIM cards to be used in GSM gateway devices which on the then understanding of the RA were not exempt under the Exemption Regulations from the licensing requirement in section 1 WTA 1949, irrespective of whether the device was a “public” or “private” GSM gateways and if “public”, whether for single-party or multi-party use;

(f) the RA’s statements on forbearance of enforcement including the extent to which either party was aware of such statements and, if aware when they became so aware and the effect of those statements, if any, on the conduct of Vodafone and Floe in entering into the Agreement and during the period August 2002 to February 2003 in performing the Agreement;

(g) that at the time of first disconnection a proposal had been made by the RA in the Consultation Document to legitimise GSM gateways, including for “public” use;

(h) the response by the mobile operators to the RA that private use of GSM gateways should be legitimised but that multi-user gateways should not be legitimised;

(i) the omission in the response of the mobile operators to the November 2002 Consultation Paper of any consideration of single user gateways used to provide telecommunication services by way of business;

3 The matters identified by the Tribunal at paragraph 287 of its Judgment are addressed at paragraphs 95-127 and 132-171 below.
(j) whether the criteria established by Vodafone on which it based its
decision to disconnect Floe were capable of distinguishing between
“public” and “private” use (and/or single-use and multi-party use, if
relevant);

(k) the obligations of the United Kingdom not to take action prior to 25
July 2003 capable of seriously undermining the objectives of the
Authorisation Directive..”

15. At paragraph 339 of its Judgment, the Tribunal stated that:

“it was also incumbent on the Director to have considered whether there had
been any change in circumstances between the date of first disconnection
and the date of the Decision that was relevant to the objective justification or
otherwise of the then ongoing refusal to supply by Vodafone”.

The Tribunal further stated that:

“In our view that Director ought to have considered the following matters (none
of which were considered in the Decision) when deciding whether Vodafone
was objectively justified in its continued refusal to supply SIM cards and
Services to Floe under the Agreement and its continued disconnection of Floe:

“(a) the result of the Consultation announced by the Government on 18 July
2003 including in particular:

(i) that the definition of “user station” was found to be ambiguous
and it was decided that it should be amended to make clear that
it covers any customer on the network irrespective of fixed or mobile
status;

(ii) that the restriction on provision of services to third parties over
exempt devices should be retained;

(iii) that the Government encouraged MNOs and Gateway
Operators to consider ways of addressing pragmatically the
existing uses of GSM gateway equipment that continued not to
meet the requirement of exemption;

(b) that the Government issued a statement to the effect, even after it had
been decided to retain the restriction on exemption in regulation 4(2),
that it was “eager” for the possibility of a pragmatic approach to
commercial ventures where traffic and connection to MNOs networks
via GSM gateways would be agreed under the auspices of the MNOs’
licences.

(c) the effect, if any, of the provisions of the Communications Act 2003
and the Authorisation Directive which came into force on 25 July 2003
(including sections 45 et seq, 164 and 172 et seq to which reference
was made at the hearing).”

\[4\] The matters identified by the Tribunal at paragraph 338 of its Judgment are addressed at
paragraphs 269-297 below.

\[5\] The matters identified by the Tribunal at paragraph 339 of its Judgment are addressed at
paragraphs 298-312 below.
Ofcom’s reinvestigation

16. On 1 December 2004, the Tribunal issued an Order remitting Floe’s complaint to Ofcom to re-investigate.6

17. On 16 December 2004 Ofcom published details of the reinvestigation on its website.7 Ofcom stated that, in light of Ofcom’s market review statement “Wholesale Mobile Voice Call Termination”8, it had reasonable grounds to believe that Vodafone may be dominant in the supply of wholesale mobile voice call termination on its own network. Ofcom confirmed that the investigation would assess whether Vodafone has infringed the Chapter II prohibition and/or Article 829 by disconnecting telecommunications services it was providing to Floe. Ofcom also confirmed that it would assess whether Vodafone has infringed the Chapter II prohibition and/or Article 82 by refusing to supply Floe with SIMs, while allegedly continuing to supply such services to other companies that operated GSM gateways.

18. On 17 December 2004 Ofcom wrote to Vodafone and Floe, inviting them to make submissions on the issues raised by the Tribunal in its Judgment and any other issues they considered relevant. Both parties provided submissions to Ofcom in response to this request.

19. On 3 March 2005 Ofcom issued a statement for comment on “The scope of mobile operators’ 2G cellular licences issued under section 1(1) of the Wireless Telegraphy Act 1949 and the legal status of the use of GSM gateways”10. Ofcom received 17 responses to this statement. Ofcom has distributed non-confidential versions of those responses to Floe, Vodafone and any other interested party who has requested copies of the responses.

20. During the course of its re-investigation, Ofcom has requested a substantial amount of information and documentary evidence from Vodafone and Floe and has also met with both parties to discuss certain issues connected with the re-investigation:

- on 14 March 2005 Ofcom issued information requests to Vodafone and Floe (these were issued in draft initially and finalised on 24 March 2005). These information requests asked Vodafone and Floe questions relating to their understanding of certain issues at the time they entered into the

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7 “Reinvestigation of a complaint from Floe Telecom Ltd against Vodafone about an alleged refusal to supply” at http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_805/?a=87101
9 Since 1 May 2004, Ofcom has the power under the Competition Act 1998 to apply Article 82 of the EC Treaty, in addition to the Chapter II prohibition, where the conduct in question has an actual or potential effect on trade between Member States.
Agreement, and also their understanding of certain issues subsequent to entering into the Agreement;

- on 14 March 2005 Ofcom issued a Notice under Section 26 of the Act to Vodafone (this was issued in draft initially and finalised on 24 March 2005). This Notice required that Vodafone provide specified documents and information relating to the disconnection of Floe’s GSM gateways by Vodafone, Vodafone’s use of GSM gateway equipment and Vodafone’s relationship with Floe subsequent to the initial disconnections;

- on 14 March 2005 Ofcom issued a Notice under Section 26 of the Act to Floe (this was issued in draft initially and finalised on 24 March 2005). This Notice required that Floe provide specified documents and information relating to the scope of Floe’s business at the time of disconnections, the disconnection of Floe’s GSM gateways by Vodafone, and Floe’s relationship with Vodafone subsequent to the initial disconnections;

- on 8 April 2005 Ofcom issued a second Notice under Section 26 of the Act to Floe (this was issued in draft initially and finalised on 18 April 2005). This Notice required Floe to clarify and expand on its response to Ofcom’s Notice under Section 26 of the Act of 24 March 2005. Specifically, it required that Floe provide specified documents and information relating to the products that Floe provided during the period August 2002-October 2003, including how these products were provided to Floe’s customers, Floe’s customer base for these products and Floe’s competitors for these products;

- on 15 April 2005 Ofcom met with Floe to discuss, among other things, the information provided by Floe. On 4 May 2005 Ofcom met with Vodafone to discuss, among other things, the information provided by Vodafone;

- on 5 May 2005 Ofcom issued a third Notice under Section 26 of the Act to Floe. This Notice required further clarification from Floe on whether, at the time of disconnections by Vodafone, any of Floe’s SIMs were dedicated exclusively to the delivery of traffic originating from a single end-user;

- on 10 May 2005 Ofcom issued information requests to Vodafone and Floe. These requested information from Vodafone and Floe relating to the availability of cross-network tariffs at the time that Floe’s SIMs were disconnected by Vodafone;

- on 13 May 2005 Ofcom issued a Notice under Section 26 of the Act to Floe’s former Technical Director. This Notice required Floe’s former Technical Director to confirm whether, at the time of disconnections by Vodafone, any of Floe’s SIMs were dedicated exclusively to the delivery of traffic originating from a single end-user. This Notice was issued to clarify Floe’s response to the same question posed in Ofcom’s Notice under Section 26 of the Act of 5 May 2005; and

- on 18 May 2005 Ofcom issued a second Notice under Section 26 of the Act to Vodafone. This Notice required that Vodafone provide certain clarification and information further to Vodafone’s response to Ofcom’s Notice under Section 26 of the Act of 24 March 2005 and also Vodafone’s
response to a Notice under Section 26 of the Act issued by the Director in his original investigation.

21. This document sets out Ofcom's conclusions on the basis of the evidence provided during this re-investigation and during the Director's previous investigation.
Section 3

Background

A. GSM gateways and the rationale for the use of GSM gateways

22. GSM gateways provide, amongst other things, an alternative mechanism to enable calls from telephones or other devices connected to a fixed network to be passed to a mobile handset or device. In order to correctly characterise this capability, it is necessary first to consider how calls are passed from fixed to mobile networks under most circumstances, and then how GSM gateways operate to deliver calls.

The delivery of a fixed-to-mobile call via a fixed point of interconnection

23. Just as fixed networks are interconnected in order to allow services to pass from one network to another, a number of fixed networks are interconnected with each of the mobile operators at fixed points of interconnection. Calls originating on the Public Switched Telephony Network (“PSTN”) are passed over a fixed point of interconnection to the mobile operator for termination on the mobile handset of a directly connected subscriber of that network. A call delivered in this way is referred to as an ‘off-net’ call, because the calling party and the called party are on different networks.

24. Each of the mobile operators charges standard prices for the termination of calls on its own network (referred to as wholesale termination charges), although these charges vary between the mobile operators. These charges (which are currently regulated by Ofcom) apply to all third party operators (both fixed and mobile) who terminate calls on that network over a fixed point of interconnection.

25. The cost of paying wholesale mobile termination charges is and has been at all material times a material cost in the provision of fixed-to-mobile telephony services. Consequently, both operators and end-users face strong incentives to find cheaper ways of delivering/making calls to mobiles. For operators, this involves finding alternative ways to deliver traffic to mobile handsets at rates lower than standard wholesale termination charges and, for end-users, it involves shopping around to find the cheapest fixed-to-mobile calling rates.

26. On 1 June 2004, following a public consultation, Ofcom issued a statement which concluded that direct price controls should be imposed on the wholesale termination charges to operators for terminating calls on the 2G mobile networks of Vodafone, O2, Orange and T-Mobile\(^\text{11}\). This statement was issued in the context of the new EC regulatory framework for electronic communications networks and services which entered into force in the UK on 25 July 2003. As part of the implementation of this framework, National Regulatory Authorities (such as Ofcom in the UK) were required to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions.

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27. The statement confirmed that each mobile operator has significant market power ("SMP") in the market for the provision of wholesale voice call termination on its own network(s). As a consequence of this SMP finding, Ofcom imposed certain regulatory remedies on Vodafone, T-Mobile, Orange and O2 in relation to their provision of wholesale mobile voice call termination services, including requiring the mobile operators to:

- provide network access (i.e. 2G call termination) on reasonable request;
- not unduly discriminate in relation to matters connected with such network access;
- supply to Ofcom copies of any new or amended access contracts;
- give advance notification of price changes; and
- reduce wholesale termination charges in line with the charge control.

28. In respect of the charge controls on wholesale termination charges, Ofcom concluded that Vodafone's and O2's average wholesale termination charges should be reduced from around 8 pence per minute to 5.63 pence per minute over the period of the charge control. Ofcom also concluded that T-Mobile's and Orange's average wholesale termination charges should be reduced from around 9.5 pence per minute to 6.31 pence per minute over the period of the charge control. In complying with the charge controls, the mobile operators are allowed to vary their wholesale termination charges by time of day. Each of the mobile operators has chosen to implement higher wholesale termination charges for weekday daytime calls, and lower wholesale termination charges for calls during weekday evenings and at weekends.

29. The mobile operators are required to ensure that their average charges remain at or below the specified levels until March 2006. On 7 June 2005 Ofcom published a consultation document outlining proposals to extend the existing controls on the mobile operators' 2G wholesale termination charges for a further 12 months to 31 March 2007.\(^{12}\)

The delivery of a call via a GSM gateway

30. GSM gateways enable calls from a fixed telephone or other device to be passed from a fixed network to a mobile network in a way that is not recognised by the mobile network as being a fixed-to-mobile call. The call is first routed from the fixed network to the GSM gateway, and then passed from the GSM gateway over the mobile network to the mobile handset where the call is to be terminated.

31. However, although the call originates on a fixed network, no regulated wholesale termination charge is paid to the mobile operator terminating the call. This is because the GSM gateway contains a SIM\(^ {13}\) card of the mobile network on which the call is to be terminated and effectively 're-originate' the call using the SIM card of the mobile network on which the call is terminated. This means that when the call is terminated on that mobile network, it appears to the mobile

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\(^{12}\) "Wholesale mobile voice call termination markets - a proposal to modify the charge control conditions" at http://www.ofcom.org.uk/consult/condocs/wholesale/wholesale.pdf

\(^{13}\) A Subscriber Identity Module ("SIM") card is a ‘smart card’ which contains subscriber specific information. The main purpose of a SIM is to identify the subscriber to the mobile network (eg for tariff identification and billing purposes). Each SIM card has an International Mobile Subscriber Identity ("IMSI") number that is uniquely associated with it.
operator terminating the call that the calling party and the called party are on the same mobile network.

32. A call that originates and terminates on the same mobile network is referred to as an ‘on-net’ call. Each of Vodafone, O2, T-Mobile and Orange offers retail rates for on-net calls between customers on their networks that are lower than their retail rates for off-net calls, and at some times of day, lower than their wholesale termination rates.

33. Therefore, where a fixed-to-mobile call is delivered via a GSM gateway, the GSM gateway allows the GSM gateway operator to provide the capability to deliver an ‘off-net’ call, by purchasing an ‘on-net call’. As noted above, as a result of the comparatively high wholesale termination rate for off-net calls and the comparatively low prices charged for on-net calls, the commercial effect is that a lower price is paid to the mobile operator for terminating the call.

34. An example of how the delivery of a fixed-to-mobile call via a GSM gateway differs from the delivery of a fixed-to-mobile call over a fixed point of interconnection is set out in Figure 1 below.

35. It can be seen from Figure 1 that where a call is delivered through a GSM gateway, it will be routed wirelessly from the GSM gateway to the mobile operator’s network. Figure 1 sets out two illustrative examples of how a call may be delivered to a GSM gateway. The first (A) is when the caller has a direct connection with the GSM gateway, for example if the GSM gateway is connected to the caller’s PABX\(^{14}\). The second (B) is when a caller dials in to the GSM gateway over the PSTN, using specific codes that enable the call to be delivered to the GSM gateway by least cost routing products\(^{15}\) such as Indirect Access\(^ {16}\) ("IA") or Carrier Pre-Selection\(^ {17}\) ("CPS").

36. The key point to note from Figure 1 is that when the call is delivered to the mobile operator via the GSM gateway, it is not transferred to the mobile operator’s network via the fixed point of interconnection, and therefore does not incur a wholesale termination charge.

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\(^{14}\) A PABX (Private Automatic Branch Exchange) is a telephone switching system located at an end-users premises which connects calls within the end-user’s network.

\(^{15}\) Least cost routing refers to different products which route calls by the most optimal route from the communications provider originating the call to the point of interconnection with the communications provider terminating the call, and charge accordingly.

\(^{16}\) Indirect Access is a facility which allows a consumer to select which communications provider’s service is used by inputting a particular access code on each separate occasion on which a selection is made.

\(^{17}\) Carrier Pre-Selection is a facility which allows a consumer to opt for certain defined classes of calls (eg. local calls or national calls) to be carried by a communications provider selected in advance (and having a contract with its subscriber), without having to dial an access code or follow any other different procedure to invoke such routing.
B. Different types of use of GSM gateways

37. Various terms have been applied in the past to describe different types of use of GSM gateway equipment. These terms have not always been applied consistently and this inconsistent application may have created a certain amount of confusion as to the legal status of each type of use. For the purposes of this Decision, Ofcom has defined the following types of use of GSM gateways:

a) A “Self-Use GSM Gateway”. This refers to the situation where a single end user ‘uses’ GSM gateway equipment for its own purposes;

b) A “Commercial Single-User GSM Gateway”. This refers to the situation where a person other than the ultimate end-user ‘uses’ GSM gateway equipment to provide an electronic communications service by way of business to one single end-user, whether the GSM gateway equipment is located at the end-user’s premises or elsewhere; and

c) A “Commercial Multi-User GSM Gateway”. This refers to the situation where a person ‘uses’ GSM gateway equipment to provide an electronic communications service by way of business to multiple end-users.

For example, the terms ‘private’ GSM gateway use and ‘public’ GSM gateway use have been used in the past to distinguish between ‘lawful’ and ‘unlawful’ use. As discussed further below, there appears to have been confusion as to whether the use of a GSM gateway to provide an electronic communications service by way of business to one single end-user and located at that end-user’s premises was ‘private’ (lawful) or ‘public’ (unlawful) GSM gateway use.
C. The legal framework for the authorisation of the use of the radio spectrum

Ofcom’s role in respect of the management of the radio spectrum

38. The radio spectrum is a finite resource for which demand generally exceeds supply. This means that the use of frequencies needs careful planning in order to make the best use of the available spectrum while avoiding unacceptable interference to authorised radio users.

39. Prior to 29 December 2003, the Radiocommunications Agency (the “RA”), an executive agency of the Department of Trade and Industry, was responsible for managing the non-military radio spectrum in the UK. The RA’s functions have now been transferred to Ofcom.

40. Ofcom’s functions in respect of the management of the radio spectrum are distinct from its concurrent functions under the Act. In managing the radio spectrum, Ofcom is required to balance a number of duties, in particular those set out in sections 3, 4 and 154 of the Communications Act 2003.

Wireless Telegraphy Act 1949

41. The current regime for authorising the use of the radio spectrum in the UK is established principally by the Wireless Telegraphy Act 1949 (the “WTA”) and a series of regulations and orders made pursuant to the WTA.

42. Section 1(1) of the WTA makes it a criminal offence to establish or use any station for wireless telegraphy or install or use any apparatus for wireless telegraphy except under the authority of a licence granted by Ofcom or unless exempted from the requirement for a licence by regulation made by Ofcom.

43. Licences granted by Ofcom pursuant to section 1(1) of the WTA authorise the person or persons named in the licence to establish, install or use certain defined radio equipment within certain specified frequencies and subject to the conditions set out in the licence.

Wireless Telegraphy Exemption Regulations 2003

44. Section 1(1) of the WTA gives Ofcom the power to exempt the establishment or use of any station for wireless telegraphy or the installation or use of any apparatus for wireless telegraphy from the requirement to hold a licence. Such exemption may be either absolute or subject to specified terms, provisions or limitations.

45. The Wireless Telegraphy (Exemption) Regulations 2003 (the “Exemption Regulations”) were adopted pursuant to section 1(1) and section 3(1) (a) and (b) of the WTA.

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20 Prior to 29 December 2003, the power to issue licences and to grant exemptions from the requirement for a licence was exercised by the Secretary of State.

46. Regulation 4(1) of the Exemption Regulations exempts from the requirement for a licence the establishment, installation and use of “relevant apparatus”. This term is defined in Regulation 3(1) as “prescribed apparatus”, which is further defined in Schedules 3 to 9 of the Regulations.

47. Under Schedule 3 Part I of the Exemption Regulations “prescribed apparatus” is defined to mean a “user station”, which is described as follows:

“a mobile station for wireless telegraphy designed or adapted –

(a) to be connected by wireless telegraphy to one or more relevant networks; and
(b) to be used solely for the purpose of sending and receiving messages conveyed by a relevant network by means of wireless telegraphy.”

48. Regulation 4(2) imposes a condition on the use of certain “relevant apparatus”. It provides that, with the exception of apparatus operating in certain specified frequency bands, the exemption does not apply to relevant apparatus which is:

“established, installed or used to provide or to be capable of providing a wireless telegraphy link between electronic communications apparatus or an electronic communications network and other such apparatus or system, by means of which an electronic communications service is provided by way of business to another person”.

The Authorisation Directive

49. The Authorisation Directive\(^22\) is aimed at implementing an internal market in electronic communications networks and services through the harmonisation and simplification of authorisation rules and conditions, including the rules and conditions relating to the authorisation of the use of the radio spectrum. The Authorisation Directive entered into force on 24 April 2002. Member States were required to implement the Directive by 25 July 2003.

50. Further details about the relevant provisions of the Authorisation Directive and how those provisions have implemented in the UK are set out at paragraphs 135-143 below.

The RTTE Directive

51. The RTTE Directive\(^23\) sets out a harmonised regulatory framework regulating the placing on the market, free movement and putting into service in the European Community of radio equipment and telecommunications terminal equipment. The RTTE Directive entered into force on 7 April 1999. Member States were required to implement the Directive into domestic law by 8 April 2000.

52. Further details about the relevant provisions of the RTTE Directive and how these interrelate with the rules on the regulation of the use of the radio spectrum are set out at paragraphs 144-147 below.

D. The current legal status of the use of GSM gateways

53. The legality of Floe’s use of GSM gateways at the time it was disconnected by Vodafone is at the heart of this case. This section therefore discusses the legal position at that time (which remains the current legal position), taking into account previous statements made by the RA and representations received from various interested parties in response to a statement for comment published by Ofcom in relation to this issue.

54. In summary, Ofcom has concluded that the current legal position is as follows:

- the use of Self-Use GSM Gateways is exempted from the requirement for a licence and is therefore lawful; and
- the use of Commercial Single-User GSM Gateways and Commercial Multi-User GSM Gateways is prohibited unless authorised by a licence and, on the basis that no licence has been granted covering the use of GSM gateways, is unlawful.

55. As explained further at paragraphs 172-175 below, independently of this Decision, Ofcom has issued two separate consultation documents concerning possible policy options for the future regulation of the use of GSM gateways and mobile call termination respectively.

(i) Statements made by the Radiocommunications Agency

56. In the past, there has been a certain degree of ambiguity as to the proper legal status of the use of GSM gateways. This ambiguity may have arisen from various public statements made by the RA. The RA’s statements, published between August 2002 and August 2003, focused on two issues:

- whether the definition of “User Station” in the Exemption Regulations covered GSM gateways (i.e. whether the use of GSM gateways was covered by the Exemption Regulations at all); and
- the effect of the restriction in Regulation 4(2) of the Exemption Regulations.

The RA’s statements also raised the possibility that it might be possible for the mobile network operators to ‘authorise’ the use of GSM gateways under the auspices of their licences issued under the WTA, although the RA never pronounced on whether any individual GSM gateways operators had in fact been authorised by any of the mobile network operators.

The RA’s statement of August 2002

57. On 23 August 2002 the RA published a statement on its website, “GSM Gateways – RA position on legality” (the “August 2002 statement’). This statement noted that “the RA is aware of devices being marketed in the UK which enable fixed telephone networks to connect via a mobile phone link directly to mobile networks; these devices are commonly referred to as ‘GSM Gateways’.

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24 See footnote 10.
58. Concerning the issue of whether GSM gateways fell within the definition of "user station" for the purposes of the Exemption Regulations, the RA stated that: "Under the current Wireless Telegraphy (Exemption) Regulations 1999 (1999/930) hereafter referred to as “the Regulations”, mobile GSM User Stations are exempt from the need for individual licensing under the Wireless Telegraphy Act 1949. The regulations do not extend to User Stations that are fixed. Companies installing and/or using this type of equipment should be aware that GSM Gateway equipment is therefore not covered by the Regulations as the equipment is fixed and does not comply with the definition of a mobile station.”

59. The August 2002 statement also stated the RA’s view that “Regulation 4(2) of the Regulations provides that the exemption from licensing with respect to “relevant apparatus” does not apply to equipment where a telecommunications service is provided by way of business to another person. GSM Gateway equipment used to provide a public telecommunications service via a connection to a public network will be captured by Regulation 4(2) and is therefore again not covered by the Regulations”.

60. The August 2002 statement further stated that “[u]nder the Wireless Telegraphy Act 1949 wireless telegraphy apparatus that is not specifically exempted from licensing is required to be licensed, otherwise use of such apparatus is illegal. Anyone installing or operating GSM Gateway equipment without an individual licence will be in contravention of the Wireless Telegraphy Act 1949 and enforcement action may be taken. This can involve seizure of the equipment and prosecution”.

The RA’s statement of October 2002

61. In October 2002 the RA, citing “a need to seek the views and requirements of operators, manufacturers and other interested parties in order to find a sensible and proportionate way forward as soon as possible,” announced that it would be consulting on the issue of GSM gateways. The RA noted that “[o]ne reason for this [need to consult] is that the intensive ‘public’ use of Gateways and fixed "mobile" applications could affect the engineering stability of licensed networks in a particular area. It is not therefore a foregone conclusion that we can simply legitimise them, hence the need for a measured, pragmatic approach”.

The RA’s consultation of November 2002

62. In November 2002 the RA published a consultation document which considered whether it was appropriate to amend the legal status of the use of GSM gateways. Paragraph 5.1 of this consultation confirmed that:

“there are two issues concerning the installation and operation of fixed stations, GSM gateways and other fixed mobile applications under the Exemption Regulations:

(i) fixed stations, fixed mobile terminals and GSM gateways are not

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26 "GSM Gateways" at [http://www.ofcom.org.uk/static/archive/ra/topics/pmc/document/gsmgateway.htm](http://www.ofcom.org.uk/static/archive/ra/topics/pmc/document/gsmgateway.htm)

covered by the definition of ‘user station’ in the existing Exemption Regulations; and

(ii) under Regulation 4(2) of the existing Exemption Regulations, user stations may not be used to provide a telecommunications service ‘by way of business’, i.e. commercially”

63. In the light of these issues, the RA’s consultation set out the following two proposals:

• Proposal 1 - that the definition of user station be amended to cover any customer of the network, irrespective of its fixed or mobile status; and

• Proposal 2 - that the restriction on the provision of commercial services via user stations shall be withdrawn.

The Government’s announcement of 18 July 2003

64. On 18 July 2003 the results of the RA’s consultation were published on its website, in the form of a Government announcement. This announcement confirmed that the RA’s first proposal would be implemented, but that the RA’s second proposal would not.

Proposal 1

65. In respect of its first proposal, the announcement concluded that the definition of ‘user station’ was “ambiguous” and would be amended to cover any customer of the network, irrespective of its fixed or mobile status.

66. The announcement stated that “This supports the majority of responses to the first proposal and enables the use of Gateway devices by private users”.

Proposal 2

67. In respect of its second proposal, the announcement concluded that the restriction on the provision of commercial services via user stations (including GSM gateways) would not be withdrawn, stating that:

“the general restriction of provision of services to third parties over exempt devices, except where otherwise specifically provided for in the Regulations, will be retained”.

68. The announcement elaborated on the reasons for this, stating that:

“Many responses from small businesses also supported the second proposal, to remove the restriction in Regulation 4(2) on the carriage of third party traffic over exempt devices. However, the benefits of this are mitigated by the fact that the operators’ ability to comply with their Regulatory requirements with regard to emergency calls and security concerns are impaired and that the resulting use of spectrum is very inefficient. After considerable discussion with manufacturers and users of Gateway equipment and considering technical

“and other information supplied by them, the Government concludes that the restriction must be retained”.

69. However, the announcement also noted that Government was keen for the mobile operators and GSM gateway operators to engage on the issue of GSM gateway use, stating that:

“mobile operators licensed under the Wireless Telegraphy Act 1949 can use their own (or third party) equipment in accordance with their licences in order to provide a telecommunications service. In some circumstances MNO’s may be able to consider purchasing products or services from Gateway Operators for use under the auspices of MNO licences. Although a commercial matter for the companies concerned, the Government encourages the MNOs and Gateway Operators to consider ways to address pragmatically existing uses of equipment that continue not to meet the requirement for exemption”

The RA’s statement of August 2003

70. In this statement the RA again confirmed its acceptance of its first proposal, stating that:

“The current definition of "User Station" in schedule 3 of the Wireless Telegraphy (Exemption) Regulations 2003/74 (the Regulations) has been extended to cover any customer of the network, irrespective of its fixed or mobile status. The Regulations will be amended when they are next revised. This will legitimise a number of private use applications that developed outside the existing regulatory framework.

71. The RA also set out certain additional views on the commercial operation of GSM gateways:

“Commercial use of the GSM spectrum is authorised only by the Wireless Telegraphy Act licences of the Mobile Network Operators (MNOs). Subject to the MNOs being able to fulfil all the legal and regulatory requirements of their licences, authorisations and related legislation (i.e. Regulatory Investigatory Powers Act 2000), it is conceivable that MNOs may be able to agree commercial ventures with other companies where traffic and connection to a relevant network would be authorised under the auspices of their WT Act licences. As the planning and control of the equipment, spectrum and network needs to be tightly controlled by the relevant licensee, GSM Gateway companies offering third party commercial services must approach the MNOs to discuss whether their operation can be regularised and accommodated. Operation without the authority and permission of a licensee is unlicensed use and will be illegal.”

72. The RA again set out that mobile operators and GSM gateway operators were encouraged to enter into dialogue on the subject of commercial GSM gateway use, stating that:

“Whilst the general restriction of provision of commercial services to third parties over exempt devices (except where otherwise specifically provided for in the Regulations) is maintained, the Government is eager for the MNO’s and

(ii) Ofcom’s statement for comment of 3 March 2005

73. In the light of the ambiguity that may have been created by the RA’s public statements outlined above, and following the Tribunal’s Judgment, Ofcom considered that it was important to clarify understanding of the legal status of the use of GSM gateways.

74. On 3 March 2005 Ofcom published a statement for comment. The statement included a discussion of:

- the application of Regulations 4(1) and 4(2) of the Exemption Regulations to the use of GSM gateways; and
- the scope of the mobile network operators’ second generation cellular licences issued under section 1(1) of the WTA and, specifically, whether they cover the use of GSM gateways30.

75. As suggested by the Tribunal in its Judgment, the statement sought views on the matters discussed from a wide range of interested parties31. Ofcom received 17 responses to the statement from interested parties, including GSM gateway operators, GSM gateway equipment manufacturers and suppliers, fixed network operators, the five UK mobile network operators and certain Government departments/agencies. Insofar as relevant, Ofcom has taken into account these responses in drafting this Decision.

Regulation 4(1) of the Exemption Regulations

76. Ofcom explained in the statement for comment that, in principle, GSM gateways are covered by Regulation 4(1) of the Exemption Regulations, i.e. subject to Regulation 4(2) of the Exemption Regulations, their use is exempt from the requirement for a licence under section 1(1) of the WTA.

77. In contrast to the view at one time expressed by the RA, Ofcom considers that GSM gateways fall within the definition of “user station” in Schedule 3 Part I of the Exemption Regulations.

78. Ofcom notes that the use of the word “mobile” in the definition of “user station” has in the past created uncertainty as to the proper scope of Regulation 4(1) of the Exemption Regulations, as a GSM gateway is generally operated from a ‘fixed’ location (i.e. it is stationary, rather than moving).

79. Ofcom considers that a GSM gateway is a “mobile station” for the purposes of the Exemption Regulations, in the same way that a mobile phone is a “mobile station” for these purposes. Although in practice a GSM gateway may generally be operated from a given location (as opposed to a mobile handset that may easily be carried from place to place), a mobile station is not required to be moving at the time it transmits or receives a call in order to fall within the

30 The scope of the mobile operators’ 2G cellular licences issued under section 1(1) of the Wireless Telegraphy Act 1949 and the legal status of the use of GSM gateways” at http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_805/gsmg/gsmg.pdf
31 Paragraph 283 of the Tribunal’s Judgment.
definition of “user station” in Schedule 3 Part I of the Exemption Regulations. The determining factor is that a mobile station has the capability of mobility and communicates via radio with a mobile operator’s network.

80. Ofcom notes that this interpretation of what constitutes a mobile station is consistent with the terminology used in the GSM standards by the European Telecommunications Standards Institute (“ETSI”), which pre-dates the Exemption Regulations and is commonly used and understood throughout the industry. Ofcom considers that the Exemption Regulations should be read in that light. A more detailed discussion of the terminology used in the GSM standards published by ETSI is set out below in relation to the scope of the mobile operators’ 2G cellular licences.

Responses to the statement for comment

81. None of the respondents to Ofcom’s statement for comment stated that they disagreed with Ofcom that GSM gateways fall within the definition of “user station”. Several of the respondents expressly stated that they agreed with Ofcom.

Ofcom’s conclusions

82. Having considered the responses to its statement for comment, Ofcom remains of the view that GSM gateways fall within the definition of “user station” in Schedule 3 Part I of the Exemption Regulations and are therefore covered by Regulation 4(1) of the Exemption Regulations, i.e. subject to Regulation 4(2) of the Exemption Regulations, their use is exempt from the requirement to be licensed under section 1(1) of the WTA.

Regulation 4(2) of the Exemption Regulations

83. Although, in principle, the use of GSM gateways does benefit from exemption from the requirement for a licence, as noted above, this exemption is subject to the terms of Regulation 4(2) of the Exemption Regulations.

84. Pursuant to Regulation 4(2), if GSM gateway equipment is “established, installed or used to provide or be capable of providing a wireless telegraphy link between electronic communications apparatus or an electronic communications network and other such apparatus or system, by means of which an electronic communications service is provided by way of business to another person”, it will fall outside the scope of the exemption.

85. In the past, the wording of Regulation 4(2) has been relied upon to make a distinction between so-called ‘public’ GSM gateways and ‘private’ GSM gateways. These terms are not used in the Exemption Regulations. The term ‘public’ GSM gateway has been used to refer to GSM gateways which fall within Regulation 4(2), i.e. by means of which an electronic communications service is provided by way of business to another person. The term ‘private’ GSM gateway, on the other hand, has been used to refer to GSM gateways which are not caught by Regulation 4(2) and which are therefore exempt from the requirement for a licence under section 1(1) of the WTA.

86. Ofcom recognises that the use of this terminology has led to a certain degree of confusion as to the types of use of GSM gateways that are permissible under the Exemption Regulations. In particular, Ofcom notes that there appears to
have been a misapprehension that Regulation 4(2) only restricted the use of
GSM gateways to provide services to multiple customers or customers’
premises, or to GSM gateways located away from a particular customer’s
premises.32

87. In this respect, Ofcom notes the Tribunal’s finding at paragraph 236 of its
Judgment:

“Whether Floe’s business concerned the provision of a telecommunications
service by means of GSM gateways each of which were dedicated to the
exclusive use of a single corporate customer of Floe at that customer’s
premises or whether the GSM gateways were used by multiple customers,
Floe’s use of GSM gateways in either case involved the provision of a
telecommunications service by way of business to another person. In either
case Floe’s use of GSM gateways would be within regulation 4(2) of the
Exemption Regulations and so would not be exempt from licensing under
section 1(1) of the WTA 1949.”

88. As confirmed by the Tribunal, for the purposes of Regulation 4(2), it is irrelevant
whether a GSM gateway is being used to provide electronic communications
services to a single customer or to more than one customer, or whether the
GSM gateway equipment is located at a particular customer’s premises or
elsewhere. The key factors in establishing whether the use of a GSM gateway
is covered by Regulation 4(2) are who is ‘using’ the GSM gateway equipment
(i.e. the ultimate end-user or another person) and whether the GSM gateway
equipment is being used to provide an electronic communications service by
way of business to another person.

89. Concerning the three types of use of GSM gateways set out in paragraph 37,
Ofcom concluded in its statement for comment that:

(a) Self-Use GSM Gateways are outwith the scope of Regulation 4(2) and
their use is therefore exempted from the requirement for a licence;

(b) Commercial Single-User GSM Gateways are covered by Regulation 4(2)
and their use is therefore prohibited unless authorised pursuant to a
licence; and

(c) Commercial Multi-User GSM Gateways are covered by Regulation 4(2)
and their use is therefore prohibited unless authorised pursuant to a
licence.

Responses to Ofcom’s statement for comment

90. In response to Ofcom’s statement for comment, Vodafone and T-Mobile (UK)
Limited ("T-Mobile") both submitted that Ofcom’s interpretation of Regulation
4(2) of the Exemption Regulations was too broad. In their view, Regulation 4(2)
does not prevent a mobile network operator from ‘using’ GSM gateway
equipment to provide an electronic communications service by way of business
to one of its subscribers. They argued that the words “to another person” in
Regulation 4(2) of the Exemption Regulations must be interpreted to mean ‘to a
person other than the subscriber’. In support of this interpretation, they referred

32 See paragraphs 226-229 below, which explains Vodafone’s understanding of the legality of
the use of GSM gateways at the time it entered into an agreement with Floe.
to the following statement made by the Tribunal at paragraph 144 of the Judgment:

“…We also accept the submission of Vodafone and OFCOM that mobile handset users do not fall within the scope of Regulation 4(2) because the requirement that the commercial service be provided “to another person” properly construed means that the service is provided to a person other than the subscriber.” (emphasis added)

91. In Ofcom’s view, Vodafone’s and T-Mobile’s interpretation is incorrect. The use of the words “to another person” in Regulation 4(2) refer to a person other than the person using the equipment. There is nothing in the words of Regulation 4(2) to indicate that such person cannot be the subscriber. Ofcom notes that the Tribunal’s statement cited above was proceeded by the following statement:

“…In the case of a mobile handset, the mobile handset subscriber does not, at least ordinarily, use the handset to provide a link between two pieces of apparatus or systems by means of which a telecommunications service is provided by way of business to another person.”

92. It is clear from this statement that the Tribunal’s comments were concerned specifically with the use of mobile phones. In the case of a mobile phone, as the Tribunal points out, it is ordinarily the end-user that is ‘using’ the mobile phone and the end-user does not ordinarily use the mobile phone as a wireless telegraphy link by means of which it provides an electronic communications service by way of business to another person. It is for this reason that the use of mobile phones is not covered by Regulation 4(2). In contrast, as regards GSM gateway equipment, it may well not be the end-user that is ‘using’ the equipment.

93. In its response to Ofcom’s statement for comment, Floe stated that Ofcom’s interpretation of Regulation 4(2) would mean that the business of mobile virtual network operators33 (“MVNOs”) would be illegal, on the basis (as far as Ofcom understands) that an MVNO could be said to be ‘using’ mobile handsets to provide a service to its customers. Ofcom disagrees with Floe’s analogy. As noted above, it is ordinarily the end-user that ‘uses’ a mobile handset, not the person who is supplying the end-user with airtime.

Ofcom’s conclusions

94. Having considered the responses to its statement for comment, Ofcom remains of the view that the use of Self-Use GSM Gateways is outwith the scope of Regulation 4(2) of the Exemption Regulations and is therefore exempted from the requirement for a licence under section 1(1) of the WTA. However, the use of Commercial Single-User and Multi-User GSM Gateways is covered by Regulation 4(2) of the Exemption Regulations and is therefore prohibited unless authorised pursuant to a licence under section 1(1) of the WTA.

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33 A Mobile Virtual Network Operator (“MVNO”) is an organisation which provides mobile telephony services to its customers, but does not have allocation of spectrum.
Whether or not the mobile operators’ licences enable them to authorise the use of GSM gateways

95. As noted at paragraph 7 above, when the Director made his decision in relation to the Floe complaint, he considered that it might be possible for Vodafone to authorise Floe’s use of GSM gateways under the auspices of Vodafone’s licence issued under section 1(1) of the WTA. The RA also made certain public statements that could be interpreted as being to this effect between 2002 and 2003.

96. If Floe’s use of GSM gateways had been authorised under Vodafone’s licence, it would have been lawful (Floe would not have required a separate licence in respect of its use of GSM gateways, nor would it have mattered whether Floe’s use of GSM gateways was exempted from the requirement for a licence under the Exemption Regulations).

97. Ofcom subsequently took the view that the Director’s understanding and the view expressed in the RA’s public statements was incorrect. Ofcom argued before the Tribunal that Vodafone’s licence did not cover the use of GSM gateways, whether by Vodafone or any other person.

98. In its Judgment, the Tribunal did not reach a conclusion on the correct interpretation of Vodafone’s licence. However, it stated that Ofcom should reconsider whether its interpretation was the correct one. The Tribunal stated that:

“In reconsidering the matter OFCOM will need to consider whether its new understanding of the scope of Vodafone’s licence, as submitted to us, is the correct construction having regard to the relevant materials, including those to which we have referred above, having made its position clear to the parties in writing and taking into account any submissions that it may receive.”

99. As noted above, Ofcom published a statement for comment on 3 March 2005, which addressed, among other things, the scope of the mobile network operators’ 2G cellular licences.

100. Insofar as relevant, the terms of Vodafone’s second generation (“2G”) cellular licence are identical to the licences issued to the other UK mobile network operators in respect of their 2G cellular networks.

101. Condition 1 of the mobile network operators’ 2G cellular licences states that the licence authorises the relevant licensee “to establish, install and use the radio transmitting and receiving stations and/or radio apparatus as described in the schedule to the licence (the “Radio Equipment”).

102. Paragraphs 1 and 2 of Schedule 1 of those licences set out a description of what constitutes Radio Equipment and the purposes of such equipment:

“1. Description of Radio Equipment Licensed

In this Licence, the Radio Equipment means the base transceiver station or repeater stations forming part of the Network (as defined in paragraph 2 below).
2. Purpose of the Radio Equipment

The Radio Equipment shall form part of a radio telecommunications network (the "Network") in which approved user stations communicate by radio with the Radio Equipment to provide a telecommunications service for customers".

103. GSM gateways do not constitute Radio Equipment as defined above. They are not “base transceiver stations” or “repeater stations” as set out in paragraph 1 of Schedule 1 to the 2G cellular licences. The reasons for this view were set out in detail in Ofcom’s statement for comment and are repeated below.

The GSM system

104. A mobile operator’s 2G radio telecommunications network is designed around the Global System for Mobile Communications (‘GSM’).

105. The European Conference of Postal and Telecommunications Administrations ("CEPT") originally began the GSM standardisation process. In 1988, CEPT created the ETSI, to which all its telecommunications standardisation activities were transferred\(^\text{34}\). The first GSM standards (phase 1 GSM900 specifications) were published in 1990.

106. ETSI has specified the architecture of the GSM System in a series of reference documents, and the definitions used in this section are derived from these ETSI reference documents. An overview of the standards used in the GSM System can be found in the ETSI GSM technical specification 03.02\(^\text{35}\).

107. Standardisation by ETSI means that the key elements of the GSM System, and the interfaces\(^\text{36}\) between them, are well defined and commonly understood. This ensures interoperability between equipment manufactured by different vendors and ensures mobile network operators are able to mix and match equipment from different vendors within their network with minimal operational overhead.

108. Two key elements of the GSM System are the Base Station System ("BSS") and the Mobile Station ("MS"). These key elements, and the interfaces between them, are summarised in Figure 2 below:

\(^{34}\) ETSI describes itself as “an independent, non-profit organization, whose mission is to produce telecommunications standards for today and for the future”\(^\text{34}\). ETSI is currently comprised of 688 members from 55 countries.

\(^{35}\) ETSI document ETS 300 522 – Digital cellular telecommunications system (Phase 2+); Network architecture. This document and ETSI’s other reference documents relating to the GSM System are available free of charge on ETSI’s website.

\(^{36}\) An interface is a set of technical characteristics describing the point of connection between electronic communications entities – for example, between two electronic communications networks or between an electronic communications network and customer apparatus.
Figure 2: The Base Station System and the Mobile Station

The Base Station System

109. The Base Station System is the system of base station equipment responsible for communicating with Mobile Stations in a certain area. The Base Station System is subdivided into one or more Base Transceiver Stations ("BTS") and one Base Station Controller ("BSC").

110. A Base Transceiver Station, which is referred to in the definition of Radio Equipment set out in paragraph 1 of Schedule 1 of the mobile operators’ 2G cellular licences, provides GSM radio coverage within a cell (i.e. a particular geographic area of the mobile network). It comprises radio transmitting and receiving equipment.

111. The role of the Base Station Controller is to manage the radio resources supported by a number of Base Transceiver Stations. Part of this role is to coordinate the handover of calls in progress between different Base Transceiver Stations as the mobile user moves between cells.

112. A repeater station, which is also referred to in the definition of Radio Equipment set out in paragraph 1 of Schedule 1 of the mobile operators’ 2G cellular licences, is a device that receives a radio signal, amplifies it and retransmits it. Repeater stations are used in radio telecommunications networks to extend the range of Base Transceiver Station signals or to deal with areas that present certain difficulties (for example, they would be used where there is hilly terrain between Base Transceiver Stations). A repeater station receives the radio signal, amplifies it and re-transmits it without decoding or otherwise processing the information within it.
The Mobile Station

113. The Mobile Station ("MS") is the ETSI standardised term which is used to describe the physical equipment (normally a mobile phone) used by a subscriber to access the mobile operator's network. In practice, the Mobile Station is comprised of the Mobile Equipment ("ME") and a Subscriber Identity Module ("SIM").

The “Um” and “Abis” GSM interfaces

114. The radio transmitting and receiving equipment used by the Mobile Station and the Base Transceiver Station operate on different frequencies. As set out in Figure 2 above the Um interface ("Um") defines the respective roles of the Base Transceiver Station and the Mobile Station, and specifies the interfaces between them. The Um interface is described in detail in the 04- and 05- series of GSM Technical Specifications, the 05- series focussing on the physical layer radio interface.

115. Therefore the Mobile Station, the Base Transceiver Station and the Base Station Controller are distinct components of the GSM System. The Um interface is the standardised interface between the Mobile Station and the Base Transceiver Station, which enables the Mobile Station to communicate with the Base Transceiver Station. The Abis-interface ("Abis") is the standardised interface between the Base Station Controller and the Base Transceiver Station, which allows the Base Transceiver Station to communicate with the Base Station Controller.

A GSM gateway is a Mobile Station

116. As has been set out, GSM is a highly specified system in which the roles of the Mobile Station and Base Transceiver Stations, and the interfaces between them, are clearly distinct and have been standardised by ETSI.

117. A Mobile Station is defined in terms of the radio frequencies at which it transmits and receives, and the signalling interfaces used to control those transmissions. In both respects, a GSM gateway complies with the definition of a Mobile Station. If it did not, it would not function. In this context, a GSM gateway is a Mobile Station (in the same way that a mobile phone is a Mobile Station). A Mobile Station communicates via radio over the Um interface with Base Transceiver Stations and/or Repeater Stations.

118. A GSM gateway is not a Base Transceiver Station because it does not comply with the ETSI Base Transceiver Station standard, and therefore the universally accepted technical definition of a Base Transceiver Station. It does not comply with this definition in two key respects. Firstly, a Base Transceiver Station is required to transmit and receive at specific radio frequencies, and a GSM gateway does not do so. Secondly, a Base Transceiver Station is required to communicate with other parts of the network using specific signalling interfaces, and a GSM gateway does not do so.

119. Therefore, GSM gateways do not constitute Radio Equipment for the purposes of the 2G cellular licences because GSM gateways are not “Base Transceiver Stations” or “Repeater Stations” as set out at paragraph 1 of Schedule 1 of the 2G cellular licences. It follows, therefore, that the 2G cellular licences do not
cover the use of GSM gateways, whether by the mobile network operators themselves or anyone else.

Responses to Ofcom’s statement for comment

120. In its response to Ofcom’s statement for comment, Floe submitted that Ofcom and the Courts are not constrained to have to interpret the scope of the mobile network operators’ 2G cellular licences in accordance with the ETSI GSM standards. Floe noted that there was no cross-reference between the definitions used in the 2G cellular licences and the GSM standards. In Floe’s view, base transceiver stations may be defined in a particular way by the GSM standards, but that definition must be expressly incorporated into the 2G cellular licences in order to have effect there.

121. Floe also submitted that Ofcom was bound to interpret the mobile operators’ 2G cellular licences in accordance with the previous statements by the RA and Oftel to the effect that it was possible for the mobile network operators to authorise the use of GSM gateways under the auspices of their licences. According to Floe, by virtue of those statements, Floe had a legitimate expectation that the mobile operators’ 2G cellular licences should be interpreted so as to permit the authorisation by the mobile network operators of the use of GSM gateways.

122. Gamma Telecom, in response to the statement for comment, also stated that the previous statements made by the RA about the scope of the 2G cellular licences had created a legitimate expectation that the mobile network operators could authorise the use of GSM gateways under their licences.

123. Ofcom notes that the paragraph 3 of Schedule 1 of the mobile network operators’ 2G cellular licences states that “The Radio Equipment covered by this Licence shall be subject to and comply with the appropriate Interface Regulation (IR 2014 – First and Second Generation Public Cellular Radiotelephone Services)”. This Interface Requirement[37] sets out certain technical requirements relating to equipment used in providing 2G mobile networks and expressly cross-refers to the relevant ETSI standards. Therefore, Floe is incorrect to say that the mobile network operators’ 2G cellular licences do not cross-refer to the ETSI standards.

124. In any event, Ofcom considers that, even if there were not a cross-reference in the licence with the relevant ETSI standards, it would still be necessary to interpret the terms of the licence so as to be consistent with the terminology used in the ETSI standards. The ETSI standards are precisely that – standards – which define how the GSM System operates. If the operation of mobile network operators’ 2G cellular networks was not consistent with the ETSI standards, the networks would not function. Thus, it is difficult to see how GSM gateways could operate in the manner in which they do and yet still be considered to be base transceiver stations and/or repeater stations for the purposes of the mobile operators’ licences. As explained above, within the GSM System, GSM gateways fulfil the same role as mobile phones, not base transceiver stations and/or repeater stations.

125. So far as Floe’s argument on legitimate expectation is concerned, Ofcom does not accept that previous statements made by the RA and Oftel have created a

legitimate expectation that the mobile operators’ licences should be construed in such a way as to confer an entitlement to authorise the use of GSM gateways. Those statements, which are considered to be incorrect, do not constitute clear, unequivocal representations devoid of any relevant qualification, as would be required to create any legitimate expectation.\textsuperscript{38} In any event, such statements are not capable of giving rise to any private law rights as between Floe and Vodafone, nor are they capable of altering the true construction of the mobile operators’ licences.

Moreover, in the context of this case, it is clear that those statements were not relied upon in any material way so as to be otherwise capable of giving rise to any kind of estoppel. The statements post-dated the Agreement and therefore cannot have been relied upon by either party in entering into the Agreement\textsuperscript{39}. In addition, Vodafone has confirmed that at no point has it formed the view that it could legitimately authorise the use by Floe of GSM gateways\textsuperscript{40}, nor does it appear to Ofcom on the evidence provided that Vodafone has ever indicated to Floe that it could do so, even after the RA’s statements had been made, and Vodafone became aware thereof.

**Ofcom’s conclusions**

Having considered the responses to its statement for comment, Ofcom remains of the view that the mobile network operators’ 2G cellular licences do not cover the use of GSM gateways, whether by the mobile network operators themselves or by anyone else. Accordingly, Vodafone was incapable of granting authorisation to Floe to use GSM gateways under its licence.

**Whether Ofcom could licence the use of GSM gateways**

As noted above, a key feature of the GSM system is that the role of “mobile stations” (such as GSM gateways) and “base transceiver station” and the frequencies on which each type of station operates are distinct. GSM gateways transmit signals on one set of frequencies (which is the same set of frequencies on which the relevant mobile operator’s base transceiver stations receive signals) and receive signals on another related set of frequencies (which is the same set of frequencies on which the relevant mobile operator’s base transceiver stations transmit signals).

The Tribunal suggested in its Judgment that the logic of Ofcom’s argument about the different frequencies on which base transceiver stations and mobile stations transmit and receive suggested that it might be possible to grant separate licences to different undertakings in respect of the same frequencies depending upon whether the apparatus used by the undertaking is transmitting or receiving on those frequencies\textsuperscript{41}. The Tribunal noted that such a view appeared to be contrary to previous statements made by the RA, which indicated that the commercial use of the ‘GSM spectrum’ had been awarded.

\textsuperscript{38} *R v Inland Revenue Commissioners ex parte MFK Underwriting* [1990] 1 WLR 1115 at 1569g

\textsuperscript{39} The Agreement between Floe and Vodafone was entered into on 12 August 2002. The circumstances surrounding the conclusion of the Agreement are discussed further at paragraphs 222-229 below.

\textsuperscript{40} Vodafone’s response of 14 April 2005 in response to question 17 of Ofcom’s information request of 24 March 2005.

\textsuperscript{41} Paragraphs 268 and 269.
exclusively to the mobile network operators and so could not be licensed to other commercial users.

130. Ofcom does not consider that the mobile network operators have been granted exclusive ‘commercial’ use of the radio frequencies in question. Although it is not intended to issue any further 2G cellular licences of the type held by the mobile network operators\(^42\), in Ofcom’s view, it is feasible that Ofcom could in the future grant licences, which covered particular types of use of GSM gateways prohibited under the Exemption Regulations. Such licences would authorise the licensee to use GSM gateways on specific frequencies, which would be the opposite frequencies to those on which the relevant mobile operator’s base transceiver stations transmit and receive signals.

131. As explained further below, in parallel to the publication of this Decision, Ofcom has published a separate consultation document concerning the future regulation of the use of GSM gateways under the WTA. One of the options discussed in that consultation document is to issue individual licences authorising the use of Commercial Multi-User GSM Gateways on a case by case basis.

E. The compatibility of the current UK legal position with EC law

132. In its Judgment, the Tribunal raised various concerns as to whether the restriction on the use of GSM gateways was compatible with the Authorisation Directive and the RTTE Directive. The Tribunal did not reach any conclusions on these issues. However, it stated that Ofcom would need to consider in its re-investigation whether the legal position was compatible with the RTTE Directive and the Authorisation Directive.

133. In the statement for comment of 3 March 2005 Ofcom requested views from industry on a number of issues that are relevant to the compatibility of the current legal position with EC law. These views have been taken into account by Ofcom in making this Decision.

134. As explained further below, Floe’s responses to questions put to it by Ofcom during the course of Ofcom’s re-investigation have demonstrated that, at the time its services were suspended by Vodafone, Floe was using GSM gateways to provide electronic communications services by way of business to multiple end-users (i.e. Commercial Multi-User GSM Gateways). Floe's responses have demonstrated that none of its GSM gateways was dedicated to the exclusive use of a single end-user (i.e. Commercial Single-User GSM Gateways). For the purposes of this Decision, Ofcom has therefore limited its analysis of the compatibility of the current legal position with EC law to the restriction on Commercial Multi-User GSM Gateways.

The Authorisation Directive

135. As explained above, the Authorisation Directive is aimed at implementing an internal market in electronic communications networks and services through

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\(^{42}\) This is set out at paragraph 1(g) of Schedule 4 of the Wireless Telegraphy (Limitation of Number of Licences) Order 2003 (SI 2003/1902).
the harmonisation and simplification of authorisation rules and conditions in order to facilitate their provision throughout the Community.

136. Recital 7 of the Authorisation Directive states that “the least onerous authorisation system possible should be used to allow the provision of electronic communications networks and services…”

137. This approach is reflected in Article 3(2) of the Authorisation Directive, which sets out a general rule that the provision of electronic communications networks and services may, subject to certain exceptions, only be subject to a general authorisation, i.e. an undertaking wishing to provide an electronic communications network or service should not be required to obtain an explicit decision or other administrative act, such as the issuing of a licence, by a national regulatory authority before exercising the rights stemming from the authorisation.

138. However, where radio frequencies are used to provide electronic communications networks and services, it may not be appropriate to make the use of such radio frequencies subject to a general authorisation. This may be the case, for example, where there is a risk of harmful interference associated with unrestricted use of the radio spectrum. For this reason, Article 5 of the Authorisation Directive qualifies the general rule established by Article 3(2). Article 5(1) states that, “where possible, in particular where the risk of harmful interference is negligible”, the use of radio frequencies should be made subject to a general authorisation, rather than to the grant of individual rights of use. In other words, a Member State may make the use of the radio spectrum subject to individual rights of use, in particular where such use of the radio spectrum creates a more than negligible risk of harmful interference.

139. In the UK, Article 3(2) of the Authorisation Directive has been implemented by abolishing the previous licensing regime for telecommunications systems established under the Telecommunications Act 1984 and introducing a new general authorisation regime for electronic communications networks and services established under the Communications Act 2003 (the “2003 Act”).

140. Concerning the use of radio frequencies for the provision of electronic communications networks or services, the UK has chosen to maintain in force the licensing regime established under section 1 of the WTA. Where Ofcom (or previously the Secretary of State) has not granted an exemption from the requirement for a licence under section 1(1) of the WTA, the authorisation to use radio frequencies therefore remains subject to individual rights of use, rather than a general authorisation. However, where an exemption is adopted, such as the Exemption Regulations, this constitutes part of the general authorisation for the purposes of Article 5(1) of the Authorisation Directive. Any terms, provisions or limitations on the scope of the exemption constitute conditions attached to the general authorisation pursuant to Article 6(1) of the Authorisation Directive. In order to ensure compliance with Article 5(1) of the Authorisation Directive and to ensure that the UK authorisation regime remains “the least onerous authorisation system possible” (in accordance with Recital 7 of the Authorisation Directive), section 1AA has been inserted in the WTA, which requires Ofcom to exempt from the individual licensing regime the establishment, installation and use of radio equipment that is not likely to involve any undue interference.
141. Article 6(1) and Part A of the Annex to the Authorisation Directive set out the types of conditions which may be attached to the general authorisation. Such conditions must be objectively justified in relation to the network or service concerned, non-discriminatory, proportionate and transparent.

142. Article 6(3) of the Authorisation Directive states that the general authorisation shall not duplicate conditions which are applicable to undertakings by virtue of other national legislation.

143. Paragraph 17 of Part A of the Annex includes as one of the types of conditions that may be attached to a general authorisation: “Conditions for the use of radio frequencies, in conformity with Article 7(2) of Directive 1999/5/EC [the RTTE Directive], where such use is not made subject to the granting of individual rights of use in accordance with Article 5(1) of this Directive”.

The RTTE Directive

144. As set out above, the RTTE Directive sets out a harmonised regulatory framework regulating the placing on the market, free movement and putting into service in the European Community of radio equipment and telecommunications terminal equipment.


146. Article 7 of the RTTE Directive governs the putting into service of equipment.

147. Article 7(2) states that “without prejudice to conditions attached to authorisations for the provision of the service concerned in conformity with Community Law, Member States may restrict the putting into service of radio equipment only for reasons related to the effective and appropriate use of the radio spectrum, avoidance of harmful interference or matters relating to public health”.

The restriction on Commercial Multi-User GSM Gateways is compatible with the Authorisation Directive and the RTTE Directive

148. Ofcom considers that Regulation 4(2) of the Exemption Regulations, insofar as it applies to restrict the use of Commercial Multi-User GSM Gateways, is compatible with both the Authorisation Directive and the RTTE Directive.

149. As noted above, Article 7(2) of the RTTE Directive permits restrictions on the putting into service of radio equipment, which relate to the effective and appropriate use of the radio spectrum, the avoidance of harmful interference or matters relating to public health. Article 6(1) and paragraph 17 of Part A of the Annex to the Authorisation Directive permit restrictions on the use of the radio spectrum, in the form of conditions attached to the general authorisation, which

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43 SI 2000/730.
44 SI 2003/1903.
45 SI 2003/3144
are in conformity with Article 7(2) of the RTTE Directive and which are objectively justified, non-discriminatory, proportionate and transparent.

150. Ofcom has been provided with evidence from the mobile network operators about the impact of GSM gateway use on the operation of their networks and the quality of service they are able to provide their subscribers. This evidence indicates that the use of Commercial Multi-user GSM Gateways, if such use were to be permitted, would be likely to give rise to problems of harmful interference and would be an inappropriate use of the radio spectrum.\(^{46}\)

151. ‘Harmful interference’ is defined in Article 2(2)(b) of the Authorisation Directive and Article 2(i) of the RTTE Directive as:

“interference which endangers the functioning of a radionavigation service or of other safety services or which otherwise seriously degrades, obstructs or repeatedly interrupts a radiocommunications service operating in accordance with the applicable Community or national regulations.” (emphasis added)

152. Ofcom considers that the use of Commercial Multi-user GSM Gateways, if it were to be generally authorised, would be likely to ‘seriously degrade, obstruct or repeatedly interrupt’ the radiocommunications service used by ordinary mobile phone subscribers.

153. Ofcom has evidence from the RA’s consultation in 2002/03\(^{47}\), and has been provided with further evidence in response to Ofcom’s recent statement for comment\(^{48}\), that the use of Commercial Multi-User GSM Gateways, by concentrating traffic from many users at a single location, is likely to lead to rapid and unpredictable increases in call traffic in the cell in which the GSM gateways are located and, in certain circumstances, in neighbouring cells. As a result, subscribers to the mobile network are likely to suffer increased congestion (resulting in an inability to make/receive calls or calls being ‘dropped’ when the subscriber moves into the cell site) and a degraded quality of service.

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\(^{46}\) The RA previously also considered that the restriction on the use of Commercial Multi-User GSM gateways was justified on the basis that it was an ineffective use of the radio spectrum. Ofcom does not dispute that the use of GSM gateways to make a call to a mobile phone involves the use of additional spectrum resources compared to a standard fixed-to-mobile call. Therefore, in that sense, it could be said that the use of a GSM gateway as an alternative to making a fixed-to-mobile call is an ineffective use of the radio spectrum. However, Ofcom considers that it would be inconsistent with its broader policies in relation to spectrum management, if it were to rely on this argument alone as a justification for restricting GSM gateway use. As far as possible, Ofcom aims to allow the market to determine the most economically efficient outcome for spectrum allocation. Therefore, although Ofcom does not consider that the RA’s reasoning was incorrect or unwarranted, Ofcom no longer considers it appropriate to rely solely on such reasoning to justify a continued restriction on the use of Commercial Multi-User GSM gateways. Ofcom would only consider it appropriate to intervene in the market by imposing or maintaining restrictions on the use of GSM gateways, if it were of the view that the market would be unable to determine whether such use was efficient, for example because of some market failure. As noted below, in parallel to publishing this Decision, Ofcom has published a consultation document, which addresses broader questions about the future regulation of the use of GSM gateways outside the scope of this Decision.

\(^{47}\) Joint response to the RA’s consultation submitted by Vodafone, T-Mobile, O2 and 3 of 21 February 2003 and Orange’s response to the RA’s consultation of 4 April 2003.

\(^{48}\) Vodafone’s, T-Mobile’s and O2’s responses to Ofcom’s statement for comment of 3 March 2005.
154. Furthermore, a GSM gateway which aggregates traffic tends to establish a new call as soon as a previous call is finished, as it concentrates traffic from a greater number of users than there are available channels. The occurrence of back-to-back calls results in GSM gateways ‘grabbing’ the available capacity for long periods of the day.

155. The mobile operators have provided Ofcom with a number of examples illustrating the change in traffic profile in particular cell sites as a result of the use of GSM gateways. These examples demonstrate that the use of GSM gateways in a particular cell site has in the past given rise to a significant increase in call traffic (in one example, the call traffic during the peak period increased from 5 Erlangs to 35 Erlangs\(^{49}\)) and a correspondingly significant increase in congestion (in one example, congestion went from the below the mobile operator’s internal target of 2% to in excess of 35%\(^{50}\)).

156. It should be noted that commercial GSM gateway use is currently fairly restricted, due to its illegality. It is difficult to assess the precise impact that a relaxation of the restrictions on commercial GSM gateways would have. However, it has been submitted to Ofcom – and Ofcom considers that it is likely – that, if legalised, the use of Commercial Multi-User GSM Gateways would become much more widespread than at present. In particular, Ofcom has evidence to suggest that certain larger fixed network operators might seek to use Commercial Multi-User GSM Gateways as an alternative means of interconnection. If that were to occur, it would lead to a huge increase in the levels of call traffic passing over the mobile network and a consequent increase in the risk of harmful interference outlined above.

157. Where the problems identified above arise, Ofcom considers that the use of Commercial Multi-User GSM gateways is not an appropriate use of the radio spectrum.

158. For the reasons set out above, Ofcom considers that the restriction on the use of Commercial Multi-User GSM Gateways stemming from Regulation 4(2) of the Exemption Regulation is objectively justified as a means of avoiding the risk of harmful interference and inappropriate use of the radio spectrum associated with the use of Commercial Multi-User GSM Gateways. The restriction is non-discriminatory, because it applies to all use of Commercial Multi-User GSM Gateways and does not distinguish according to the identity of the user of the gateway. It is proportionate, as the problems of congestion and degradation of service quality associated with the use of Commercial Multi-User GSM Gateways are serious and there are alternative means of delivering the call traffic to the mobile network, which are less likely to cause congestion and degradation of service quality for end-users\(^{51}\). Finally, it is transparent, in that it is clear in its intention to prohibit Commercial Multi-User GSM Gateways. Although there has been a degree of uncertainty in the past as to the precise scope of Regulation 4(2), it does not appear to Ofcom that this uncertainty extended to Commercial Multi-User GSM Gateways – it seems to Ofcom that

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\(^{49}\) An Erlang is a unit of telecommunications traffic measurement.

\(^{50}\) Congestion refers to the inability for customers to make a call in a particular cell site or to move into a new cell site resulting in a call being ‘dropped’. A congestion rate of 35% indicates that 35% of attempted calls within a particular cell site failed.

\(^{51}\) For example, via a fixed point of interconnection. When calls are delivered in this way the operator delivering the call for termination on the mobile operator’s network pays the mobile operator the standard wholesale mobile termination charge.
the majority of informed parties have always understood the effect of Regulation 4(2) insofar as it applied to Commercial Multi-User GSM Gateways.

159. Moreover, other National Regulatory Authorities have also stated that the use of Commercial Multi-User GSM Gateways is not an appropriate use of the radio spectrum.52

160. In its Judgment, the Tribunal queried whether Regulation 4(2) of the Exemption Regulations could be considered to be a “condition” attached to the general authorisation:

“...it seems arguable that regulation 4(2) is not a “condition of usage of such radio frequencies” within the meaning of Article 5 of the Directive, but rather a provision which excludes the supply of telecommunications services provided by way of business to another person from the scope of the general authorisation. In other words, it seems to us that the “conditions” to which Articles 5 and 6, paragraphs 17 of Annex A and paragraphs 1 and 2 of Annex B, refer are conditions which regulate the use of the authorised frequencies. Regulation 4(2) on the other hand excludes certain activities from the authorisation in the first place. At first sight, the effect of Regulation 4(2) is to require individual licensing of the activities to which that provision applies.”53

161. In Ofcom’s view, even if Regulation 4(2) of the Exemption Regulations were not considered to be a condition attached to the general authorisation, but rather a limit on the scope of the exemption, such that commercial GSM gateway use required individual licensing, this would still be in conformity with the Authorisation Directive. As noted above, Article 5(1) of the Authorisation Directive permits a Member State to make the use of the radio spectrum subject to individual rights of use, should it consider this appropriate, and in particular where such use of the radio spectrum creates a more than negligible risk of harmful interference. For the reasons set out above, Ofcom considers that the use of Commercial Multi-User GSM Gateways does create a more than negligible risk of harmful interference.

**Articles 7(3) – (5) of the RTTE Directive**

162. Floe has submitted to Ofcom that, irrespective of whether Regulation 4(2) of the Exemption Regulations is compatible with Article 7(2) of the RTTE Directive, such restriction does not authorise the mobile network operators to refuse to connect or to disconnect radio equipment to the mobile network. Floe refers specifically to Article 7(3), (4) and (5) of the RTTE Directive. Floe appears to suggest that the mobile network operators may only refuse to connect or disconnect GSM gateway equipment by following the procedure set out in these provisions.

163. Before addressing these provisions, it is important to note that the RTTE Directive is concerned primarily with the regulation of equipment, as opposed to the services which are provided using that equipment. In Ofcom’s view, this is an important factor in interpreting the scope of the RTTE Directive.

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53 Paragraph 184 of the Tribunal’s Judgment.
164. Article 7(3) of the RTTE Directive states that:

“Without prejudice to paragraph 4, Member States shall ensure that operators of public telecommunications networks do not refuse to connect telecommunications terminal equipment to appropriate interfaces on technical grounds where that equipment complies with the applicable requirements of Article 3”. (emphasis added)

165. In Ofcom’s view, this provision applies only to the situation where an operator of a public telecommunications network seeks to refuse connection of radio equipment for technical reasons connected with the equipment itself. It does not prevent an operator from refusing to connect equipment on the basis of the use to which that equipment is to be put and, in particular, where the use to which the equipment is to be put is prohibited under national law without the authority of a licence. Therefore, Ofcom does not consider that Article 7(3) is relevant in the circumstances of this case.

166. Article 7(4) of the RTTE Directive states that:

“Where a Member State considers that apparatus declared to be compliant with the provisions of this Directive causes serious damage to a network or harmful radio interference or harm to the network or its functioning, the operator may be authorised to refuse connection, to disconnect such apparatus or to withdraw it from service. The Member State shall notify each such authorisation to the Commission, which shall convene a meeting of the committee for the purpose of giving its opinion on the matter. After the committee has been consulted, the Commission may initiate the procedures referred to in Article 5(2) and (3). The Commission and the Member States may also take other appropriate measures”.

167. In Ofcom’s view, this provision applies only to the situation where serious damage to a network or harmful radio interference or harm to the network or its functioning is caused by apparatus qua apparatus. It does not apply in the circumstances where a Member State has chosen to place a restriction on the use to which a particular type of apparatus may be put. Therefore, Ofcom considers that Article 7(4) is not relevant in the circumstances of this case.

168. Article 7(5) of the RTTE Directive is an exception to the general rule in Article 7(4). It states that:

“In case of emergency, an operator may disconnect apparatus if the protection of the network requires the equipment to be directed without delay and if the user can be offered, without delay and without costs for him, an alternative solution. The operator shall immediately inform the national

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54 Article 7(3) of the RTTE Directive has been implemented in the UK by Regulation 7(1)(a) of the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 (as amended).
55 Article 7(4) of the RTTE Directive has been implemented in the UK by Regulation 7(1)(b) and 7(2)(c) of the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 (as amended).
56 Article 7(5) of the RTTE Directive has been implemented in the UK by Regulation 7(2)(d) of the Radio Equipment and Telecommunications Terminal Equipment Regulations 2000 (as amended).
regulatory authority responsible for the implementation of paragraph 4 and Article 9".

169. As with Articles 7(3) and 7(4), Ofcom considers that Article 7(5) applies only to the situation where an operator wishes to disconnect apparatus for reasons connected to the apparatus itself. It does not apply to the situation where a Member State has placed a restriction on the use to which apparatus may be put. Furthermore, Article 7(5) applies only in an emergency situation and is a special case of no relevance to the facts of the present case.

Conclusion on compatibility with EC law

170. For the reasons set out above, Ofcom considers that the restriction on the use of Commercial Multi-User GSM Gateways is compatible with the Authorisation Directive and the RTTE Directive and that the UK has complied with its obligations under those Directives.

171. In any event, whether or not the current UK legal position is compatible with the Authorisation Directive and the RTTE Directive, this is not relevant in assessing whether Vodafone has infringed the Chapter II Prohibition or Article 82 in relation to its past conduct. As explained further at paragraphs 294-297 below, Ofcom considers that Vodafone is entitled to rely on the national law in force until such time as it has been disapproved by a competent national authority or court.

E. The future regulation of the use of GSM gateways

172. The Tribunal commented in its Judgment that the legal status of the use of GSM gateways, including the question of whether and on what terms mobile network operators may lawfully authorise the use of GSM gateways by others under their licences, has ramifications not only for this investigation, but for competition in the mobile sector and for the management of the radio spectrum in general. 57

173. Ofcom has functions as a national regulatory authority in respect of the management of the radio spectrum and in relation to the regulation of the mobile sector. These functions are separate from Ofcom’s concurrent functions as a national competition authority under the Act.

174. Acting in its capacity as a national regulatory authority, on 7 June 2005, Ofcom published a preliminary consultation document on the future regulation of mobile call termination 58. This document sought views on, among other things, how technological developments or other industry initiatives might remove the need for charge controls in the future. One of the technological developments considered in the consultation document is the use of GSM gateways. The consultation document sets out that the use of GSM gateways enables the subscriber to take advantage of lower prices for on-net calls rather than paying the standard price for fixed-to-mobile calls, and recognised that an alternative regulatory approach which could allow all customers for fixed-to-mobile calls to benefit from the lower prices of retail on-net calls would involve requiring that

57 Paragraphs 3(b) and 283 of the Tribunal’s Judgment.
the mobile operators provide call termination at prices which are linked to the mobile operators’ retail tariffs for all interconnection provision. The advantages and disadvantages of this approach to regulation are explored in section 4 of that document.

175. In parallel to the publication of this Decision, Ofcom is also publishing a separate consultation document concerning the future regulation of the use of GSM gateways under the WTA. This document addresses issues, including public interest issues associated with authorising the use of GSM gateways, which go beyond the scope of this investigation. The document proposes to extend the Exemption Regulations to allow the use of Commercial Single-User GSM Gateways located at the same premises as the originating caller and also raises the possibility of issuing individual authorisations to cover the use of Commercial Multi-User GSM Gateways59. In making its proposals, Ofcom has noted that it may be necessary to introduce additional restrictions in order to avoid hampering the ability to undertake lawful interception, and Ofcom is pursuing this aspect separately with the relevant Government departments.

Section 4
Legal and Economic Assessment

A. Ofcom’s re-investigation

176. Ofcom’s investigation has considered whether Vodafone has infringed the Chapter II Prohibition and/or Article 82 in relation to its treatment of Floe.

177. The Chapter II Prohibition provides that an abuse by one or more undertakings of a dominant position in the UK or a part of it is prohibited if it may affect trade within the UK.

178. Article 82 provides that an abuse by one or more undertakings of a dominant position within the common market or in a substantial part of it is prohibited if it may affect trade between Member States.

179. Pursuant to Section 60 of the Act, in the application of the Chapter II Prohibition, Ofcom is required to ensure that there is no inconsistency with the principles laid down by the EC Treaty and the European Court and any relevant decision of the European Court. Ofcom must also have regard to any relevant decision or statement of the European Commission.

B. The undertakings

Floe

180. Floe was a provider of electronic communications equipment and services. In particular, Floe employed GSM gateways to provide discounted mobile termination to UK companies. Alongside this, Floe offered a full tariff of rates for other destinations, conventionally supplied\(^60\).

181. Floe is now in administration. The Thompson Partnership was appointed as administrators of Floe on 1 October 2003 and notice of that appointment was lodged with the High Court on the same date.

Vodafone

182. Vodafone is a wholly-owned subsidiary of Vodafone Group Plc, a UK listed company.

183. Vodafone has been granted licences under the Wireless Telegraphy Act 1949 in respect of its second generation (“2G”) and third generation (“3G”) cellular networks. Vodafone provides a variety of wholesale and retail mobile electronic communications services.

\(^{60}\) As set out by Floe in its complaint to the Director of 18 July 2003.
C. The Chapter II prohibition and Article 82 do not apply

184. Ofcom does not consider that the Chapter II Prohibition and Article 82 apply in respect of the particular facts of this case. The reasons for this conclusion are set out below.

(i) The illegality of Floe’s activities

185. During the course of the investigation, Ofcom asked Floe to provide information about the type of services it was offering its customers at the time it was disconnected by Vodafone, and how its customers accessed those services.61

186. Floe confirmed that there were three factors that determined how its customers were connected to its GSM gateways. These were the routing plan that was in place at Floe’s switch, the type of customer in each case (ie. whether the customer was a business end-user or another communications provider) and the size of the customer in each case (ie. whether the customer was large enough to be directly connected to Floe’s switch via a leased line).62

187. It has been confirmed to Ofcom that, at the time of service disconnections by Vodafone, Floe’s business was as follows:

- Floe used GSM gateways to provide telecommunications services by way of business to both end-users and other communications providers;
- Floe’s customers’ call traffic was routed into Floe’s distributed network rather than via on-site customer premises GSM gateways;
- Floe segregated its end-user traffic and communications provider traffic at Floe’s switch, and then terminated each type of traffic on separate GSM gateways, and
- no SIMs were dedicated to an individual customer.

188. On the basis of the evidence provided to Ofcom, it therefore appears that, at the time its services were disconnected by Vodafone, Floe was operating a distributed network of Commercial Multi-User GSM gateways.

189. Floe stated to Ofcom that it was operating both Commercial Single-User GSM Gateways and Commercial Multi-User GSM Gateways.68 However, on the basis of the evidence provided, Ofcom considers that, at the time of

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61 See paragraph 20 above for further details on the information requested from Floe during the course of this investigation.
62 Floe’s response of 22 April 2005 to question 8(b) of Ofcom’s Notice under Section 26 of the Act of 18 April 2005.
63 Floe segmented its end users customers into two categories; (1) “SME/ME & Small Corporates” and (2) “Large Corporates”.
64 Floe’s response of 11 May 2005 to Ofcom’s Notice under Section 26 of the Act of 5 May 2005.
65 As stated by Floe’s former Technical Director at the meeting between Ofcom and Floe of 15 April 2005.
66 Floe’s response of 22 April 2005 to question 1(d)(iii) of Ofcom’s Notice under Section 26 of the Act of 18 April 2005.
67 Response of Floe’s former Technical Director of 16 May 2005 to Ofcom’s Notice under Section 26 of the Act of 13 May 2005.
68 Floe’s response of 11 May 2005 to Ofcom’s Notice under Section 26 of the Act of 5 May 2005.
disconnection, Floe was operating only Commercial Multi-User GSM Gateways\textsuperscript{69}. Although certain of Floe’s GSM gateways may have been dedicated to the termination of traffic from different customer types (that is, GSM gateways used solely for one customer category, but that were used for a variety of customers within that category at any one time), at the time its services were disconnected by Vodafone, none of its SIMs were dedicated to an individual customer.

190. As set out in section 3 above, the use of Commercial Multi-User GSM Gateways is prohibited unless authorised pursuant to a licence issued under section 1(1) of the WTA.

191. Floe has never been issued with a licence under section 1(1) of the WTA to use GSM gateway equipment, nor for the reasons explained in Section 3 above could Vodafone have authorised Floe to use GSM gateways under its licence, as Vodafone’s licence does not cover GSM gateways.

192. On the basis of the evidence provided, Ofcom therefore concludes that Floe’s use of GSM gateways was unlawful under section 1(1) of the WTA.

193. In Ofcom’s view, the competition rules do not and cannot apply to protect or promote activities, such as the use of Commercial Multi-User GSM Gateways, which are prohibited by national law, insofar as the prohibition in question is compatible with EC law. It has been explained in Section 3 above what the public policy justification is for imposing a restriction on Commercial Multi-User GSM Gateway use and why such a restriction is compatible with EC law.

194. It would defeat the purpose of the competition rules if they were to act to promote competition in a particular economic activity which is itself unlawful. In short, the purpose of the competition rules is to promote competition in the lawful supply of goods or services.

195. On the basis that the activities engaged in by Floe were at the relevant time prohibited by national law, and such a restriction was compatible with EC law, the Chapter II prohibition and Article 82 do not apply to protect or promote competition in such activities.

196. Ofcom notes in this context that whether a particular activity is unlawful and whether the competent authority decides to bring a prosecution are separate issues. The activity in question will still be unlawful, irrespective of whether the person engaged in the activity in question is prosecuted.

(ii) The potential illegality of Vodafone’s activities if it had continued to supply Floe

197. It has been set out above that Floe’s use of GSM gateways to provide an electronic communications service by way of business to its customers constituted a criminal offence under section 1(1) of the WTA.

198. In the particular circumstances of this case, Ofcom considers that, if Vodafone had continued to supply Floe, Vodafone itself would potentially have been committing a criminal offence:

\textsuperscript{69} Floe’s former Technical Director’s response to Ofcom’s Notice under Section 26 of the Act of 13 May 2005.
(a) for aiding and abetting the commission by Floe of an offence; and
(b) for being concerned in arrangements which Vodafone knew or suspected
facilitated the acquisition, retention, use or control of criminal property by
Floe contrary to section 328 of the Proceeds of Crime Act 2002.

199. It would appear to Ofcom that, once Vodafone had realised that there was a
real possibility that Floe might be using Vodafone SIMs in GSM gateway
equipment in order to provide an electronic communications service by way of
business to Floe's customers, if Vodafone had continued to supply Floe in such
circumstances, Vodafone would have faced a genuine risk of being guilty itself
of aiding and abetting the commission of a criminal offence by Floe.\footnote{70}

200. It would not be a defence for Vodafone to have made a complaint to the RA or
any other body. Even if Vodafone had complained to the RA about Floe’s
activities, if it had continued to supply services to Floe, it would still have been
at risk of committing a criminal offence. Notification to the RA would amount to
no more than mitigation. Even if it was decided not to prosecute Vodafone, for
example because it was not considered to be in the public interest to do so, this
would not prevent Vodafone’s actions from constituting a criminal offence.

201. In addition, it would appear to Ofcom that any money received by Floe from its
customers as a result of Floe’s use of its GSM gateway equipment would
potentially constitute ‘criminal property’ for the purposes of section 328(1) of the
Proceeds of Crime Act 2002 ("PCA")\footnote{71} and that, by supplying Floe with the

\footnote{70} Section 44 of the Magistrates' Court Act 1980 states that: "A person who aids, abets,
counsels or procures the commission by another person of a summary offence shall be guilty
of the like offence and may be tried (whether or not he is charged as a principal) either by a
court having jurisdiction to try that other person or by a court having by virtue of his own
offence jurisdiction to try him." (The offence committed by Floe was a summary offence. At
the relevant time, this was by virtue of section 14(1)(aa) of the WTA. Since 18 September
2003, the offence is now covered by section 14(1AA)(a) of the WTA).

A person who aids, abets, counsels or procures the commission of a crime may be termed a
‘secondary party’. A secondary party is guilty of an offence if he participates in a joint venture
realising (but without agreeing) that, in the course of the joint venture, the principal might
commit a particular offence, and the principal does so. In these circumstances, the secondary
party has lent himself to the enterprise and, by doing so, has given assistance and
encouragement to the principal in carrying out an enterprise which the secondary party
realises may involve the offence (\textit{R v. Powell and another} [1997] 4 All ER 545).

The words ‘aids, abets, counsels or procures’ should be given their ordinary meaning
(\textit{Attorney General’s Reference (No. 1 of 1975)} 2 All ER 684). Thus, it has been held that a
person who supplies the instrument for a crime or anything essential to its commission aids in
the commission of it. If that person does so knowingly and with intent to aid, he abets the
commission of the crime as well and is therefore guilty of aiding and abetting (\textit{National Coal

To realise something might happen is to contemplate it as a real not a fanciful possibility (\textit{R v.
Roberts} [1993] 1 All ER 583).

\footnote{71} Section 328(1) of the Proceeds of Crime Act 2002 (the "PCA") states that: "A person
commits an offence if he enters into or becomes concerned in an arrangement which he
SIMs and airtime, Vodafone would therefore have been concerned in an arrangement which facilitated the acquisition of such criminal property by Floe. Once Vodafone had reason to suspect that Floe was using the services provided to it by Vodafone for the purposes of committing an offence under section 1(1) of the WTA, Vodafone would have had the requisite mental element under section 328(1) of the PCA. If Vodafone had continued to supply services to Floe in these circumstances, Vodafone would therefore have faced a risk of contravening section 328(1) of the PCA.

202. If Vodafone had continued to supply services to Floe once it suspected that Floe’s use of GSM gateways was contrary to section 1(1) of the WTA, it would not have been a defence for Vodafone to have made a complaint to the RA about Floe’s actions.\(^2\)

Section 340 of the PCA states that property is criminal property if: “(a) it constitutes a person’s benefit from criminal conduct or it represents such a benefit (in whole or part and whether directly or indirectly), and (b) the alleged offender knows or suspects that it constitutes or represents such a benefit.”

Under section 340 of the PCA, criminal conduct is defined to include conduct which “constitutes an offence in any part of the United Kingdom”.

\(^2\) Section 328(2) of the PCA provides a defence against the offence in section 328(1). It states that a person does not commit an offence under section 328(1) if:

“(a) he makes an authorised disclosure under section 338 and (if the disclosure is made before he does the act mentioned in subsection (1)) he has the appropriate consent;

(b) he intends to make such a disclosure but had a reasonable excuse for not doing so;

(c) the act he does is done in carrying out a function he has relating to the enforcement of any provision of this Act or of any other enactment relating to criminal conduct or benefit from criminal conduct.”

Section 338(1) provides that:

“(1) For the purposes of this Part a disclosure is authorised if -

(a) it is a disclosure to a constable, a customs officer or a nominated officer by the alleged offender that property is criminal property;

(b) it is made in the form and manner (if any) prescribed for the purposes of this subsection by order under section 339, and

(c) the first or second condition set out below is satisfied.

(2) The first condition is that the disclosure is made before the alleged offender does the prohibited act.

(3) The second condition is that –

(a) the disclosure is made after the alleged offender does the prohibited act,

(b) there is good reason for his failure to make the disclosure before he did the act, and

(c) the disclosure is made on his own initiative and as soon as it is practicable for him to make it.”
203. Paragraph 5(2) of Schedule 3 of the Act provides that:

“The Chapter II Prohibition does not apply to conduct to the extent to which it is engaged in an [sic] order to comply with a legal requirement.”

204. Ofcom notes that paragraph 5(2) of Schedule 3 of the Act reflects the principle set out by the ECJ in *Ladbroke Racing* that:

“If anti-competitive conduct is required of undertakings by national legislation or if the latter creates a legal framework which itself eliminates any possibility of competitive activity on their part, Articles 85 and 86 [now Articles 81 and 82] do not apply. In such a situation, the restriction of competition is not attributable, as those provisions implicitly require, to the autonomous conduct of the undertakings.”

205. To the extent that it would be a criminal offence for Vodafone to continue to make supplies to Floe, in the knowledge that there was a real possibility that Floe would be acting unlawfully, then in refusing to do so, Vodafone was “complying with a legal requirement” (i.e. the requirement of the criminal law to desist from such conduct) within the meaning of both paragraph 5(2) of Schedule 3 of the Act and the principle as set out by the ECJ in the *Ladbroke Racing* case.

206. In Ofcom’s view, the competition rules cannot be taken to compel an undertaking to engage in unlawful activity. Whatever Vodafone’s motives may have been in taking action against Floe (and, as set out below, the illegality of Floe’s actions appears to have been one), the fact remains that public policy demands that the operation of competition law does not serve to protect unlawful conduct.

207. As noted above, whether or not a particular activity is unlawful and whether or not the competent authority decides to bring a prosecution are separate issues. The activity in question will still be unlawful, irrespective of whether the person engaged in that activity is prosecuted.

208. Ofcom also wishes to make it clear that it will only be in exceptional circumstances that conduct will escape the application of the Chapter II prohibition and Article 82 on the basis that such conduct is required as a matter of national law. Ofcom has concluded that this case is one of those exceptional cases.

D. If the Chapter II prohibition and Article 82 were to apply

209. For the reasons set out above, Ofcom does not consider that the Chapter II Prohibition and Article 82 apply in respect of the particular facts of this case. However, Ofcom has also carried out an analysis of whether Vodafone’s conduct would infringe the Chapter II Prohibition and/or Article 82, if this general proposition were not accepted.

210. If the Chapter II Prohibition and Article 82 were to apply in the particular circumstances of this case, contrary to Ofcom’s view as set out above, in order to conclude that Vodafone has abused a dominant position contrary to the Chapter II Prohibition and/or Article 82, Ofcom would need to determine:

- the definition of the relevant market(s);
- whether Vodafone has a dominant position in a relevant market;
- whether Vodafone has abused a dominant position in a relevant market; and
- whether such an abuse may affect trade within the UK and/or between Member States.

The definition of the relevant market(s) and whether Vodafone has a dominant position in a relevant market

211. In the light of Ofcom’s conclusions on abuse, which are set out in detail below, Ofcom does not consider it necessary to reach a conclusion on the definition of the relevant markets or whether Vodafone is dominant in a relevant market. However, for the purposes of considering whether Vodafone’s conduct amounts to an abuse, Ofcom has taken the view that the relevant upstream market in this case is the market for the provision of mobile call termination on Vodafone’s network covering the whole of the United Kingdom and that Vodafone holds a dominant position in this market. Ofcom has also taken the view that the relevant downstream markets in this case (i.e. the markets in which Floe was operating) are:

- the retail market for fixed-to-mobile calls to business end-users; and
- the wholesale of mobile call termination to communications providers.

212. The basis for Ofcom’s view of the relevant markets and Vodafone’s position within those markets is set out in the Annex to this Decision.

Whether Vodafone has abused a dominant position in a relevant market

213. The holding of a dominant position is not in itself prohibited by the Chapter II Prohibition or Article 82. However, a dominant undertaking has a special responsibility by virtue of its market power not to allow its conduct to impair genuine undistorted competition.

214. The special responsibility imposed on a dominant undertaking is to be considered in the light of the specific circumstances of each case, taking into account the weakened competitive situation.

215. As the ECJ set out in Hoffmann-La Roche v. Commission:

“The concept of abuse is an objective concept relating to the behaviour of an undertaking in a dominant position which is such as to influence the structure of a market were, as a result of the very presence of the undertaking in question, the degree of competition is weakened and which, through recourse to methods different from those which condition normal competition in

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products or services on the basis of the transactions of commercial operators, has the effect of hindering the maintenance of the degree of competition still existing in the market or the growth of that competition.”

216. There are two different (although overlapping) potential abuses at issue in this case:

(a) refusal to supply; and
(b) discrimination

217. Each of these potential abuses is discussed separately below.

(a) Refusal to supply

218. Undertakings are generally free to supply, or not to supply, whomever they choose. Therefore, a refusal to supply by a dominant undertaking is not normally abusive. However, in certain circumstances, it may be an abuse for a dominant undertaking, without any objective justification, to refuse to supply a particular product or service to a customer. This might be the case, for example, where the dominant undertaking refuses access to a so-called ‘essential facility’77 or where the refusal to supply eliminates all competition to the dominant undertaking in a downstream or related market78.

219. It is clear from the case-law both at the UK and EC levels that conduct by a dominant undertaking, which might otherwise amount to an abuse, may be objectively justified and, where that is the case, will not infringe the Chapter II Prohibition and/or Article 82. In Genzyme, the Tribunal stated that “at the stage of decision, the OFT is bound to consider the issue of objective justification, and in particular any arguments put forward by the dominant undertaking”79.

220. For the reasons set out below, Ofcom considers that, in the particular circumstances of this case, Vodafone’s conduct was objectively justified and therefore not abusive.

Chronology of events

221. Before going on to explain why Ofcom considers that Vodafone’s conduct in this case was objectively justified, it is first necessary to set out the events at issue in this case. Ofcom has split up the relevant facts (which are based on the evidence provided during Ofcom’s re-investigation and the Director’s previous investigation) into three different time periods:

- the period leading up to the conclusion of the Agreement between Floe and Vodafone in August 2002;
- the period between August 2002 and Vodafone’s initial disconnection of Floe’s services in March 2003; and
- the period after Vodafone’s initial disconnection of Floe’s services.

The Agreement between Floe and Vodafone (early 2002 – 12 August 2002)

222. In early 2002, Floe approached Vodafone regarding a potential commercial relationship between the two companies. Between March 2002 and August 2002 Vodafone and Floe corresponded and discussed this potential commercial relationship. During this time, Floe provided Vodafone with a copy of its business plan\(^\text{80}\). The business plan provided, among other things, that:

- Floe’s business would involve providing a range of value-added solutions focused on ‘growing the number of ‘On-Net’ minutes carried over the Vodafone mobile infrastructure’. To achieve this, Floe planned to “attack” the switch rooms of small to medium businesses and use its unique product portfolio to directly connect the PABX\(^\text{81}\) to the Vodafone mobile network via the air interface\(^\text{82}\);
- Floe intended to target small and medium sized enterprises with between five and ninety employees, which made large numbers of fixed-to-mobile calls and which had an “average (typical) monthly mobile call spend of around £200 - £230 per month”\(^\text{83}\);
- Floe would sell its services via both direct and indirect sales channels\(^\text{84}\); and
- Floe intended to use “a range of unique customer premise direct mobile access equipment”. Such equipment would be “either connected across the PABX exchange lines in such manner that it is able to “sense” the dialled information carried on the lines or in the case of the smaller single line solutions, terminate the line to a GSM interface”. The equipment Floe intended to use included GSM gateway equipment with both “single-SIM capability” and “multi-SIM capability”\(^\text{85}\).

223. The discussions between Vodafone and Floe culminated on 12 August 2002 in the signature of the Agreement. Pursuant to the Agreement, Vodafone appointed Floe as an authorised distributor of certain defined services (including the supply of SIMs and mobile handsets) and granted Floe a non-exclusive licence to market and resell the services to end-users.

224. In order to properly understand the circumstances in which Vodafone entered into the Agreement with Floe, Ofcom has asked Vodafone to confirm its understanding of the nature of Floe’s business and the legality of Floe’s activities at this time.

225. Vodafone has confirmed that, when it entered into the Agreement with Floe, it understood that Floe would be supplying its customers with GSM gateway equipment. However, Vodafone considered that this business would be

\(^{80}\) Floe Telecom Limited’s Business Case Response to Vodafone Corporate (Revision 1.00.01) (the “Business Plan”). The Tribunal concluded at paragraph 33 of its Judgment that the Business Plan was the version provided to Vodafone during the negotiations leading to the Agreement. Ofcom notes that the version of the Business Plan provided to it would appear to be incomplete. In particular, the Business Plan that Ofcom has (which is the version provided by Vodafone to the Tribunal in the Floe appeal) starts on p.5 and Annexes A, B and C are blank.

\(^{81}\) See footnote 14.

\(^{82}\) p.6 of Floe’s Business Plan.

\(^{83}\) p.18 of Floe’s Business Plan (However, Ofcom notes that on p.20, the Business Plan refers to Floe’s target market as being SMEs with between 5 and 80 employees).

\(^{84}\) p.18 of Floe’s Business Plan.

\(^{85}\) p.20 of Floe’s Business Plan.
ancillary to Floe’s general supply of SIMs and mobile handsets.\textsuperscript{86} As set out below, the evidence that Ofcom has suggests that Floe did initially intend to supply SIMs and handsets to its customers.

226. Concerning the GSM gateway equipment to be supplied by Floe to its customers, Vodafone understood that this was always going to be located at the end-user’s premises and used solely for the traffic of that user.\textsuperscript{87} Although Vodafone’s understanding of what Floe was intending to do proved to be incorrect, it does not appear to Ofcom that Vodafone’s understanding was inconsistent with the business plan provided by Floe.

227. Vodafone has stated that, at the time it entered into the Agreement, it did not consider that Floe’s activities as it understood them to be would be unlawful.\textsuperscript{88} Although Vodafone knew that Floe intended to supply its customers with SIMs and GSM gateway equipment and that Floe would bill its customers directly, Vodafone considered that, in these circumstances, Floe’s customers would still be ‘using’ the gateway solely for their own benefit and therefore Regulation 4(2) of the Exemption Regulations would not apply\textsuperscript{89}. Vodafone has also confirmed that it did not consider at this time that it could authorise the use of GSM gateways under its licence\textsuperscript{90}.

228. It appears to Ofcom that Vodafone’s understanding of the law at this time was that there was no distinction between a Self-Use GSM Gateway, as defined above, and a Commercial Single-User GSM Gateway located at the end-user’s premises and used only for the traffic of that end-user.\textsuperscript{91} Both of these types of use of GSM gateways were considered by Vodafone to be what was previously referred to as ‘private’ use of GSM gateways and both were considered by Vodafone to be lawful. As explained above, Ofcom considers that conclusion to be incorrect. However, that is not relevant in this case, in view of the fact that Floe was only providing Commercial Multi-User GSM Gateways at the time of disconnection.

229. Vodafone has stated that the determinative characteristic of what it understood at this time to be unlawful GSM gateway use (what was previously described as ‘public’ GSM gateway use) was that the equipment was used to provide

\textsuperscript{86} Vodafone’s response of 13 April 2005 in response to question 1 of Ofcom’s information request of 24 March 2005.
\textsuperscript{87} Vodafone’s response of 13 April 2005 in response to question 3 of Ofcom’s information request of 24 March 2005. Ofcom notes that the Tribunal raised the possibility at paragraph 314 of its Judgment that “Vodafone’s understanding of Floe’s business was that Floe’s use of public GSM gateways was to be limited to the use of "customer premises equipment," dedicated in each case to a single Floe customer”. It appears to Ofcom on the evidence provided that this was indeed the understanding of Vodafone at the time it entered into the Agreement.
\textsuperscript{88} Vodafone’s response of 13 April 2005 to question 21 of Ofcom’s information request of 24 March 2005. Question 21 asked Vodafone to confirm which of the circumstances set out by the Tribunal in paragraph 311(a) of its judgment best describes Vodafone’s understanding at the time it entered into the Agreement. Vodafone confirmed that (subject to certain qualifications) the circumstances set out in paragraph 311(a) of the judgement most accurately reflects Vodafone’s understanding at the time it entered into the Agreement.
\textsuperscript{89} Vodafone’s response of 13 April 2005 to question 13 of Ofcom’s Notice under Section 26 of the Act of 24 March 2005.
\textsuperscript{90} Vodafone’s response of 13 April 2005 to question 17 of Ofcom’s information request of 24 March 2005.
\textsuperscript{91} Vodafone’s response of 13 April 2005 to question 23 of Ofcom’s 1\textsuperscript{st} Information Request of 24 March 2005.
services to multiple end-users. According to Vodafone, in the case of what it understood to be unlawful GSM gateway use, the GSM gateway equipment was always located away from the end-user’s premises, allowing for the aggregation of traffic\(^{92}\), and generally contained a far greater number of SIMs than GSM gateways used by a single end-user\(^{93}\). At the time it entered into the Agreement with Floe, Vodafone did not consider that Floe would be providing this type of service to its customers\(^{94}\).


230. After entering into the Agreement with Vodafone, Floe was supplied with 250 SIMs by Vodafone.

231. Between October 2002 and February 2003, Vodafone and Floe had a series of update meetings and exchanged correspondence. On 24 October 2002, Floe wrote to Vodafone requesting “a free handset for all 250 connections we have made since signing the contract.”\(^{95}\) In November 2002, Floe wrote to Vodafone again, stating that it would “order an additional 100-150 sims in the next few weeks” and “Voda will supply handsets as per the contract.”\(^{96}\) In January 2003, Floe provided Vodafone with a list of issues it wished to discuss. These included “Floe increasing its portfolio of Vodafone offerings” and “Floe selling 50 handset connections per week.”\(^{97}\)

232. Notwithstanding the above correspondence, it appears that Floe did not purchase any further SIMs from Vodafone, nor was Floe provided with any mobile handsets.

233. At the end of January 2003, Vodafone gathered usage data on suspected Commercial Multi-User GSM Gateway users on the Vodafone network. It appears that at this stage Vodafone began to suspect that Floe was using Commercial Multi-User GSM Gateways\(^{98}\).

234. On 6 February 2003, at a regular update meeting between Vodafone and Floe, Vodafone outlined its concern that Floe’s use of GSM gateway was unlawful. According to Vodafone, Floe stated at this meeting that it was supplying GSM gateway devices to its customers for their own use and billing the customers for their calls (which, on the basis of Vodafone’s understanding, would be ‘lawful’ GSM gateway use), but that it was not supplying a GSM gateway service, on a

\(^{92}\) Vodafone’s response of 13 April 2005 to question 12 of Ofcom’s 1st Notice under Section 26 of the Act of 24 March 2005.

\(^{93}\) Vodafone’s response of 13 April 2005 to question 12 of Ofcom’s 1st Notice under Section 26 of the Act of 24 March 2005.

\(^{94}\) Vodafone’s response of 13 April 2005 in response to questions 4 and 5 of Ofcom’s information request of 24 March 2005.

\(^{95}\) Email of 24 October 2002 from Floe’s Commercial Director to Vodafone’s Relationship Manager, Corporate Accounts and Vodafone’s Customer Account Manager.

\(^{96}\) Email of 28 November 2002 from Floe’s Chief Executive to Vodafone’s Relationship Manager, Corporate Partners.

\(^{97}\) Email of 30 January 2003 from Floe’s Chief Executive to Vodafone’s Relationship Manager, Corporate Partners.

\(^{98}\) Witness Statement of Vodafone’s Head of Regulatory Policy, as submitted during the Floe appeal.
wholesale basis, to third parties (which, on the basis of Vodafone's understanding, would be 'unlawful' GSM gateway use).  

235. Following the meeting, Vodafone went away and investigated further its suspicions that Floe was using Commercial Multi-User GSM Gateways. This analysis showed very high on-net calling volumes in a particular location. Vodafone considered that this usage pattern was indicative of Commercial Multi-User GSM Gateways. This is confirmed by a series of internal e-mails. In particular, an e-mail from Vodafone’s Head of Regulatory Policy, in which he stated that he had:

“seen some data from [Vodafone’s Intelligence Manager, Fraud and Security] which casts doubt over the story we got from Floe Telecom. Namely, one site, 30 Floe Telecom SIMs, generating on average 160 odd calls per day. I can draft up a response to teir [sic] letter but I’d like to have all the data. Can I get a list of SIMs registered to Floe please?”

236. This e-mail was forwarded to the relevant Customer Account Manager, stating “Can you please organise the SQL as discussed for [Vodafone’s Head of Regulatory Policy] – it seems that Floe SIMs need to be investigated”. A list of these SIMs was provided to Vodafone’s Head of Regulatory Policy on 26 February 2003.

237. On 28 February 2003 Vodafone’s Head of Regulatory Policy then circulated, to his colleagues, a draft letter to Floe and another company in respect of their suspected unlawful GSM gateway use. The e-mail stated that:

“Both of the above have been approached and we have given them every opportunity to work with us to stop what is, after all, a criminal act. We intend to send these letters out asap.”

238. On 10 March 2003, Vodafone’s Director of Fraud & Security sent the agreed version of this letter to Floe’s Chief Executive. This letter stated as follows:

“I understand that you met with my colleagues in early February and that the subject of GSM Gateways was discussed. I believe that you indicated that you supply gateway devices to individual ME and SME customers for their own use (and you bill them for calls) but did not supply a GSM Gateway service, on a wholesale basis, to third parties.

Vodafone has analysed the traffic data associated with SIM cards registered to Floe Telecom. As an example, on the 14th November 2002 on a Vodafone

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99 Ofcom does not have a contemporaneous note of the meeting between Floe and Vodafone. Ofcom has therefore relied upon Vodafone’s summary of the meeting, as set out in its letter to Floe of 10 March 2003.

100 Email from Vodafone’s Head of Regulatory Policy to Vodafone’s General Manager, Corporate Partners and Vodafone’s Relationship Manager, Corporate Partners of 24 February 2003.

101 “SQL” stands for “Structured Query Language” and is a programming language used for getting information from a database. In this case it referred to the type of report that would be generated using SQL.

102 Email from Vodafone Customer Account Manager to Vodafone Relationship Manager, Corporate Partners.

103 Email from Vodafone’s Head of Regulatory Policy to Vodafone’s General Manager, Corporate Partners and Vodafone’s Vodafone’s Intelligence Manager, Fraud and Security.
cell located near Heathrow Airport, 29 SIMs registered to Floe Telecom made an average of 163 calls each. Our experience shows that this pattern of usage is indicative of SIMs used in GSM Gateways to supply services to third parties.

As we outlined at the meeting, Vodafone is extremely concerned about the use of GSM Gateways on our network. The use of these devices can cause serious network congestion, they disrupt services requiring CLI and, above all, their use is illegal.

In view of the fact that the use of GSM Gateways is illegal as well as the reasons stated above Vodafone requires that, within 14 days of the date of this letter, Floe demonstrates to Vodafone’s satisfaction that these SIMs are being used for legal purposes only. Failure to comply will result in the suspension of the service to Floe Telecom without further notice and Vodafone reserves the right to take such further measures as it deems appropriate."

239. On 13 March 2003, Floe sent a response to Vodafone. This letter set out a number of reasons why Floe considered that Vodafone’s proposed actions were unwarranted, including that:

- Floe had a legal contract with Vodafone that was entered into with full knowledge of the nature of Floe’s business and service delivery mechanisms;
- Floe had been completely open and honest with Vodafone having regular review meeting with the account manager to keep Vodafone aware of Floe’s business;
- the usage of GSM gateways was under review by the DTI/RA and by arbitrarily suspending services, Vodafone was totally disregarding the advice of government by taking precipitous action prior to the conclusion of the RA’s consultation;
- Vodafone’s proposed action was anti-competitive and may also be in breach of Vodafone’s licence; and
- Vodafone’s actions would have a significant impact on Floe’s business and its customers.

240. On the same day as Floe sent this letter, Vodafone issued an instruction to its bank to call for payment of approximately £135,000 due from Floe to Vodafone pursuant to the direct debit arrangement put in place by Floe. On 18 March 2003 Vodafone’s bank informed Vodafone that the payment had been refused. Vodafone contacted Floe and Floe informed Vodafone that it had cancelled the direct debit arrangement.

241. On 18 March 2003, in response to Floe’s cancellation of its direct debit arrangements, Vodafone suspended the SIMs it had identified were being used by Floe in Commercial Multi-User GSM Gateways. It did this by amending its home location register and ‘flagging’ Floe’s SIMs as being suspended. This had the effect that Floe’s SIMs were no longer recognised by Vodafone’s network, ie the SIM card could no longer be used to make or receive calls. These SIMs were not subsequently re-activated.

104 Letter of 13 March 2003 from Floe Group to Vodafone’s Director of Fraud & Security.
242. The evidence provided to Ofcom demonstrates that Vodafone disconnected other companies suspected of using Commercial Multi-User GSM Gateways if it got no satisfactory answer to the contrary (Vodafone’s actions in relation to other companies are discussed further at paragraphs 319-325 below). Floe’s letter of 13 March 2003 did not directly respond to Vodafone’s concerns expressed in its letter to Floe of 10 March 2003 about the legality of Floe’s activities and Floe did not dispute that it was using Commercial Multi-User GSM Gateways. It therefore seems likely that Floe would have been disconnected by Vodafone, even if Floe had not cancelled its direct debit arrangements.

The period subsequent to the initial disconnection (18 March 2003 – October 2003)

243. Vodafone has confirmed that, after the initial suspension of Floe’s SIMS on 18 March 2003, Vodafone did not supply Floe with additional SIMs. However, it appears that Floe purchased further SIMs after this date from other sources.

244. After the initial suspension of Floe’s SIMs on 18 March 2003, Vodafone recorded the IMEI numbers of the GSM gateway equipment in which Floe’s SIMs had been used in its Equipment Identity Register (“EIR”). This is a register which is used by Vodafone to record the IMEIs of lost and stolen equipment. The effect of this was that these IMEI numbers were also ‘flagged’ as suspended on Vodafone’s EIR and could not be used to make or receive calls on Vodafone’s network. This prevented Floe from obtaining new Vodafone SIMs and inserting them into the GSM gateway equipment. Vodafone’s ‘flagged’ the IMEIs of Floe’s GSM gateway equipment on at least one occasion, which was 25 April 2003.

245. On each of 21 July 2003, 2 September 2003 and 16 October 2003 Vodafone took steps to suspend SIMs that it suspected its service providers, or service providers’ customers, were using in Commercial Multi-User GSM Gateways. It appears that SIMs purchased by Floe from Vodafone’s service providers were suspended at this time.

Objective justification

246. There is not an exhaustive list set down in case-law as to what might amount to an objective justification in any particular case. Whether or not a dominant undertaking’s conduct is objectively justified will depend on the specific circumstances of the case.

247. Ofcom considers that Vodafone was objectively justified in refusing to supply Floe, in the particular circumstances of this case, on the basis that the services

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105 The International Mobile Identity (“IMEI”) is a 15-digit code. Each mobile handset or GSM gateway has an IMEI number that is uniquely associated with it and which enables the equipment to be identified by the mobile network. The first six digits of the IMEI number disclose the type of equipment being used.

106 As a general matter, flagging an IMEI number as suspended on Vodafone’s network does not of itself prevent the relevant equipment being used on another network; each operator needs to flag the IMEI on its own network in order to prevent the relevant equipment from being used to communicate via its network. In the case of Floe’s equipment the IMEIs were mistakenly uploaded from Vodafone’s EIR onto the Central Equipment Information Register (“CEIR”), a centrally maintained database used by all mobile network operators in the UK, to enable them to identify stolen equipment and prevent it being used. Ofcom understands that, once this mistake came to Vodafone’s attention, Vodafone corrected that data on the CEIR.
which Vodafone was supplying Floe were being used by Floe to engage in an unlawful activity (i.e. the use of Commercial Multi-User GSM Gateways).

248. Ofcom considers that the following statement made by the ECJ in *United Brands* is particularly relevant in the context of this case:

> “Although it is true, as the applicant points out, that the fact that an undertaking is in a dominant position cannot disentitle it from protecting its own commercial interests if they are attacked, and that such an undertaking must be conceded the right to take such reasonable steps as it deems appropriate to protect its said interests, such behaviour cannot be countenanced if its actual purpose is to strengthen this dominant position and abuse it.”\(^{107}\)

249. This case concerned, among other things, a refusal by United Brands to continue to supply a dealer. United Brands sought to argue that its conduct was justified as a response to the dealer’s actions in promoting the products of United Brand’s main competitors. The ECJ, in rejecting United Brand’s justification for its conduct, stated:

> “Even if the possibility of a counter-attack is acceptable that attack must still be proportionate to the threat taking into account the economic strength of the undertakings confronting each other.

> The sanction consisting of a refusal to supply by an undertaking in a dominant position was in excess of what might, if such a situation were to arise, reasonably be contemplated as a sanction for conduct similar to that for which UBC blamed Olsen.”\(^{108}\)

250. Although the ECJ rejected the objective justification put forward by United Brands, it follows from the ECJ’s reasoning that a dominant undertaking is objectively justified in refusing to supply a customer if it does so as a means of protecting its legitimate commercial interests and the dominant undertaking’s actions are reasonable and proportionate in the circumstances.

**Protection of legitimate commercial interests**

251. From the evidence that Ofcom has been provided, it is clear that, prior to taking action to disconnect Floe, Vodafone had concerns that Floe was using Commercial Multi-User GSM Gateways and that Vodafone considered such use to be unlawful.

252. It is also clear from the evidence that Ofcom has been provided that, at the time it was disconnected by Vodafone, Floe was indeed operating Commercial Multi-User GSM Gateways. It has been explained above that the operation of Commercial Multi-User GSM Gateways by Floe constituted a criminal offence under section 1(1) of the WTA and that, once Vodafone was aware that there was a real possibility that Floe was operating unlawfully, if Vodafone had continued to supply Floe in these circumstances, Vodafone itself would have faced a genuine risk of committing a criminal offence.


\(^{108}\) Paragraphs 190 and 191.
253. In these particular circumstances, Ofcom considers that Vodafone’s actions were an objectively justifiable means of protecting its legitimate commercial interests.

254. In its Judgment, the Tribunal questioned whether Vodafone’s conduct was objectively justified in the light of certain statements made by the judgment of the Court of First Instance (CFI) in Hilti109. In that case, the CFI upheld a decision by the European Commission finding that Hilti had abused a dominant position by pursuing a series of different measures designed to prevent other manufacturers of nails from competing to sell nails for use in Hilti-manufactured nail guns. Hilti argued in its defence that its actions were justified by the fact that there were ‘significant deficiencies’ in the quality of nails supplied by competing nail manufacturers and that these manufacturers had engaged in ‘false and misleading advertising’ in relation to the quality of their nails compared to those manufactured by Hilti. The CFI rejected Hilti’s arguments concerning objective justification. It stated that:

"As the Commission has established, there are laws in the United Kingdom attaching penalties to the sale of dangerous products and to the use of misleading claims as to the characteristics of any product. There are also authorities vested with powers to enforce those laws. In those circumstances it is clearly not the task of an undertaking in a dominant position to take steps on its own initiative to eliminate products which, rightly or wrongly, it regards as dangerous or at least as inferior in quality to its own products.

It must further be held in this connection that the effectiveness of the Community rules on competition would be jeopardized if the interpretation by an undertaking of the laws of the various Member States regarding product liability were to take precedence over those rules."

255. Ofcom accepts the premise underlying the CFI’s judgment in Hilti that it is not the role of a dominant undertaking to take it upon itself to act as “judge, jury and executioner” in respect of the enforcement of the law and the protection of the public interest. However, Ofcom does not consider that this applies where, as in the present case, a dominant undertaking is asked to supply a product or service to one of its customers, which the customer intends to use illegally. In those circumstances, Ofcom considers that it is in the dominant undertaking’s legitimate commercial interests to refuse to supply the customer. In Ofcom’s view, the facts of Hilti are clearly distinguishable from those in the present case.

256. The Tribunal also questioned in its Judgment whether Vodafone was objectively justified in disconnecting Floe given the uncertainty in the legal position at the relevant time111. The legal situation with regard to GSM gateway use was unclear in certain respects at the time Vodafone disconnected Floe. For example, Vodafone itself considered that the type of service it expected Floe to provide under the Agreement (i.e. a Commercial Single-User GSM Gateway) would have been lawful. However, Ofcom has not been provided with any evidence to demonstrate that there was any uncertainty at the time that Commercial Multi-User GSM Gateways were not exempted from the requirement for a licence. Ofcom considers that Vodafone was therefore

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109 Paragraph 337.
111 Paragraph 337.
justified in relying on its concern that Floe’s use of Commercial Multi-User GSM Gateways was unlawful.

257. It has been explained above that, prior to disconnecting Floe, Vodafone wrote to Floe on 10 March 2003, setting out its concerns and giving Floe 14 days in which to demonstrate to Vodafone that the SIMs were being used in a lawful manner. If Vodafone had been mistaken about Floe’s use of GSM gateways being unlawful, Floe could have written to Vodafone to state this.

258. Evidence provided to Ofcom by Vodafone during the course of the re-investigation indicates that where a customer has responded to a letter from Vodafone, similar to the one sent to Floe on 10 March 2003, stating that Vodafone’s concerns were unfounded, Vodafone has held off disconnecting the customer and given the customer a further period to demonstrate that its activities were legitimate.

259. Furthermore, Vodafone has stated that, on at least a couple of occasions, it has taken steps to ‘re-instate’ SIMs or the IMEI numbers of GSM gateway equipment that it has mistakenly suspended or where the relevant user has demonstrated to Vodafone that its equipment is no longer being used in an unlawful manner.

Conclusion on protection of legitimate commercial interests

260. For the reasons set out above, Ofcom considers that Vodafone had a legitimate commercial interest in disconnecting Floe, on the basis of the illegality of Floe’s use of Commercial Multi-User GSM Gateways. This is the case, irrespective of whether or not other reasons for the disconnection existed.

261. Furthermore, as explained further at paragraphs 294-297 below, to the extent that Floe’s conduct was unlawful as a matter of domestic law, Vodafone was entitled to rely on such illegality, whether or not the domestic provisions were compatible with EC law.

Reasonableness and proportionality of Vodafone’s conduct

Whether Vodafone should have referred Floe’s suspected Commercial Multi-User GSM Gateway use to the RA instead of taking steps to disconnect Floe.

112 On 13 June 2003 Vodafone wrote to [✓] identifying certain SIMs that Vodafone suspected were being used in Commercial Multi-User GSM Gateways. It appears that [✓] responded to Vodafone that certain of the SIMs were being used legitimately by a corporate customer. Vodafone wrote to [✓] on 3 July 2003. In this letter Vodafone referred to 15 SIMs that [✓] had stated were being used “legitimately by a reputable corporate customer”. Vodafone stated that it was “prepared to leave the 15 SIMs in operation for the time being, provided the congestion can be relieved by barring the LIST A SIMs. However, within 14 days of this letter, Vodafone will require [✓] to show that the 15 SIMs are being used legitimately, and, whilst it will endeavour to avoid further barring, it reserves the right to bar the SIMs should it be required by network quality standards, or otherwise.”


262. In its Judgment, the Tribunal raised a question as to whether Vodafone was objectively justified in disconnecting Floe without first referring the matter to the RA or leaving it to the RA to take enforcement action under the WTA.  

263. Where a dominant undertaking is supplying a particular product or service to one of its customers and the customer is using that product or service unlawfully, Ofcom considers that it is reasonable and proportionate for the dominant undertaking to cease supplying the customer, at least until the customer demonstrates that it has stopped engaging in the unlawful activity. This is all the more so if the dominant undertaking is itself at risk of committing a criminal offence if it continues to supply the customer. In Ofcom’s view, it does not make a difference for these purposes whether or not the dominant undertaking chooses to complain to the competent authority about its customer’s activities and, if so, whether or not the competent authority chooses to take enforcement action against the customer. The dominant undertaking’s legitimate commercial interest in ceasing to supply the customer is separate from the issue of whether it is in the public interest to take enforcement action. Even if no enforcement action is taken against the customer, the activity in question will still be unlawful and the dominant undertaking will therefore still have a legitimate commercial interest in ceasing to supply the customer.

264. In any event, evidence provided to Ofcom by Vodafone demonstrates that Vodafone did speak to the RA prior to disconnecting any GSM gateway users to enquire whether the RA intended to take enforcement action against unlawful GSM gateway use. It appears that the RA confirmed to Vodafone that it had no immediate plans to take action against unlawful GSM gateway use and it raised no objection to Vodafone taking such action itself. In these circumstances, Ofcom considers that it was reasonable for Vodafone to have gone ahead and disconnected illegal GSM gateway users, including Floe, rather than formally complaining to the RA.

The discussions that took place between Vodafone and Floe regarding alternative legal and commercial arrangements between the two companies

265. Reference was made in Section 3 above to the Government announcement issued on 18 July 2003, setting out the conclusions of the RA’s consultation on GSM gateways. This announcement included a statement encouraging the mobile network operators and GSM gateway operators to “consider ways to address pragmatically existing uses of equipment that continue not to meet the requirement for exemption”.

266. Ofcom has been provided with evidence that demonstrates that, after the date of initial disconnection, Vodafone engaged in discussions with Floe on and off between May 2003 and October 2003 with a view to exploring alternative commercial arrangements to enable Floe to continue in business. These possible alternative arrangements included:

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\(^{115}\) Paragraph 337.

\(^{116}\) As set out by in an email of 27 September 2002 from Vodafone’s Intelligence Manager, Fraud and Security to Vodafone’s Director of Fraud and Security, in which Vodafone’s Intelligence Manager, Fraud and Security set out details of a telephone conversation that he had had with the RA’s Head of Enforcement Policy.
• a ‘potential legal structure’ devised by Vodafone, which Vodafone considered at the time to be a legally compliant way of re-instating Floe’s GSM gateways until the results of the RA’s consultation were known\(^{117}\);
• a direct connection between Floe’s network and Vodafone’s network\(^{118}\);
• a standard interconnection agreement between Vodafone and Floe\(^{119}\); and
• a possible service provider relationship\(^{120}\).

267. None of these arrangements were ever concluded. During the course of its re-investigation, Ofcom asked Vodafone and Floe to confirm why the discussions about alternative commercial arrangements were unsuccessful. Floe gave various explanations why this was the case, including that Floe already had an agreement with Vodafone, Floe would have to accept higher prices (Vodafone’s standard interconnect rate) and Floe would have had to pay all sums outstanding to Floe, which Floe refused to do\(^{121}\). Vodafone also referred to the fact that Floe refused to pay its outstanding debts to Vodafone as a reason why the discussions with Floe never progressed\(^{122}\).

268. In the circumstances, Ofcom does not consider that Vodafone acted unreasonably. In particular, Ofcom considers it reasonable for Vodafone not to have progressed discussions with Floe further, whilst Floe refused to clear its outstanding debts to Vodafone. In this respect, Ofcom notes the judgment of the Court of Appeal in *Leyland DAF Ltd v. Automotive Products plc*. In that case, the Court of Appeal had to consider an appeal against a High Court decision refusing to grant an order requiring Automotive Product plc to supply Leyland DAF, unless Leyland DAF met its outstanding liabilities of £758,955. The Court of Appeal rejected the appeal. Steyn LJ stated that:

“In my judgment the conduct of Automotive is not in any way disproportionate to the commercial interests which they are seeking to protect. It is exactly tailored to achieve the payment of an overdue bill which is, in my judgment, a reasonable and normal response in such case, even if Automotive are in a dominant position within the meaning of Article 86 [now Article 82].”\(^{123}\)

The factors set out by the CAT at paragraph 338 of its judgment

269. In concluding that Vodafone’s refusal to supply Floe was objectively justified, Ofcom has taken into account each of the factors set out by the Tribunal at paragraph 338 of its Judgment.

\(^{117}\) This was discussed in a series of e-mails between one of Vodafone’s in-house solicitors and Floe’s solicitors between 21 May 2003 and 18 June 2003.
\(^{118}\) It appears that this was first discussed at a meeting between Floe and Vodafone on 22 May 2003 and then subsequently in correspondence between Floe (and Floe’s solicitors) and Vodafone between 11 June 2003 and 27 June 2003.
\(^{119}\) This was raised as a possibility by Vodafone’s Strategy Director in a fax to Floe’s Chairman of 18 June 2003.
\(^{120}\) This was discussed in correspondence between Floe’s Chairman and Vodafone’s Sales and Distribution Executive between 22 September 2003 and 6 October 2003 and at a meeting on 24 September 2003.
\(^{121}\) Floe’s response of 30 March 2005 to questions 29, 31 and 32 of Ofcom’s Notice under Section 26 of the Act of 24 March 2005.
\(^{122}\) Vodafone’s response of 13 April 2005 to questions 33, 36, 37 and 39 of Ofcom’s Notice under Section 26 of the Act of 24 March 2005.
(a) the legal status of the use of GSM Gateways and the common understanding in the industry at the time as to the legality or otherwise of GSM gateways and the licensing requirements under the WTA 1949

270. Ofcom has set out in Section 3 above the legal status of the use of GSM gateways. It is important to note that the legal position has not changed during the relevant period.

271. Concerning the understanding in the industry of the legal position at the relevant time, it is difficult to draw any definitive conclusions on the basis of the evidence that Ofcom has received during the course of this investigation. There does not appear to have been a comprehensively common understanding of all aspects of the legal status of the use of GSM gateways. However, Ofcom notes the following points:

- there appears to have been a lack of appreciation of the significance of the legal restrictions on GSM gateway use on the part of certain GSM gateway operators. Floe, for example, has stated that, at the time it entered into the Agreement with Vodafone, it "was not concerned with regulatory niceties" and that "it did not conduct a granular analysis on its legal position";

- none of the respondents to Ofcom’s statement for comment indicated that they disagreed with Ofcom’s conclusion that GSM gateways were ‘mobile’ stations and were therefore covered by the Exemption Regulations;

- the main issue of uncertainty within the industry appears to have related to whether or not the use of Commercial Single-User GSM Gateways located at the customer’s premises was exempted from the requirement for a licence. As noted above, this was the view taken by Vodafone. From discussions Ofcom has had with certain other industry members during its re-investigation, it appears that there was (and remains) a certain degree of confusion as to whether this type of GSM gateway usage was (and is) unlawful. Those misapprehensions are immaterial to the central issue in this case;

- there appears to have been a consensus that the use of Commercial Multi-User GSM Gateways was not exempted from the requirement for a licence; and

- certain industry members stated in response to Ofcom’s statement for comment that they considered that the mobile network operators’ licences enabled them to authorise the use of GSM gateways. However, all of the mobile network operators have stated that they agree with Ofcom that their licences do not cover GSM gateways.

272. As set out above, there appears to have been consensus within the industry that the use of Commercial Multi-User GSM Gateways was not exempted from the requirement for a licence. In these circumstances, Ofcom considers that Vodafone was justified (a) in considering that the use of Commercial Multi-User GSM Gateways was unlawful and (b) in disconnecting Floe’s suspected use of Commercial Multi-User GSM Gateways on the basis of such illegality.

124 Floe’s response of 30 March 2005 to questions 1 and 2 of Ofcom’s information request of 24 March 2005.
(b) The true construction of Vodafone’s licence

273. Ofcom has set out the true construction of Vodafone’s 2G cellular licence in Section 3 above. Vodafone does not – and did not at any relevant time – have the ability to use GSM gateways, or to authorise anyone else to use GSM gateways, under its licence. Nor did Vodafone at any time have a different view, notwithstanding the RA’s statements.

(c) the legal status of the representations made by the RA as to the scope of MNOs’ licences under the WTA 1949

274. Ofcom does not consider that any statements made by the RA regarding the scope of the mobile operators’ licences had any legal effect. They were based on an erroneous interpretation of the licences and are not capable of giving rise to any legitimate expectation or estoppel as against Vodafone. They were not relied upon, since they post-dated the Agreement and in any event were not accepted by Vodafone.

(d) Vodafone’s understanding of the scope of its 2G licence at the time it entered into the Agreement

275. Vodafone has confirmed that it was aware of the RA’s statements, which indicated that its licence might cover the use of GSM gateways. However, Vodafone did not consider that its licence covered the use of GSM gateways.

(e) that the agreement between Vodafone/Floe properly construed related to the provision by Vodafone of SIM cards to be used in GSM Gateway devices which on the then understanding of the RA were not exempt under the Exemption Regulations from the licensing requirement in section 1 WTA 1949, irrespective of whether the device was a “public” or “private” GSM gateway and if “public” whether for single-party or multi-party use

276. As explained above, Vodafone has confirmed to Ofcom that, at the time it entered into the Agreement with Floe, it considered that Floe would be using the SIMs provided by Vodafone under the Agreement in Commercial Single-User GSM Gateways located at the customer’s premises. Ofcom considers that this view is not inconsistent with the terms of Floe’s business plan provided to Vodafone prior to entering into the Agreement.

277. It follows that Vodafone’s disconnection of Floe’s SIMs, which Vodafone suspected were being used in Commercial Multi-User GSM Gateways, was not inconsistent with Vodafone’s interpretation of its Agreement with Floe.

(f) the RA’s statements on forbearance of enforcement including the extent to which either party was aware of such statements and, if aware when they became aware and the effect of those statements, if any, on the conduct of Vodafone and Floe in entering into the Agreement and

during the period August 2002 to February 2003 in performing the Agreement.

278. Both Floe and Vodafone have confirmed to Ofcom that they were aware of statements by the RA to the effect that it intended to forbear from taking enforcement action during the period of its consultation. However, they only became aware of such statements after they entered into the Agreement. Floe has confirmed that it first became aware of the RA’s forbearance from enforcement at a meeting with the RA on 7 February 2003. Vodafone became aware of the RA’s position at around the time the RA issued its consultation document in November 2002.

279. In the case of Floe, once it became aware of the RA’s statements on forbearance from enforcement, it does not appear that such statements had a significant impact on Floe’s performance of the Agreement. Indeed, Floe has confirmed that: “It would be wrong to categorise Floe’s appreciation of the situation as being one where it fully comprehended there was any form of regulatory forbearance. It did not perceive from its enquiries and what was going on in the industry and the operation of its contract with Vodafone that there was a problem.”

280. Similarly, until Vodafone came to suspect that Floe was operating Commercial Multi-User GSM Gateways, Vodafone considered that Floe’s activities under the Agreement were lawful. Therefore, the RA’s statements on forbearance from enforcement had no impact on Vodafone’s performance of the Agreement. In any event, the RA’s statements on forbearance do not remove Vodafone’s objective justification for disconnecting Floe in the circumstances.

(g) at the time of disconnection the RA had proposed to legitimise public GSM gateways including for “public” use

281. Ofcom does not consider that the fact that the RA had proposed a possible change to the law to legitimise public GSM gateway use is relevant in assessing whether Vodafone’s actions were objectively justified in the particular circumstances of this case. Vodafone was entitled to rely on the law as it stood at the relevant time – indeed, as explained above, not to have done so would have put Vodafone at risk of committing a criminal offence.

282. Although the RA was consulting on a possible change to the law, there was no imminent prospect of such a change being made at the time of disconnection. The RA had not specified when it was going to conclude its consultation. There was no guarantee that the RA would actually adopt its proposal. Furthermore, even if the RA had decided to adopt its proposal, it was not clear within what time frame the law would actually have been changed. In the circumstances, Ofcom does not consider that it was incumbent on Vodafone to defer taking action until after the RA announced the results of its consultation on whether or not it would legalise the commercial operation of GSM gateways, nor does the fact that Vodafone did not do so undermine Vodafone’s objective justification
for its actions, particularly given that it was decided in the end not to remove
the restriction on commercial GSM gateway use.

(h) the response by mobile operators to the RA that private use of GSM
gateways should be legitimised but that multi-user gateways should not
be legitimised

283. Vodafone, T-Mobile, O2 and 3 submitted a joint response to the RA’s
November 2002 consultation document. This response indicated that the
mobile operators were not in favour of removing the restriction on “3rd
party public commercial gateways”, but supported the “self-use of private GSM
Gateways by corporate customers for routing their own traffic”.

284. During the course of the investigation Vodafone confirmed that it was its
intention that the reference to “3rd party public commercial gateways” in the
mobile operators’ joint response should refer to GSM gateways used to provide
services to multiple end users, at a remote location to those premises. Vodafone
also confirmed that reference to “the self use of private GSM
gateways by corporate customers for routing their own traffic” was intended by
Vodafone to include GSM gateways used by customers solely for their own
traffic and for their own benefit. Vodafone also stated that it understood
that “third parties could install and maintain such equipment, could supply SIM
cards for use in such equipment and could even provide billing to the end
customer whilst the customer remained the user of that equipment.”

285. Ofcom notes that Vodafone’s understanding of the joint mobile operators’
response is consistent with Vodafone’s actions in disconnecting Floe.
Vodafone’s view was that the use of Commercial Multi-User GSM gateways
should remain prohibited. At the time of disconnection, Vodafone considered
that Floe was using Commercial Multi-User GSM Gateways (which Floe has
confirmed to be correct) and it was only Floe’s Commercial Multi-User GSM
Gateways which Vodafone sought to disconnect.

286. In any event, in Ofcom’s view, what Vodafone did or did not say in the context
of a consultation on a proposal to remove the restriction on the commercial use
of GSM gateways is not relevant in deciding whether or not Vodafone’s conduct
in disconnecting Floe’s GSM gateways was objectively justified. Even if
Vodafone considered that the legal position should be changed, it was entitled
to rely on the law as it stood at the relevant time.

(i) the omission in the response of the mobile operators to the November
2002 Consultation Paper of any consideration of single user gateways
used to provide telecommunications services by way of business

287. Ofcom does not consider that any omission to discuss Commercial Single-User
GSM Gateways in Vodafone’s submissions in response to the RA’s
consultation is relevant in deciding whether or not Vodafone’s actions were
objectively justified in this particular case. As already set out above, at the time

130 Vodafone’s response of 13 April 2005 to question 22 of Ofcom’s information request of 24
March 2005.
131 Vodafone’s response of 13 April 2005 to question 23 of Ofcom’s information request of 24
March 2005.
132 Vodafone’s response of 13 April 2005 to question 23 of Ofcom’s information request of 24
March 2005.
of disconnection, Vodafone considered that Floe was using Commercial Multi-User GSM Gateways (which Floe has confirmed to be correct) and it was only Floe’s Commercial Multi-User GSM Gateways which Vodafone sought to disconnect.

(j) whether the criteria established by Vodafone on which it based its decision to disconnect Floe were capable of distinguishing between “public” and “private” use (and/or single-use and multi-party use, if relevant)

288. During the course of its re-investigation, Ofcom asked Vodafone to confirm how it went about identifying the use of Commercial Multi-User GSM Gateways on its network, and in particular how it identified that Floe was using Commercial Multi-User GSM Gateways.

289. Vodafone stated that what first led it to suspect that particular SIMs were being used in Commercial Multi-User GSM Gateways, including those by Floe, was a combination of the following two factors:

a) very high mobile to mobile usage; and,

b) no fixed to mobile calls.133

290. Vodafone then carried out further analysis of SIMs it suspected of being used in Commercial Multi-User GSM Gateways. Vodafone considered that SIMs used in Commercial Multi-User GSM Gateways would typically have the following additional characteristics:

- they had very high mobile-to-mobile usage, on average 407.3 minutes usage per SIM per day;
- they used price plans with low on-net rates;
- they were originating calls from fixed locations;
- they were in batches of sequential SIMs; and
- they were associated with congestion on Vodafone’s network134.

291. As a check on the validity of its analysis, Vodafone compared its data on suspected Commercial Multi-User GSM Gateway use with data on the use of a GSM gateway used by [X], one of Vodafone’s customers considered to be a typical ‘lawful’ GSM gateway user135. This analysis confirmed that [X]’s usage was around 30 minutes per SIM per working day, compared with 407.3 minutes for the SIMs captured through Vodafone’s analysis of suspected Commercial Multi-User GSM Gateway use.

292. Where there was doubt or a dispute as to whether a particular SIM was being used in a Commercial Multi-User GSM Gateway, Vodafone carried out an analysis of the ‘B’ number (the receiving mobile number). According to

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135 Vodafone provided evidence of an email that had been sent from Vodafone’s Product Manager to Vodafone’s Head of Regulatory Affairs (headed “Premicells”) on 22 July 2002, which provided details on the Premicell mobile numbers used by [X], a Vodafone Corporate customer.
Vodafone, a Commercial Multi-User GSM Gateway will carry an unusually small proportion of calls to the same ‘B’ number and an unusually large proportion of calls to numbers which are not otherwise called again in that month. Vodafone carried out this analysis in respect of Floe’s SIMs referred to in Vodafone’s letter to Floe of 10 March 2003.  

293. As far as Ofcom is aware, unless a mobile operator is told that someone is using Commercial Multi-User GSM Gateways on its network, the only means by which such use can be identified by the mobile operator is by analysing the traffic volumes and call patterns. On the basis of the evidence provided by Vodafone, Ofcom is satisfied that the criteria Vodafone adopted for identifying Commercial Multi-User GSM Gateway use were reasonable. Further, it is clear that, in the case of Floe, Vodafone was correct in suspecting that Floe was using Commercial Multi-User GSM Gateways.

(k) the obligations of the United Kingdom not to take action prior to 25 July 2003 capable of seriously undermining the objectives of the Authorisation Directive

294. For the reasons set out in Section 3 above, Ofcom considers that the current restriction on the use of Commercial Multi-User GSM Gateways is compatible with EC law. However, even if that were not the case, Ofcom does not consider that this would affect Ofcom’s conclusions concerning objective justification. Both the obligation on the UK to implement the Authorisation Directive by 25 July 2003 and the obligation prior to 25 July 2003 not to take action capable of seriously undermining the objectives of the Authorisation Directive were obligations on the UK, not on Vodafone.  

295. Ofcom considers that, as a matter of legal certainty, an undertaking is entitled to rely on the national law in force until such time as it has been disapplied by a competent national authority or court.  

296. In this respect, Ofcom notes the ECJ’s judgment in Consorzio Industrie Fiammiferi (CIF). One of the issues considered by the ECJ in that case was whether a national competition authority could penalise anti-competitive conduct by undertakings, which was required or facilitated by national law. The ECJ held as follows:

“If a national law precludes undertakings from engaging in autonomous conduct which prevents, restricts or distorts competition, it must be found that, if the general Community law principle of legal certainty is not to be violated, the duty of national competition authorities to disapply such an anti-competitive law cannot expose the undertakings concerned to any penalties, either criminal or administrative, in respect of past conduct where the conduct was required by the law concerned.

The decision to disapply the law concerned does not alter the fact that the law set the framework for the undertakings’ past conduct. The law thus continues to constitute, for the period prior to the decision to disapply it, a justification

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137 The principle of legal certainty is recognised as a fundamental principle of EC law.: see Schermers and Waelbroeck, Judicial Protection in the European Union, 6th Ed, paragraph 117.
which shields the undertakings concerned from all the consequences of an infringement of Articles 81 EC and 82 EC and does so vis-à-vis both public authorities and other economic operators.”  

297. Ofcom also considers that the CFI’s judgment in *ITT Promedia NV*\(^{139}\) is relevant in this context. In that case, the CFI considered whether it could be an abuse of a dominant position for a dominant undertaking to bring proceedings against another undertaking. The party sued by the dominant undertaking claimed that the legislation which formed the basis of the action was itself incompatible with EC law. The CFI ruled that the European Commission had “correctly held in…the contested decision, without having previously considered the question whether the relevant Belgian provisions were compatible with Community law, that [the dominant undertaking] could legitimately refer to those provisions, in the case of its first action, so long as they had not been invalidated.”\(^{140}\)

**The factors set out by the CAT at paragraph 339 of its Judgment**

298. At paragraph 339 of its Judgment, the Tribunal stated that: “it was incumbent on the Director to have considered whether there had been any change in circumstances between the date of first disconnection and the date of the Decision that was relevant to the objective justification or otherwise of the then ongoing refusal to supply by Vodafone.”\(^{141}\)

299. Ofcom has taken into account each of the factors set out by the Tribunal at paragraph 339 of its judgment below.

(a) **The results of the Consultation announced by the Government on 18 July 2003**

*The definition of “user station” was found to be ambiguous*

300. Irrespective of whether or not GSM gateways fall within the definition of “user station” for the purposes of the Exemption Regulations, the use of Commercial Multi-User GSM Gateways would be unlawful. Therefore, Ofcom does not consider that the Government’s conclusion that the definition of “user station” is ambiguous is relevant in deciding whether or not Vodafone’s actions were objectively justified.

**That the restriction on provision of services to third parties over exempt devices should be retained**

301. The decision to retain the restriction on the commercial use of GSM gateways simply confirmed the status quo, i.e. that Floe’s use of Commercial Multi-User

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140 Paragraph 98.
141 Vodafone has confirmed to Ofcom that, following the date of disconnection, Floe has not requested any further SIMs from Vodafone, nor has it requested to be re-connected. In the absence of a specific request for further services from Floe, it is not clear to Ofcom that there is an ongoing refusal to supply as such by Vodafone.
GSM Gateways was unlawful. To the extent that it was objectively justified in disconnecting Floe prior to 18 July 2003, it clearly remained objectively justifiable for Vodafone to continue to refuse to supply Floe after 18 July 2003.

That the Government encouraged MNOs and Gateway Operators to consider ways of addressing pragmatically the existing uses of GSM gateway equipment that continued not to meet the requirement of exemption and issued a statement to the effect, even after it had been decided to retain the restriction on exemption in regulation 4(2), that it was eager for the possibility of a pragmatic approach to commercial ventures where traffic and connection to MNOs networks via GSM gateways would be agreed under the auspices of the MNOs' licences.

302. Whatever encouragement the Government gave to developing pragmatic solutions to the use of GSM gateways could not have compelled Vodafone to continue to supply Floe, in circumstances where Floe was operating unlawfully.

303. In any event, Vodafone did make attempts following the Government's announcement to discuss alternative lawful arrangements with GSM gateway operators. Following the Government's announcement on 18 July 2003, a meeting took place between the mobile operators (including Vodafone), the Mobile Gateway Operators Association and representatives from the RA and DTI to discuss possible 'lawful' solutions to the use of GSM gateways.

304. As noted above, Vodafone also engaged in discussions with Floe following its initial disconnection about possible alternative 'lawful' means of allowing Floe to continue in business.

The effect, if any, of the provisions of the Communications Act 2003 and the Authorisation Directive which came into force on 25 July 2003 (including sections 45 et seq. 164 and 172 et seq)

305. Ofcom has considered the provisions of the Communications Act 2003 and the Authorisation Directive highlighted by the Tribunal in its Judgment.

306. As set out at paragraphs 148-161 above, insofar as relevant to the facts of this case, the current legal position is compatible with the Authorisation Directive. In any event, even if that were not the case, for the reasons set out at paragraphs 294-297, Vodafone was still entitled to rely on the national law in force at the time.

307. In its Judgment, the Tribunal made reference to recital 27 of the Authorisation Directive. This states as follows:

“The penalties for non-compliance with conditions under the general authorisation should be commensurate with the infringement. Save in exceptional circumstances, it would not be proportionate to suspend or withdraw the right to provide electronic communications services or the right to use radio frequencies or number where an undertaking did not comply with one or more of the conditions under the general authorisation”.

308. This provision is directed to Ofcom (as the national regulatory authority responsible for enforcing the conditions under the general authorisation), not to
commercial entities such as Vodafone. In any event, Ofcom does not consider that Recital 27 of the Authorisation Directive is directed to a situation where, as in the present case, a particular type of activity is prohibited by one of the conditions attached to the general authorisation. In such circumstances, it is clearly an appropriate remedy to require the cessation of the activity in question.

309. Furthermore, it should be noted that Vodafone did not refuse to supply Floe in all circumstances. Vodafone refused to supply Floe, to the extent that Floe was operating unlawfully. Indeed, as set out above, Vodafone expressed its willingness to enter into alternative ‘lawful’ arrangements with Floe to enable Floe to continue in business. Ofcom does not consider that Vodafone’s conduct in these circumstances was inconsistent with the principle underlying recital 27 of the Authorisation Directive.

310. Section 45 of the Communications Act gives Ofcom the power to impose various *ex ante* conditions on communications providers, including certain ‘general conditions’ (i.e. conditions attached to the general authorisation). However, Section 45 is not relevant to the facts of this case. The general condition at issue in this case – the restriction on the commercial use of GSM gateways under Regulation 4(2) of the Exemption Regulations – was imposed pursuant to section 1(1) of the WTA. Section 45 does not apply to conditions specifically relating to the use of the radio spectrum.

311. Section 164 of the Communications Act applies where Ofcom considers it appropriate to limit the number of wireless telegraphy licences or grants of recognised spectrum access on certain frequencies, or for certain uses, for the purpose of securing efficient spectrum use.\(^\text{143}\). On the basis that no individual authorisations have as yet been granted in respect of the use of GSM gateways, it has not been necessary to consider whether to impose a restriction on the number of such licences pursuant to section 164 of the Communications Act. However, if Ofcom were in the future to grant licences covering certain types of use of GSM gateways prohibited by the Exemption Regulations, which as set out above is an option that Ofcom is currently considering, then Ofcom would need to consider whether to impose a limit on the number of such licences. However, this would be on a forward-looking basis only and would not therefore be relevant to the specific facts of this case.

312. Section 172 of the Communications Act sets out the procedure that Ofcom must follow for enforcing breaches of conditions attached to a licence or exemption issued under section 1(1) of the WTA\(^\text{144}\). Ofcom does not consider that this provision is relevant in this case, as it applies to Ofcom (as the national regulatory authority responsible for enforcing the terms of licences and the Exemption Regulations), not commercial entities such as Vodafone. Moreover, the procedure set out in Section 172 is designed to protect the proposed defendant’s rights of defence, in circumstances where it faces potential criminal sanctions. In contrast, in the present case, Vodafone was acting to protect its legitimate commercial interests, in circumstances where it faced potential criminal liability if it had continued to supply Floe.

\(^{143}\) Section 164 of the Communications Act reflects Article 7 and recital 11 of the Authorisation Directive.

\(^{144}\) Section 172 of the Communications Act reflects Article 10 of the Authorisation Directive.
Discrimination

313. In certain circumstances, it may be an abuse for a dominant undertaking, without any objective justification, to discriminate between customers. Section 18(2)(c) and Article 82(2)(c) both list as an example of abusive conduct:

“applying dissimilar conditions to equivalent transactions with other trading parties, thereby placing them at a competitive disadvantage.”

314. Not all differential treatment can be regarded as discriminatory. Discrimination consists of applying dissimilar conditions to equivalent transactions or similar conditions to different transactions.\(^{145}\)

315. In many cases, there may be an objective reason for treating customers differently. Conduct, which might on its face appear discriminatory, will not infringe the Chapter II Prohibition or Article 82, if it can be objectively justified.

Vodafone treatment of other GSM gateway users

316. In its original complaint to the Director, Floe alleged that:

“Vodafone has periodically suspended Floe’s GSM Gateway Service on the grounds of unlawful activity...yet still permitted GSM gateway services by others, including its own service providers – thereby, we believe, showing undue preference”.

317. Floe named three companies, which it believed had been treated differently by Vodafone, i.e. whose GSM gateway services had not been disconnected by Vodafone. These companies were Company A (who Floe stated were a customer of Service Provider X, one of Vodafone’s service providers), Company B\(^{146}\) (who Floe stated were a customer of Service Provider Y, one of Vodafone’s service providers) and Company C.\(^{147}\)

318. In the light of the allegations made by Floe, Ofcom has considered whether Vodafone has acted in a discriminatory manner in its disconnection of GSM gateway users (including the three companies named in Floe’s original complaint).

(i) Commercial Multi-User GSM Gateways

319. On the basis of the evidence provided to it by Vodafone, it does not appear to Ofcom that Vodafone has discriminated in its treatment of companies which it has suspected of using Commercial Multi-User GSM Gateways on its network.

320. As noted above, Vodafone identifies the use of Commercial Multi-User GSM Gateways on its network by examining the traffic profile and call volumes of SIMs. Vodafone has confirmed to Ofcom that, in each case that it has identified suspected Commercial Multi-User GSM Gateway use on its network, it has

\(^{145}\) The OFT’s Draft Guideline Assessment of Conduct (OFT 414a), at paragraph 3.9.

\(^{146}\) Company B now appears to be in Liquidation.

\(^{147}\) For reasons of confidentiality, the companies referred to in Floe’s complaint have been referred to as “Company A”, “Company B” and “Company C” and “Service Provider X” and “Service Provider Y”. 

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either taken steps to disconnect the SIMs itself or, in the case of certain SIMs supplied by Vodafone service providers, the service provider has disconnected the SIMs.

321. Vodafone first took steps to identify companies that were using Commercial Multi-User GSM Gateways on its network in January 2003\(^\text{148}\). It dealt with these companies in terms of size, dealing with the largest users first\(^\text{149}\). It appears that the first companies that Vodafone took action against were [\(<\)]\(^\text{150}\), [\(<\)]\(^\text{151}\) and Floe\(^\text{152}\).

322. The three companies referred to in Floe’s original complaint (Company A, Company B and Company C) were all customers of Vodafone’s service providers.

323. Company C was a customer of [\(<\)] (\([\,<]\) have a service provider relationship with Vodafone). Vodafone wrote to [\(<\)] on 22 May 2003, in similar terms to the letter to Floe of 10 March 2003. This letter stated that Vodafone suspected that 740 Vodafone SIMs had been supplied by [\(<\)] to one customer and that it understood these SIMs were being used in Commercial Multi-User GSM Gateways. Vodafone considered that the customer who had been supplied these SIMs was [\(<\)]\(^\text{153}\).

324. In response to specific questions from Ofcom, Vodafone stated that it had no record of having dealings with Company A and Company B. However, evidence provided to Ofcom during the course of the investigation

\(^{148}\) As set out in email of 9 January 2003 from Vodafone’s General Manager, Corporate Partners to Vodafone’s Billing Development Manager, which stated that “The desire is for personal contact to be made with all the owners of these SIMs and for them to be switched off, if they are deemed to be being used illegally”.

\(^{149}\) As set out in the email of 13 June 2003 from from Vodafone’s Intelligence Manager, Fraud and Security to Vodafone’s Strategy Director of 13 June 2003 in which Vodafone’s Intelligence Manager, Fraud and Security stated that “We have dealt with the gateway issue from the top down, contacting and ultimately disconnecting the largest gateway operators first. Following the removal of [\(<\)], Floe Telecom and [\(<\)], the next largest loss was attributed to SIMs on the [\(<\)] service provider base. [\(<\)] was advised of their activity in April and the call values subsequently dropped, but the activity continued; these SIMs are due to be barred within 14 days. The next largest losses were £50-70k per month on the [Service Provider Y], [Service Provider X] and [\(<\)] bases. [Service Provider X] has been given 14 days notice today, [Service Provider Y] will receive the same when [\(<\)] is able to approve the letter and [\(<\)]’s letter will go out when we receive contact details.”

\(^{150}\) Letter of 25 February 2003 from Vodafone’s Head of Sales to the Managing Director of [\(<\)], in which Vodafone stated that it suspected [\(<\)] was using SIMs in Commercial Multi-User GSM Gateways.

\(^{151}\) Letter of 10 March 2003 from Vodafone’s Director of Fraud and Security to the Business Director of [\(<\)], in which Vodafone stated that it suspected [\(<\)] was using SIMs in Commercial Multi-User GSM Gateways.

\(^{152}\) Letter of 10 March 2003 from Vodafone’s Director of Fraud and Security to the Chief Executive of Floe, in which Vodafone stated that it suspected Floe was using SIMs in Commercial Multi-User GSM Gateways.

\(^{153}\) Vodafone appears to have continued to monitor suspected GSM Gateway use by [Company C]. Ofcom notes an email from Vodafone’s Intelligence Manager, Fraud and Security to Vodafone’s Sales and Distribution Executive of 26 June 2003, in which Vodafone’s Intelligence Manager, Fraud and Security stated “the [\(<\)] SIMs are operated by [Company C], now owned by [\(<\)]. Having had notice of disconnection from [\(<\)], we have seen a couple of PayT SIMs substituted In [Company C] Gateway devices, indicating that [Company C] may intend continuing what we believe to be illegal carriage of third party traffic.”
demonstrates that Vodafone took action to suspend the services of the service providers (Service Provider X\(^{154}\) and Service Provider Y\(^{155}\)) who Floe stated had supplied SIMs to these companies.

325. Vodafone has confirmed that it has disconnected SIMs used by a total of 38 companies, including companies that had purchased SIMs directly from Vodafone Corporate and which Vodafone suspected of operating Commercial Multi-User GSM Gateways, and also SIMs used by its service providers where Vodafone suspected that either those service providers or the service providers’ customers were using the SIMs in Commercial Multi-User GSM Gateways. Vodafone stated that this amounted to between \([<]\) SIMs in total\(^{156}\).

(ii) Commercial Single-User GSM Gateways

326. Vodafone has confirmed to Ofcom that it is aware of certain SIMs supplied by Vodafone service providers being used in Commercial Single-User GSM Gateways on its network. On 14 October 2003, Vodafone requested that its service providers notify it of their intention to sell SIMs for use in Commercial Single-User GSM Gateways. Six Vodafone service providers contacted Vodafone in response to this request, with details of a total of 36 Commercial Single-User GSM Gateways. Vodafone has stated that this list includes all the Commercial Single-User GSM Gateways of which Vodafone is aware on its network\(^{157}\).

327. Vodafone has confirmed to Ofcom that it has never sought to disconnect SIMs used in Commercial Single-User GSM Gateways on its network\(^{158}\).

328. Ofcom does not consider that Vodafone’s differential treatment of Commercial Single-User GSM Gateways and Commercial Multi-User GSM Gateways amounts to discrimination by Vodafone, since such activities do not constitute ‘equivalent transactions’.

329. In any event, as noted above, Vodafone did not previously consider that the use of Commercial Single-User GSM Gateways located at the customer’s premises was unlawful. Although Ofcom does not agree with Vodafone’s previous legal interpretation, Ofcom notes that Vodafone was not alone in misunderstanding the proper scope of the law. It appears to Ofcom that certain other industry members shared the same misunderstanding that the use of Commercial Single-User GSM Gateways located at the customer’s premises were lawful. In the light of this, Ofcom considers that Vodafone was objectively justified in this case, on the basis of its understanding of the legal position at the time, in not disconnecting Commercial Single-User GSM Gateways. Ofcom notes that, following the Tribunal’s Judgment of 19 November 2004, Vodafone issued a bulletin to its sales channels indicating that it was no longer able to

\(^{154}\) On 13 June 2003 Vodafone wrote to Service Provider X in similar terms as the letter to Floe of 10 March 2003.

\(^{155}\) On 13 June 2003 Vodafone wrote to Service Provider Y in similar terms as the letter to Floe of 10 March 2003.

\(^{156}\) Vodafone’s response of 26 May 2005 to Ofcom’s Notice under Section 26 of the Act of 18 May 2005.

\(^{157}\) Vodafone’s response of 26 May 2005 to Ofcom’s Notice under Section 26 of the Act of 18 May 2005.

accept applications for the operation of GSM gateways on its network. Therefore, since its legal interpretation has been put in doubt, Vodafone has taken steps to prevent further Commercial Single-User GSM Gateways on its network.

(iii) Self-Use GSM Gateways

330. Vodafone has confirmed to Ofcom that between 1999 and 2003 Vodafone Corporate supplied GSM gateway equipment to certain of its corporate customers for their own use. The equipment was included in Vodafone’s standard price list and corporate customers could order the equipment via its website. Vodafone did not package the equipment with a specific tariff or any other products or services. Vodafone ceased supplying GSM gateway equipment to its customers in mid-2003.

331. From the evidence provided by Vodafone, it appears to Ofcom that Vodafone was supplying GSM gateway equipment to its customers for their own use. It does not appear to Ofcom that Vodafone was ‘using’ the equipment to provide an electronic communications service by way of business to its customers contrary to Regulation 4(2) of the Exemption Regulations. The use of the GSM gateway equipment by Vodafone’s customers was therefore exempt from the requirement for a licence and was lawful.

332. Ofcom does not consider that Vodafone discriminated by disconnecting Floe and other users of Commercial Multi-User GSM Gateways, whilst itself supplying GSM gateway equipment to its own customers, on the basis that Vodafone’s supply of GSM gateway equipment to its customers was lawful, whereas Floe’s use of Commercial Multi-User GSM Gateways was unlawful.

Whether such an abuse may affect trade within the UK and/or between Member States

333. In the light of Ofcom’s conclusion that Vodafone’s conduct in this case was not abusive, Ofcom does not consider it necessary to reach a conclusion on whether Vodafone’s conduct may have affected within the UK and/or between Member States.

Conclusion

334. For the foregoing reasons, Ofcom has concluded that Vodafone has not infringed the Chapter II Prohibition or Article 82 in the particular circumstances of this case. There are therefore no grounds for action against Vodafone.

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159 All Channel Bulletin No 91.04 of 16 December 2004.
160 Vodafone’s response of 13 April to question 12 of Ofcom’s Notice under Section 26 of the Act of 24 March 2005.
Introduction

335. The European Court of Justice has defined a dominant position as:

“…a position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained on the relevant market by giving it the power to behave to an appreciable extent independently of its competitors, customers and ultimately of consumers”\(^{162}\).

336. For the purposes of the Chapter II prohibition and Article 82, dominance is assessed within a relevant economic market.\(^{163}\). The relevant market has two dimensions: the relevant goods or services (the product market) and the geographic extent of the market (the geographic market)\(^{164}\).

337. A relevant product market comprises all those products and/or services which are regarded as interchangeable by any reason of the products' characteristics, prices and intended use\(^{165}\). A relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services in which the conditions of competition are sufficiently homogeneous and which can be distinguished from the neighbouring areas because the conditions of competition are appreciably different in those areas\(^{166}\).

338. The ‘hypothetical monopolist test’ is a useful tool to identify close demand-side and supply-side substitutes. A product (or service) is considered to constitute a separate market if a hypothetical monopoly 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 unprofitable. If such a price rise would be unprofitable, because customers would switch to other products, or because suppliers of other products would begin to compete with the monopolist, then the market definition should be expanded to include substitute products.

339. The complaint that was submitted by Floe was that Vodafone has abused a dominant position by suspending the SIMs that were being used in Floe’s GSM gateways. Therefore in investigating this complaint, Ofcom has considered both the upstream market in which Vodafone supplied the SIMs to Floe and the downstream market in which the effect of any conduct carried out by Vodafone is likely to occur (i.e. the market in which Floe is engaged).

\(^{163}\) See OFT Guidelines 402 The Chapter II Prohibition, paragraph 3.3
\(^{164}\) See OFT Guideline 403 Market Definition, paragraph 2.10.
\(^{166}\) Commission notice on the definition of the relevant market for the purposes of Community competition law, OJ [1997] C372/5, paragraph 8.
340. In the light of Ofcom’s conclusions on abuse, which are set out in detail in Section 4, Ofcom does not consider it necessary to reach a conclusion on market definition and dominance.

341. However, for the purposes of considering Vodafone’s conduct, Ofcom has adopted the view that the relevant market is the market for wholesale voice call termination of calls to subscribers on Vodafone’s network, and that Vodafone holds a dominant position in this market.

342. Ofcom will first consider the definition of the downstream market. This is because the demand for the upstream service is a derived demand i.e. the level of demand for the upstream service depends upon the demand for the retail service in the downstream market. Hence, if the upstream input accounts for a sufficiently large proportion of the downstream price, the range of available substitutes in the downstream market will inform the likely range of substitutes for the upstream service.

**Downstream product market definition**

**GSM gateways**

343. Ofcom understands that at the time Floe’s GSM gateways were disconnected by Vodafone, there were a number of operators that were using GSM gateways to provide reduced rate fixed-to-mobile calls to either business end-users and/or communications providers.

344. During the course of the investigation, Ofcom has established that at the time of service disconnections by Vodafone, Floe operated Commercial Multi-User GSM Gateways to provide reduced rate fixed-to-mobile calls to both business end-users and other communications providers. These communications providers were either re-sellers or service providers. When a communications provider purchased this service from Floe, it would resell this service to its own end-user customers.

345. The service provided by Floe enabled its customers to make reduced rate fixed-to-mobile calls on the four GSM mobile networks. In order to provide this service Floe wirelessly interconnected with each mobile operator via the air interface. To achieve this Floe purchased a wholesale access and call origination service from each of the mobile operators (accessed using SIM cards), and used these SIMs in its Commercial Multi-User GSM Gateways to convert the fixed-to-mobile calls made by its customers into mobile-to-mobile calls, which the mobile network then terminated at on-net rates. Therefore Floe offered its business end-user customers and its communications provider customers the ability to make fixed-to-mobile calls to any mobile network at on-net rates. Floe offered these calls at a single pence per minute (ppm) rate during both peak and off-peak time periods.

346. During peak hours on-net calling charges are significantly below the mobile termination rate charged for the termination of fixed-to-mobile calls. For example, in August 2003 peak rate termination charges were in the region of 12ppm, whilst on-net calling charges could be as low as around 6-7 ppm. Therefore, by purchasing on-net calls rather than mobile termination, Commercial Multi-User GSM Gateway operators such as Floe were able to obtain a discount on the regulated mobile termination rates during peak hours.
During off-peak hours the mobile termination rates fall to 4ppm to 5ppm, hence the differential between fixed-to-mobile calls offered via a GSM gateway and fixed-to-mobile calls delivered via a fixed point of interconnection disappears.

347. Whilst there is a significant differential between the peak and off-peak rates for wholesale mobile termination the average charges are cost-based. Since 2002/3 the wholesale mobile termination charges of Vodafone, T-Mobile, O2 and Orange have been subject to charge controls\(^\text{167}\). Details of the current charge controls have been set out in section 3 above.

Other types of ‘reduced-rate’ fixed-to-mobile products

348. The services that Commercial Multi-User GSM Gateway operators such as Floe offered are one of a variety of products which have emerged to address the demand from business users for reduced rate peak time fixed-to-mobile calls. Other reduced-rate fixed-to-mobile calling products include Mobile Virtual Private Network (“MVPN”) products offered by mobile network operators and other communications providers\(^\text{168}\). Typically, these products offer fixed-to-mobile calls at reduced rates, which, at the time of service suspension and/or disconnection by Vodafone, were in the region of 6ppm to 10ppm.

349. MVPNs are generally offered in a package with other mobile telecommunications services (including access and origination) and involve setting-up a direct link between the business end-user and one of the mobile networks. Given that these products link the business end-user to only one mobile network they involve limits on the types of fixed-to-mobile calls for which reduced calling rates are available. Typically these will be limited to those calls which are terminated on the mobile network to which the business end-user is directly connected (i.e. those calls which are considered to be on-net). Additionally, in some cases the reduced rates are limited to a defined group of handsets on the mobile network (e.g. the handsets of a business’ employees). Therefore, there are some key differences between the reduced rate services offered by the GSM gateway operators such as Floe, and those offered via an MVPN.

The delivery of fixed to mobile calls via a fixed point of interconnection

350. Business end-users can also access fixed-to-mobile calls from other fixed network operators and service providers. However, whereas Commercial Multi-User GSM Gateway operators such as Floe used GSM gateways to achieve connectivity with the mobile networks via the air interface, other fixed network operators and service providers interconnect with each mobile operator’s network via a fixed point of interconnection.

351. Fixed-to-mobile calls routed via a fixed point of interconnection are not charged at the same reduced retail rates as fixed-to-mobile calls routed via a GSM gateway. This is because, when a call is routed via a fixed point of interconnection, the operator originating the call has to pay a regulated wholesale termination charge to the mobile operator that is terminating the call. As set out above, during peak hours regulated wholesale termination charges

\(^{167}\) In addition, the mobile termination rates charged by Vodafone and O2 have been subject to a price cap since 1998/9.

\(^{168}\) A number of communications providers have service provider relationships with mobile operators for MVPN products.
can be significantly higher than the on-net call rates paid by GSM gateway operators (for example 12ppm compared to 6-7ppm).

352. This difference in input prices results in a difference in the retail prices charged for fixed-to-mobile calls by the relevant operators. During peak hours fixed-to-mobile calls via a GSM gateway are priced at around 10ppm to 12ppm, this compares to retail rates of around 20ppm to 25ppm for calls offered by other fixed network operators and service providers via a fixed point of interconnection. During off-peak hours the differential between these rates largely disappears.

Consideration of the relevant downstream market(s)

353. As explained above, Floe offered services to both business end-users and other communications providers (ie. service providers and re-sellers). Therefore, in order to identify the relevant product market or markets for these services it is necessary to consider the service provided to end-users separately from that provided to communications providers.

354. The relevant market at the retail level for services provided to business end-users is considered first. Ofcom will then consider the relevant market for the provision of wholesale inputs to this market to communications providers. This is because the demand for the services of GSM gateway operators at the wholesale level can be considered to be derived demand from the retail product provided to business end-users. Therefore, the relevant demand-side substitutes at the retail level can also inform the assessment of substitutes at the wholesale level.

(i) the relevant product market for business end-users

355. Ofcom's starting point in identifying the relevant downstream market(s) is to consider the effect of a hypothetical monopolist increasing the retail price of fixed-to-mobile calls provided via a GSM gateway above the competitive level by 5-10%. To assess this Ofcom first considers the possible demand-side effects of this increase and then consider any possible supply-side effects.

Would a GSM gateway operator’s customers switch to other fixed operators and/or fixed service providers in the event of a 5-10% price rise?

356. If the retail price of calls made via a GSM gateway increased above the competitive level by 5-10%, it is necessary to consider whether the GSM gateway operator’s customers could substitute to other retail providers of fixed-to-mobile calls (i.e. those purchasing wholesale mobile call termination under standard fixed interconnection agreement ). There are a significant number of fixed network operators and service providers offering retail fixed-to-mobile calls to business end-users.

357. Generally, in order to use the service provided by the GSM gateway operator the GSM gateway operator’s customer would also need to have access to a fixed line and therefore would be expected to have in place a contract with either a fixed network operator or service provider for other calls made via its fixed line (e.g. local and national calls). This should minimise the likelihood of there being any significant barriers to end-users switching from a GSM gateway operator to another retail provider of fixed-to-mobile calls.
358. However, as discussed above the standard retail fixed-to-mobile calling charges are above the rates charged by GSM gateway operators, particularly during peak hours when the differential can be significant (e.g. 12ppm compared to 25ppm). These price differences are due to the GSM gateway operators accessing discounted inputs at the wholesale level rather than due to differences in the underlying cost of providing the relevant call.

359. In undertaking a ‘hypothetical monopolist test’ it is necessary to assess the effect of a change in price from the competitive level. Therefore to assess whether the price differential between standard retail fixed-to-mobile calls and those calls provided via a GSM gateway is a barrier to end-users substituting between these calls, such that they should be considered to be in different markets, it is necessary to assess whether the differential observed in practice is in accordance with the differential we would expect to find if both calls were priced at the competitive level.

360. In a competitive market it is expected that prices will be driven down to the marginal cost of providing the product or service. This is because, if prices are above marginal cost operators will have an incentive to reduce their price and in so doing (temporarily) capture the entire market. However, when one operator reduces its price all other operators will follow in order to regain their share of the market. This competitive process would be expected to continue until the price falls to marginal cost. At this point, operators would not be expected to reduce prices any further as to do so would make them loss making.

361. The expectation of price equal to marginal cost holds when there are no fixed costs. However, in a market with significant fixed costs the price which would be expected to prevail in a competitive market would be generally determined by the long run incremental costs (including a mark-up for common costs) of providing the product or service rather than the marginal cost as this allows the operators to recover the fixed costs of providing the product or service.

362. Hence, in assessing whether the service provided by GSM gateway operators such as Floe is within the same market as retail fixed-to-mobile calls delivered via a fixed point of interconnection, it is necessary to identify whether there are significant differences in the long run incremental cost of providing these calls. The cost of providing a fixed-to-mobile call is to a large extent determined by the cost of wholesale mobile call termination. Therefore, the regulated wholesale rate for terminating a call on a mobile network, which is set by reference to the long run incremental cost of providing this service, could generally be considered to be a lower bound on the competitive price for a fixed-to-mobile call via a GSM gateway. The same can also be argued for standard retail fixed-to-mobile calls.

363. Therefore, for the purposes of a ‘hypothetical monopolist test’, Ofcom would not expect there to be significant differences between the competitive price of a fixed-to-mobile call provided via a GSM gateway and that of a fixed-to-mobile call provided via a regulated wholesale interconnection. Therefore, for the purpose of identifying relevant markets, the price differential exhibited at the time of service disconnections by Vodafone should not be considered a barrier to end-users substituting to other retail providers of fixed-to-mobile calls in response to a SSNIP by a hypothetical monopoly supplier.
364. Therefore, at the competitive price level, Ofcom considers that a 5-10% increase in the price of fixed-to-mobile calls via a GSM gateway would be rendered unprofitable by end-users substituting to other providers of retail fixed-to-mobile calls (e.g. fixed network operators and other service providers). Hence Ofcom is of the opinion that fixed-to-mobile calls provided via a GSM gateway are in the same retail market as fixed-to-mobile calls provided via a fixed point of interconnection.

365. This implies that the existing price of a fixed-to-mobile call provided via a GSM gateway is below the price that would be expected in a competitive market. This is not an unreasonable conclusion in this case. The price of fixed-to-mobile calls provided via a GSM gateway is largely determined by the price of on-net calls, as sold as part of a bundle of mobile access and call origination. The price of individual items when sold within a bundle will often differ from the competitive price if each individual item were sold separately. This is because, when products are sold as a bundle the bundled package is generally sold at a price which is lower than the sum of the individual component’s prices.

366. Therefore, by purchasing on net calls at the bundled price but consuming them as a stand-alone product, the GSM gateway operators are obtaining on-net calls at price which is below the price for the stand-alone product in a competitive market. In this regard, Ofcom notes that Hutchison 3G UK Limited (“3”) has stated to Ofcom that “Mobile tariffs are designed on the basis of customer call patterns. Bundled tariffs of this type are proving popular with customers. Gateway operators take advantage of these tariff bundles, using them for very skewed call patterns. This imposes costs on the network operators, such that widespread gateway operations would mean such structures of tariffs would not be sustainable.”

Would a GSM gateway operator’s customers switch to other ‘reduced rate’ fixed-to-mobile products in the event of a 5-10% price rise?

367. In addition to fixed-to-mobile calls offered by other fixed operators it is possible that end-users could substitute to other reduced-rate fixed-to-mobile products, for example the MVPNs offered by Vodafone and the other mobile operators.

368. Based on the evidence available, there are a number of key differences between MVPN products offered by the mobile operators and those services provided by GSM gateway operators such as Floe which may impact upon their substitutability. These key differences are discussed below and their impact upon the substitutability of these services is assessed.

369. An MVPN is generally offered in a package with other mobile services (including access and origination). In addition, an MVPN will require the provision of a leased line between the business customer’s PABX and the mobile network. Therefore, the purchase of an MVPN will incur fixed set-up costs. These factors limit the substitutability of these products for the services offered by GSM gateway operators, particularly for smaller business end-users that may not generate sufficient volumes of fixed-to-mobile calls to justify the fixed costs involved in acquiring an MVPN.

370. Ofcom understands that business end-users generally connected to Commercial Multi-User GSM Gateway Operators via IA or CPS rather than via

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169 3’s response of 1 April 2005 to Ofcom’s statement for comment of 3 March 2005.
a leased line. In this regard, Ofcom notes Floe’s statement that “Theoretically customers could be offered/take any of Floe’s products but as a general rule took the product that provided them with the best savings for the least incurred implementation or set-up cost.” Ofcom notes that of the 21 customers that Floe has identified to Ofcom, 18 accessed Floe’s services via IA or CPS.

371. A further difference between MVPN products and the services offered by GSM gateway operators are that the former generally impose restrictions on the destination of fixed-to-mobile calls. For example, MVPN products limit the cheapest rates to calls made to registered mobile numbers (e.g. a company’s employees) on the network of the mobile operator that is supplying the MVPN. Reduced rates also apply to calls to non-registered mobiles on the network of the mobile operator that is supplying the MVPN. However the services offered by GSM gateway operators allow end-users to make cheaper calls to any mobile number on any mobile network. Therefore, the substitutability of an MVPN product will depend upon whether a business end-user’s fixed-to-mobile traffic is predominately to a restricted range of numbers or to numbers on only one mobile network.

372. To assess whether this was the case for businesses which use the services provided by GSM gateway operators Ofcom has also examined evidence provided by Floe on the split of its customers’ traffic between different networks. This indicated that its customers’ traffic was split over all of the four GSM mobile networks, and was not generally weighted predominately in favour of one operator.

373. In order to consider whether those businesses which purchase services from GSM gateway operators would consider an MVPN product to be a viable substitute, Ofcom has examined the average volume and split of calls made by businesses that use of each of these services, and the implication of these for the total annual call charges paid at the prices at around the time of the disconnections by Vodafone.

374. This analysis has been undertaken at the call price levels evident in the market. This is because it is reasonable to expect the relative call prices for these two services at competitive price levels to be consistent with the relative prices evident in the market. Both GSM gateways and MVPNs make broadly comparable use of network resources in order to provide a fixed-to-mobile call and both access these resources on similar terms. In particular the key network resource used, and key driver of the costs of the calls, is the termination of the call on the mobile network. This cost is common to both services and is reflected in both the existing market prices (at the on-net rates) and at competitive prices (at the rates implied by the long run incremental cost of terminating a call on a mobile network). The difference between the two services, which would be expected to be reflected in the relative prices, is the difference in the cost of the fixed network resources used before the call is handed over to the mobile network. Any differences in these costs (for example differences in the cost of using a leased line rather than IA or CPS) would

170 Floe’s response of 22 April 2005 to question 3(b) of Ofcom’s Notice under Section 26 of the Act of 18 April 2005.
171 Floe’s response of 22 April 2005 to question 3(a) of Ofcom’s Notice under Section 26 of the Act of 18 April 2005.
already be reflected in the existing market prices to a comparable extent as they would be at competitive price levels.

375. Evidence collected in a previous Ofcom investigation into the supply of MVPN products by the mobile operators (completed in May 2004) identified that the average customer for an MVPN made 308,500 discounted fixed-to-mobile call minutes per annum at an annual call expenditure of £22,200. This only includes the expenditure on the discounted fixed-to-mobile calls and does not include subscription charges or other set-up fees.

376. Examination of invoices provided by Floe indicates that on average its customers made discounted fixed-to-mobile call minutes per annum at an average expenditure of £. However, these calls were split over the four GSM mobile networks, whilst the calls made via an MVPN are limited to only one mobile network.

377. Estimates of the equivalent annual expenditure if an average user of a GSM gateway were to switch to an MVPN indicates that this would increase their total average expenditure on fixed-to-mobile calls from £ to £ (excluding any additional subscription charges or other set-up fees involved in acquiring an MVPN, for example the cost of acquiring a leased line). This suggests that GSM gateway operators would have to increase their call prices by 50% for their average end-user to become indifferent between their solution and that offered via an MVPN.

378. Therefore, Ofcom considers that there is insufficient evidence that the customers of GSM gateway operators would substitute to MVPN products in significant enough numbers to render a 5-10% increase in the price of GSM gateway services unprofitable. This suggests that MVPN products are not within the same economic market as fixed-to-mobile calls made via GSM gateways.

Would a GSM gateway operator’s customers switch to other methods of communication in the event of a 5-10% price rise?

379. Additionally Ofcom would not expect a 5-10% increase in the price of a fixed-to-mobile call to be rendered unprofitable by the calling party switching to other means of communication to reach mobile customers (e.g. calling a fixed line rather than a mobile number, sending a fax or an email etc). As the mobile subscriber (i.e. the called party) can usually be contacted only on one mobile network, the one that he or she has chosen as his or her provider of mobile services.

Summary of demand-side analysis

380. The evidence presented above suggests that if a hypothetical monopoly supplier of fixed-to-mobile calls via a GSM gateway were to increase prices above the competitive level by, for example 5% to10%, its customers would be expected to substitute to other retail providers of fixed-to-mobile calls. However, its customers would not substitute to an MVPN, or to an alternative means of communication, such as email.

173 “Suspected Margin Squeeze by Vodafone, O2, Orange & T-Mobile” at http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ccases/closed_all/cw_615/decision.pdf
381. Therefore Ofcom’s analysis of demand-side substitutability suggests that the relevant market for the retail of fixed-to-mobile calls via a GSM gateway is the retail market for business fixed-to-mobile calls.

Would other suppliers enter the retail market for the provision of fixed-to-mobile calls to business end-users in the event of a 5-10% price rise?

382. Another relevant consideration when undertaking a ‘hypothetical monopolist test’ is whether there are possible supply-side substitutes which widen the market from that identified through the demand-side analysis. However, given that the consideration of supply-side substitutes would only widen the market and given that it is not necessary for Ofcom to reach a final conclusion on the relevant markets in this case, Ofcom does not consider it necessary to assess possible supply-side substitutes in the downstream market.

Conclusion on product market definition for end-users

383. Ofcom’s view is that there is a relevant product market at the retail level for the provision of fixed-to-mobile calls to business end-users. This market includes fixed-to-mobile calls provided to business end-users via GSM gateways and those fixed-to-mobile calls that are delivered via a standard fixed interconnection.

(ii) the relevant product market for communications providers

384. In addition to providing services to business end-users Floe also offered services at the wholesale level to other communications providers (re-sellers and service providers). The purpose of these transactions was to allow the communications providers to access mobile termination via the GSM gateway. This was then used to provide fixed-to-mobile calls to the communications provider’s own end-user customers.

385. The service provided to communications providers would typically consist of the ability to connect to the network of the GSM gateway operator (either via a direct interconnection or via IA or CPS), the conveyance of the fixed-to-mobile call over the network of the GSM gateway operator to the location of the GSM gateway (i.e. the point of wireless interconnect with the mobile network), and finally the termination of the call via the mobile network to any mobile network.

386. The demand for the services of GSM gateway operators at the wholesale level can be considered to be derived demand from the retail product provided to business end-users\(^{174}\). Therefore, the relevant demand-side substitutes at the retail level can also inform the assessment of substitutes at the wholesale level.

Conclusion on product market for communications providers

\(^{174}\) Some communications providers may have been using the wholesale services provided by GSM gateway operators to terminate fixed-to-mobile traffic originated by customers other than business end-users (for example international or residential traffic). However, Ofcom considers that there is no available evidence to suggest that the majority of fixed-to-mobile traffic terminated by GSM gateway operators was originated by users other than business end-users.
387. This suggests that mobile termination for fixed-to-mobile calls via a standard interconnection agreement should be considered as a substitute for the wholesale services provided by GSM gateway operators.

388. Similar considerations will also hold for supply-side substitutes at the wholesale level. Hence, in accordance with the approach taken to identifying the relevant market at the retail level, Ofcom does not consider it necessary to assess possible supply-side substitutes at the wholesale level.

389. Therefore Ofcom’s analysis suggests that there is a relevant product market for the wholesale of mobile termination to service providers and resellers.

Conclusion on downstream product markets

390. Based on the evidence presented above Ofcom’s view on the product market definitions for the services provided by Floe are:

- the retail market for the provision of fixed-to-mobile calls to business end-users; and
- the wholesale of mobile termination to communications providers

Geographic market definition

391. When identifying relevant markets it is necessary to consider the relevant geographic market as well as the relevant product market.

392. Fixed network operators and service providers which provide fixed-to-mobile calls to businesses generally offer services throughout the United Kingdom. However, some operators do focus on particular geographic areas, for example the South East. Despite this, if a hypothetical monopolist in one area of the United Kingdom increased its prices over the competitive level there are no significant barriers which would be expected to prevent existing network operators in other areas and service providers extending their geographical coverage to these areas. Consequently, the relevant geographic market is considered to be the whole of the United Kingdom.

Upstream product market definition

393. Vodafone provided Floe with a wholesale access and origination service which Floe used to access mobile termination at on-net rates. At the point when Vodafone disconnected the SIMs that were being used by Floe, Vodafone suspected that these SIMs were being used to access mobile termination at on-net calling rates. Therefore, by suspending the SIMs used by Floe, Vodafone was implicitly declining to provide mobile termination at wholesale on-net rates.

394. In undertaking a ‘hypothetical monopolist test’ it is necessary to consider, if a hypothetical monopoly supplier of call termination via the air interface to GSM gateway operators were to increase the price of its service by 5-10%, whether or not there are close substitutes which the GSM gateway operators would switch to.

395. One possible substitute is the regulated wholesale interconnection product offered by the mobile operators. This wholesale product is offered to all third party operators (both fixed and mobile) who directly interconnect with a mobile operator in order to terminate calls on its network.
396. The provision of wholesale mobile call termination is regulated and mobile operators are obliged to provide this product to all interconnecting operators on a non-discriminatory basis. Therefore, if GSM gateway operators such as Floe were to request this product the mobile operators would be obliged to provide it at the standard regulated rates.

397. During peak hours the GSM gateway operators have not used this regulated product as, at these times, the rates charged for wholesale termination are significantly above the on-net rates which the GSM gateway operators use to access mobile termination via the air interface.

398. However, as discussed above, at the time of service disconnections by Vodafone the price differential between on-net and wholesale termination rates should not necessarily be taken as evidence that these two products are not close substitutes for a GSM gateway operator for the purpose of identifying relevant product markets. When undertaking a SSNIP test it is necessary to consider whether a 5-10% increase above the competitive price would be enough to encourage substitution and, hence, to make the price increase unprofitable.

399. In accordance with the analysis set out above, Ofcom would expect the competitive price in a market with significant fixed costs to be generally determined by the long run incremental cost of providing the relevant product or service. In the case of wholesale on-net calls purchased by GSM gateway operators this will be heavily dependent on the cost of terminating the call on a mobile network. Hence, for the purposes of a ‘hypothetical monopolist test’, the regulated termination rates, which are set with reference to the long run incremental cost of providing this service, can be considered as a reasonable lower bound for the competitive price expected for wholesale on-net calls.

400. Therefore, at competitive price levels, it is reasonable to conclude that standard interconnection at regulated termination rates is a substitute for the service provided to GSM gateway operators by mobile operators. Hence there is evidence to suggest that the services provided to GSM gateway operators by mobile operators are in the same market as the market for termination on their networks.

How wide is the upstream market?

401. It is necessary to identify whether the relevant market is the market for mobile call termination on each mobile operator’s network or whether the relevant market should be widened to the market for mobile call termination across all mobile networks.

402. There are two factors which Ofcom has taken into account in this regard. These factors are:

- whether the disconnect created by the calling party pays principle (CPP) applies for calls made via a GSM gateway and hence, whether business end-users are able to substitute between the different mobile networks; and

- whether the presence of tariffs which include cross-network calls at on-net calling rates mean that the GSM gateway operators can substitute between different networks when purchasing mobile termination via the air interface.
Ofcom’s analysis in respect of the application of these two factors will now be set out.

The application of the calling party pays principle

403. Under the CPP arrangement, the calling party (and not the called party) pays the total price of a retail call to a mobile. This means that the call termination charge is included in the cost base of the network operator (either fixed or mobile) originating the call, and is reflected in the retail price it sets for calls originating on its network. The CPP arrangement therefore creates a disconnection between the calling party who pays for the termination service and the mobile subscriber (i.e. the called party) who chooses the provider of that service.

404. The effect of this disconnection between the calling party and the called party is that a 5-10% increase in the price of a call to a mobile phone would not be rendered unprofitable by the mobile subscriber (i.e. the called party) switching to a different mobile network. This is because they do not pay for the incoming call.

405. Nor would a 5-10% increase in the price of a call to a mobile phone be rendered unprofitable by the calling party switching to other means of communication to reach mobile customers, as the mobile subscriber (i.e. the called party) can usually be contacted only on one mobile network, the one that he or she has chosen as his or her provider of mobile services.

406. Ofcom’s review of wholesale mobile voice call termination markets noted three conditions that needed to be satisfied in order for a SSNIP in the price of termination to be rendered unprofitable due to substitution by the calling party:

- The calling party must be sufficiently aware that they are calling a mobile and that they are calling a specific mobile network.
- The calling party must be sufficiently aware of the price of calling that particular network.
- The calling party must be sensitive to changes in the prices of calling the network they want to reach (i.e. an increase in the termination charge above the competitive level must cause callers to adapt their behaviour to find an alternative way of contacting the person they want to call).

407. Ofcom’s review of wholesale mobile voice call termination markets considered that for the generality of fixed-to-mobile calls, these conditions are not satisfied. Therefore, in the event of an increase in the termination charge above the competitive level, the calling party will not be able to adapt their behaviour to find an alternative way of contacting the person they want to call. There are no a priori reasons to expect that fixed-to-mobile calls via a GSM gateway will differ substantially from the generality of fixed-to-mobile calls.

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408. By contrast, a relevant situation in which the CPP disconnect may not apply is when the called and calling party form part of a closed-user group. In this case, the same party is generally paying to both make the call and paying for the ability to receive the call. Given the lower rates for on-net calling Ofcom considers that that members of a closed-user group would all subscribe to the same mobile network. Hence, Ofcom considers that each end-user’s fixed-to-mobile and mobile-to-mobile traffic would be significantly skewed towards only one mobile network.

409. Ofcom has considered whether or not there is evidence to suggest that the fixed-to-mobile calls made via GSM gateways are closed-user group calls. Evidence provided by Floe suggests that each of its customers generated traffic to all of the mobile networks, and that the pattern of traffic was not predominately to only one network\textsuperscript{176}. The available evidence therefore does not suggest that the fixed-to-mobile calls made via GSM gateways are closed-user group calls.

Conclusion on the application of CPP

410. Hence, based on the above information Ofcom’s view of the relevant wholesale product market would be the market for mobile termination on each of the mobile operator’s networks.

The application of cross-network tariffs

411. A further factor to consider is whether or not the availability of cross-network minutes at on-net rates implies that the relevant market was the wholesale market for call termination across all mobile operators’ networks rather than on each mobile operator’s network.

412. In principle, if suitable cross-network tariffs are available, GSM gateway operators could purchase call termination via the air interface through cross-network minutes from only one mobile operator but still be able to terminate calls on all of the different mobile networks. Therefore, it would be possible for a GSM gateway operator to substitute between the different mobile operators in response to an increase in price above the competitive level imposed by one operator.

413. In order to assess whether the presence of cross-network minutes widens the relevant market Ofcom will consider the following three issues. Firstly Ofcom considers whether, taking a static view of the world, it would be practical for GSM gateway operators to use these tariffs. Secondly, Ofcom considers whether, taking a dynamic view of the world, the use of these tariffs by GSM gateway operators would be expected to have an effect upon their long term availability. Finally, Ofcom undertakes a hypothetical monopolist test to assess whether the presence of cross-network tariffs would make it unprofitable for a monopoly provider of call termination on its own network to increase the price of termination above the competitive level.

414. In order to assess whether in practice GSM gateway operators would be able to substitute between different network operators it is firstly necessary to consider the availability of tariffs including cross-network minutes. The cross-

\textsuperscript{176} As set out at paragraph 376 above.
network minutes do not remove the effect of the CPP disconnect for the end-users of the GSM gateway operators (i.e. the businesses making the fixed-to-mobile calls). Rather they allow a GSM gateway operator to buy discounted termination on networks other than the one to which it connects. Therefore, for cross-network minutes to be a reasonable substitute for on-net call minutes it would be necessary for the tariffs which include these calls to be suitable for substantially all of the GSM gateway operators’ traffic.

415. Analysis of tariff availability at the time of service suspension/disconnection by Vodafone indicated that the best available tariffs including cross-network minutes offered cross-network rates in the region of 7.5ppm for calls within the inclusive call bundle. The tariffs offering these calling rates had maximum inclusive call bundles of 1000 minutes per month. At this time GSM gateway operators were able to access on-net call rates of around 6.5ppm. Hence, if these operators were to switch to use cross-net minutes this would increase the call charges they paid by 15%.

416. In addition, the limit on the minutes within the inclusive call bundle could impact upon the number of SIMs required by the GSM gateway operator. Evidence presented by Floe indicated that if Floe was to use a tariff with a maximum inclusive call bundle of 1000 minutes to access cross-network tariffs this would require six times as many SIMs177.

417. However, despite these difficulties, it appears that some GSM gateway operators made use of cross-network tariffs in response to the mobile operators disconnecting the SIMs used to access on-net calls178. In addition, when assessing the impact of a price differential in the context of market definition analysis we need to consider whether this differential would be expected to persist at competitive price levels. The end-to-end network resources required to deliver an on-net and off-net mobile call are very similar. Hence, there are reasons to expect that the long run incremental cost of providing these two types of call may not be significantly different. Therefore, despite the 15% price differential at the time of the suspension/disconnection of Floe’s SIMs there are reasons to suggest that cross-network minutes may be a substitute for on-net minutes.

418. If we were to assume that it is practical for GSM gateway operators to use cross-network calls rather than on-net calls to access call termination via the air interface, for this to widen the relevant market the use of these tariffs by GSM gateway operators must not reduce the availability of these tariffs. Cross-network tariffs are offered by mobile operators in response to competitive pressure in the retail market for mobile access and origination. During peak hours the cross-network calls offered within these tariffs can be priced below the regulated wholesale mobile termination charge which these calls incur during these times. For example, the lowest price cross-network tariffs offer calling rates of 7.5ppm (at both peak and off-peak times), this compares to peak time wholesale call termination rates ranging from 10ppm to 14ppm. If GSM gateway operators were to make extensive use of these tariffs this would be expected to have impact upon the commercial viability of these tariffs. If a GSM gateway operator routed all of its traffic via only one mobile network operator this would result in the mobile operator receiving approximately four

177 Floe’s response of 17 May 2005 to Ofcom’s information Request of 10 May 2005.
178 As set out by VIP in its response of 17 May 2005 to Ofcom’s information Request of 10 May 2005.
times the volume of traffic from this user. However, as all calls generated would be expected to be peak time calls, the revenue which it receives for all of the incremental traffic would be below the wholesale termination charge which it is charged by the other mobile operators in order to terminate these cross-network calls.

419. Therefore, taking a dynamic rather than static view of the world indicates that significant use of cross-network minutes by GSM gateway operators would have a significant impact upon the commercial viability of these tariffs and it is reasonable to expect that this would result in mobile operators no longer supplying these tariffs to GSM gateway operators. In this regard, Ofcom notes that T-Mobile has stated to Ofcom that:

“the viability of T-Mobile’s current [¥] tariff which provides [¥] call minutes to any UK network for £[¥] per month is based on an expected use which includes significant calls to fixed networks. The viability of this tariff would be threatened if there were substantial use of this tariff only for calls to mobile networks (and not for lower cost calls to fixed networks), given the need for T-Mobile to recover from calls to mobiles the cost of other mobile operators’ termination charges and the cost of T-Mobile’s own network, administration and retail activities as well as VAT.”

420. Further to this, Ofcom has also undertaken a hypothetical monopolist test to assess whether or not the availability of cross-network minutes would make it unprofitable for a hypothetical monopoly supplier of mobile call termination on its own network to increase the price of termination above the competitive level by 5-10%.

421. Mobile termination is a necessary input into both wholesale on-net minutes and wholesale cross-network minutes. Therefore, if a hypothetical monopolist increased the price of mobile termination on its network above the competitive level we would generally expect that this would be passed through to the competitive prices of wholesale on-net minutes on the hypothetical monopolist’s network and wholesale cross-network minutes including calls to the hypothetical monopolist’s network (assuming that the price of the cross-network minutes is based on an average of the costs of providing the calls across all of the networks). Not to do so would be equivalent to the hypothetical monopoly supplier of termination competing with itself (i.e. allowing one product it provides, either as an end-product or as a wholesale input, to undermine another product it provides). Therefore, as Ofcom would expect the competitive price of the substitutable products to increase to a broadly comparable extent as the monopoly product, the price increase would not be rendered unprofitable by GSM gateway operators substituting away from for example standard mobile termination to wholesale on-net minutes or wholesale cross-network minutes.

**Conclusion on the application of cross-network tariffs**

422. Therefore, whilst Ofcom has not reached a final view on the substitutability of cross-net minutes for on-net minutes for GSM gateway operators at the time of service disconnections by Vodafone, based on a dynamic assessment of the potential impact of GSM gateway operators making use of cross-network tariffs,

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179 T-Mobile’s response of 14 April 2005 in response to Ofcom’s information Request of 24 March 2005
and upon the outcome of the hypothetical monopolist test, Ofcom’s view is that the relevant product market is the market for mobile termination on each mobile operator’s network.

The relevant upstream product market in which Vodafone may hold a dominant position

423. In the light of the analysis on the application of CPP and cross-network tariffs, Ofcom’s view on the relevant upstream market in which Vodafone may hold a dominant position is the market for the provision of mobile termination on Vodafone’s network.

Geographic upstream market definition

424. Each of the four mobile operators offer termination of calls throughout the whole of its network, which, in each case, covers the whole of the United Kingdom. Consequently, the relevant geographic market is the whole of the United Kingdom.

(ii) Vodafone’s position in the upstream market

425. Vodafone has a 100% market share in respect of the provision of call termination on its own network. Therefore, Vodafone is a monopolist in the provision of call termination on its own network.

426. Ofcom notes that there is currently no technological means which would make it possible for anyone other than Vodafone to provide call termination on Vodafone’s network. In these circumstances, and given Vodafone’s market share in respect of call termination on its network, Ofcom’s view is that Vodafone holds a dominant position in the market for the provision of call termination on its own network.

Conclusion on market definition and dominance assessment

427. For the reasons that have been set out, Ofcom does not consider it necessary to reach a conclusion on market definition and dominance. However, Ofcom has adopted the view that the relevant market is the market for wholesale voice call termination of calls to subscribers on Vodafone’s network, and that Vodafone holds a dominant position in this market.