



Neutral citation [2008] CAT 22

**IN THE COMPETITION
APPEAL TRIBUNAL**

Case Number: 1094/3/3/08

Victoria House
Bloomsbury Place
London WC1A 2EB

18 September 2008

Before:
LORD CARLILE QC
(Chairman)

**DR ARTHUR PRYOR CB
PROFESSOR PAUL STONEMAN**

BETWEEN:

VODAFONE LIMITED

Appellant

supported by

**BRITISH TELECOMMUNICATIONS PLC
TELEFÓNICA O2 UK LIMITED
ORANGE PERSONAL COMMUNICATIONS SERVICES LIMITED
T-MOBILE (UK) LIMITED**

Intervenors

-v-

OFFICE OF COMMUNICATIONS

Respondent

supported by

HUTCHISON 3G UK LIMITED

Intervenor

JUDGMENT

APPEARANCES

Mr. Tim Ward (instructed by Herbert Smith LLP) appeared on behalf of Vodafone Limited.

Mr. Pushpinder Saini QC and Mr. Alan Bates (instructed by the Office of Communications) appeared on behalf of the Office of Communications.

Mr. Aidan Robertson (instructed by BT Legal) appeared on behalf of the Intervener British Telecommunications plc.

Miss Dinah Rose QC and Mr. Brian Kennelly (instructed by Baker & McKenzie LLP) appeared on behalf of the Intervener Hutchison 3G UK Limited.

Miss Marie Demetriou and Miss Sarah Love (instructed by Field Fisher Waterhouse LLP) appeared on behalf of the Intervener Orange Personal Communications Services Limited.

Mr. Meredith Pickford (instructed by T-Mobile (UK) Limited) appeared on behalf of the Intervener T-Mobile (UK) Limited.

Miss Kelyn Bacon (instructed by Telefónica Europe plc) appeared on behalf of the Intervener Telefónica O2 UK Limited.

I. INTRODUCTION

1. This appeal is brought by the Appellant, Vodafone Limited (“Vodafone”), under section 192 of the Communications Act 2003 (“the CA 2003”). Vodafone appeal against the decision of the Office of Communications (“OFCOM”) to modify Part 1 and General Condition 18 of Part 2 of the General Conditions regarding number portability, as set out in Annex 2 to the concluding statement entitled “*Telephone number portability for consumers switching suppliers*” (“the Decision”), published on 29 November 2007.
2. Number portability is the process which enables subscribers to a fixed or mobile network to retain their telephone number(s) when they change network operator. Portability for fixed line operators was introduced from 1997, whereas mobile number portability (“MNP”) was introduced in the UK in January 1999 because, at the time, the former telecommunications regulator felt that many consumers, especially businesses, were reluctant to change their communications provider if this meant having to bear the inconvenience and costs of a new telephone number. The process is referred to as “porting” (as is the transfer of calls from one network to another). Market research conducted by OFCOM during February 2007 indicated that of those consumers who had switched mobile provider in the last 12 months, 34% had ported their number.
3. Under the current system for providing MNP in the UK, a customer of network A (“the donor network”) who wishes to transfer to network B (“the recipient network”) will first need to obtain a Porting Authorisation Code (“PAC”) from the donor network. Once the PAC is received, the customer can contact the recipient network and that network will then enter the PAC into the industry porting system, supplied by Syniverse. Before 31 March 2008, the donor network had five business days from this point in which to complete the porting process. This was reduced to two business days from 31 March 2008 by a statement published by OFCOM on 17 July 2007 (see section III below). Once the porting process has been completed, calls made to the customer’s original mobile telephone number will be routed to the recipient network. However, under the existing system, calls to a ported number are still generally routed

in the first instance to the donor network, which then onward routes the call to the recipient network.

4. The Decision mandates the establishment of a database, to be populated first with ported mobile numbers but later extending to ported fixed numbers too (see paragraph [5], below), so as to enable any provider to route calls directly to ported numbers without the need to route the call to the donor network in the first instance for onward routing to the recipient. The process envisaged in the Decision to achieve direct routing is known as All Calls Querying of a Common Database (“ACQ/CDB” or “CDB”). According to OFCOM, the only change that would be necessary under the new system in order to ensure correct routing of a ported number would be a single change to the relevant record in the CDB. The Decision also requires that, with effect from the 1st September 2009, the porting process for mobile numbers should be recipient-led (i.e. a customer would only need to contact his or her intended new provider in order to begin the porting process) and that the length of time to complete the porting process should be further reduced from two business days to two hours. At paragraph 2.2 of the Decision, OFCOM state that they consider changes to the current regime are necessary at this time in order to ensure that consumers may derive the maximum benefits from number portability and are protected from the market failures which arise under the current regime.
5. In terms of the timing of the direct routing aspect of the Decision, paragraph 1.9 provides:

“Ofcom has concluded that the costs of deploying [the CDB] solution will be outweighed by the benefits if direct routing is implemented by fixed networks as and when they deploy Next Generation Networks (“NGNs”). Mobile networks are already capable of interrogating databases on a call by call basis to determine how calls to ported numbers should be routed. The implementation challenges faced by providers of fixed services and mobile services are, therefore, different and the timetable which Ofcom is mandating reflects this.”

The Decision mandates that communications providers (both fixed and mobile) use all reasonable endeavours to establish a CDB ready to be populated by data as soon as reasonably practicable and, in any event, no later than 31 December 2008. Once established, the CDB must be populated with: (i) all ported mobile numbers as soon as reasonably practicable and, in any event, no later than 1 September 2009; and (ii)

all ported fixed numbers as soon as reasonably practicable and, in any event, no later than 31 December 2012.

6. The Decision also has implications for the current system of mobile call termination in the UK, which is the process of connecting a voice call from the network from which a call is made (“the originating network”) to the recipient network. Under arrangements entered into between mobile network operators (“MNOs”), the terminating network operator makes a charge for each call terminated on its network, known as a mobile call termination charge. Disputes over the rates charged in the mobile industry were the subject of consideration by the Tribunal in a number of appeals against determinations of OFCOM under the dispute resolution powers contained in section 185 of the CA 2003 (see, for example, *Hutchison 3G UK Limited v Office of Communications (Termination Rate Dispute)* [2008] CAT 12 and [2008] CAT 19). Given the system of onward routing that is currently followed in the industry, it is the donor network, rather than the recipient network, whose mobile call termination rate is charged to the originating network. The donor network passes the call termination charge received from the originating network to the recipient network after deducting a charge to compensate the donor network for its costs in routing the call. This charge is known as the donor conveyance charge (“DCC”). Under the arrangements set out in the Decision, the originating network would pay the recipient network’s call termination charge directly, as the call would no longer be routed via the donor network in the first instance. The DCC would therefore no longer arise. An appeal relating to a dispute between T-Mobile and H3G over the appropriate level of the DCC is currently pending before the Tribunal (Case 1093/3/3/07 *T-Mobile (UK) Limited v Office of Communications (Donor Conveyance Charge)*).
7. In order to avoid unnecessary levying of the DCC (in addition to other costs and technical inefficiencies associated with onward routing), certain MNOs have set up a system known as “call trap”. Under this system, calls made by a network’s own subscribers to a number that has been ported into the same network are not routed out to the called number’s original donor network for subsequent onward routing back to the network. Instead, the network routes (or “traps”) the calls on-net directly to the ported-in customer, thereby avoiding the extra costs associated with onward routing.

8. The appeal is brought by Vodafone under section 192(1)(a) of the CA 2003. Following receipt of the Notice of Appeal and publication of the summary of the appeal on the Tribunal's website, a number of applications for permission to intervene were received. At a case management conference held on 31 March 2008, British Telecommunications plc ("BT"), Orange Personal Communications Services Limited ("Orange"), T-Mobile (UK) Limited ("T-Mobile") and Telefónica O2 UK Limited ("O2") were granted permission to intervene in support of Vodafone. Hutchison 3G UK Limited ("H3G") were granted permission to intervene in support of OFCOM. The main hearing was held from 18 to 20 June 2008.
9. For the reasons set out below, the Tribunal is unanimous in finding that the appeal brought against the Decision is well founded.

II. LEGISLATIVE FRAMEWORK

10. Regulation of electronic communications across the European Union is based on the European Common Regulatory Framework ("CRF"), which was promulgated in April 2002 and had to be implemented into domestic law by the Member States by July 2003. One of the instruments comprising the CRF is Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services [2002] OJ L 108/51, 24.4.2002 ("the Universal Service Directive"). Article 30 of that Directive provides as follows (so far as is relevant):

"Article 30

Number portability

1. Member States shall ensure that all subscribers of publicly available telephone services, including mobile services, who so request can retain their number(s) independently of the undertaking providing the service:

- (a) in the case of geographic numbers, at a specific location; and
- (b) in the case of non-geographic numbers, at any location.

This paragraph does not apply to the porting of numbers between networks providing services at a fixed location and mobile networks.

2. National regulatory authorities shall ensure that pricing for interconnection related to the provision of number portability is cost oriented and that direct charges to subscribers, if any, do not act as a disincentive for the use of these facilities.

..."

11. Under Directive 2002/21/EC on the common regulatory framework for electronic communications networks and services [2002] OJ L 108/33, 24.4.2002 ("the Framework Directive"), each Member State must designate a national regulatory authority ("NRA") to carry out the regulatory tasks set out in the CRF. Such NRAs must be independent of the government of the Member State and must exercise their powers impartially and transparently. The United Kingdom's NRA is OFCOM.
12. The requirements laid down in Article 30 of the Universal Services Directive are implemented in domestic law by General Condition 18, which the Decision seeks to modify. The General Conditions were adopted by the Director General of Telecommunications on 22 July 2003 and subsequently amended by notifications made by OFCOM on 30 March 2006 and 17 July 2007. The General Conditions apply to all communications networks and service providers. The power of OFCOM to set conditions is provided in section 45 of the CA 2003. The test for setting or modifying conditions is set out in section 47 of the CA 2003, while the procedure for setting, modifying or revoking such conditions is provided in section 48. Those sections provide, so far as is relevant, as follows:

"45 Power of OFCOM to set conditions

- (1) OFCOM shall have the power to set conditions under this section binding the persons to whom they are applied in accordance with section 46.
- (2) A condition set by OFCOM under this section must be either—
 - (a) a general condition; or
 - (b) a condition of one of the following descriptions—
 - (i) a universal service condition;
 - (ii) an access-related condition;
 - (iii) a privileged supplier condition;
 - (iv) a significant market power condition (an "SMP condition").

...

46 Persons to whom conditions may apply

- (1) A condition set under section 45 is not to be applied to a person except in accordance with the following provisions of this section.
- (2) A general condition may be applied generally—
 - (a) to every person providing an electronic communications network or electronic communications service; or
 - (b) to every person providing such a network or service of a particular description specified in the condition.

(3) A universal service condition, access-related condition, privileged supplier condition or SMP condition may be applied to a particular person specified in the condition.

47 Test for setting or modifying conditions

(1) OFCOM must not, in exercise or performance of any power or duty under this Chapter—

- (a) set a condition under section 45, or
- (b) modify such a condition,

unless they are satisfied that the condition or (as the case may be) the modification satisfies the test in subsection (2).

(2) That test is that the condition or modification is—

- (a) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
- (b) not such as to discriminate unduly against particular persons or against a particular description of persons;
- (c) proportionate to what the condition or modification is intended to achieve; and
- (d) in relation to what it is intended to achieve, transparent.

48 Procedure for setting, modifying and revoking conditions

(1) Subject to the following provisions of this Chapter—

- (a) the way in which conditions are to be set or modified under section 45 is by the publication of a notification setting out the conditions or modifications; and
- (b) the way in which such a condition is to be revoked is by the publication of a notification stating that the condition is revoked.

(2) Before setting conditions under section 45, or modifying or revoking a condition so set, OFCOM must publish a notification—

- (a) stating that they are proposing to set, modify or revoke the conditions that are specified in the notification;
- (b) setting out the effect of those conditions, modifications or revocations;
- (c) giving their reasons for making the proposal; and
- (d) specifying the period within which representations may be made to OFCOM about their proposal.

(3) That period must end no less than one month after the day of the publication of the notification.

(4) In the case of a notification under subsection (2) with respect to an SMP condition, the applicable requirements of sections 79 to 86 must also be complied with.

(5) OFCOM may give effect, with or without modifications, to a proposal with respect to which they have published a notification under subsection (2) only if—

- (a) they have considered every representation about the proposal that is made to them within the period specified in the notification; and
- (b) they have had regard to every international obligation of the United Kingdom (if any) which has been notified to them for the purposes of this paragraph by the Secretary of State.

...”

13. The general duties that OFCOM must take into account in carrying out their functions are provided in sections 3 to 9 of the CA 2003. Sections 3 and 4 provide as follows:

“3 General duties of OFCOM

- (1) It shall be the principal duty of OFCOM, in carrying out their functions—
(a) to further the interests of citizens in relation to communications matters; and
(b) to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- ...
- (3) In performing their duties under subsection (1), OFCOM must have regard, in all cases, to—
(a) the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed; and
(b) any other principles appearing to OFCOM to represent the best regulatory practice.
- ...

4 Duties for the purpose of fulfilling Community obligations

- (1) This section applies to the following functions of OFCOM—
(a) their functions under Chapter 1 of Part 2;
- ...
- (2) It shall be the duty of OFCOM, in carrying out any of those functions, to act in accordance with the six Community requirements (which give effect, amongst other things, to the requirements of Article 8 of the Framework Directive and are to be read accordingly).
- (3) The first Community requirement is a requirement to promote competition—
(a) in relation to the provision of electronic communications networks and electronic communications services;
(b) in relation to the provision and making available of services and facilities that are provided or made available in association with the provision of electronic communications networks or electronic communications services;
- ..."

14. OFCOM are also under a duty, in certain circumstances, to carry out impact assessments under section 7 of the CA 2003:

“7 Duty to carry out impact assessments

- (1) This section applies where—
(a) OFCOM are proposing to do anything for the purposes of, or in connection with, the carrying out of their functions; and
(b) it appears to them that the proposal is important;
- but this section does not apply if it appears to OFCOM that the urgency of the matter makes it impracticable or inappropriate for them to comply with the requirements of this section.
- (2) A proposal is important for the purposes of this section only if its implementation would be likely to do one or more of the following—
(a) to involve a major change in the activities carried on by OFCOM;
(b) to have a significant impact on persons carrying on businesses in the markets for any of the services, facilities, apparatus or directories in relation to which OFCOM have functions; or
(c) to have a significant impact on the general public in the United Kingdom or in a part of the United Kingdom.
- (3) Before implementing their proposal, OFCOM must either—

- (a) carry out and publish an assessment of the likely impact of implementing the proposal; or
 - (b) publish a statement setting out their reasons for thinking that it is unnecessary for them to carry out an assessment.
- (4) An assessment under subsection (3)(a) must set out how, in OFCOM's opinion, the performance of their general duties (within the meaning of section 3) is secured or furthered by or in relation to what they propose.
- (5) An assessment carried out under this section—
- (a) may take such form, and
 - (b) must relate to such matters,
- as OFCOM consider appropriate.
- (6) In determining the matters to which an assessment under this section should relate, OFCOM must have regard to such general guidance relating to the carrying out of impact assessments as they consider appropriate.
- (7) Where OFCOM publish an assessment under this section—
- (a) they must provide an opportunity of making representations to them about their proposal to members of the public and other persons who, in OFCOM's opinion, are likely to be affected to a significant extent by its implementation;
 - (b) the published assessment must be accompanied by a statement setting out how representations may be made; and
 - (c) OFCOM are not to implement their proposal unless the period for making representations about it has expired and they have considered all the representations that were made in that period.
- ..."

15. In carrying out their functions under Chapter 1 of the CA 2003, OFCOM, by virtue of section 135, can require the MNOs (and other industry participants) to provide them with "all such information as they consider necessary for the purpose of carrying out their functions". Contravention of a requirement imposed under section 135 can lead to the imposition of penalties by OFCOM under section 139. OFCOM's powers under section 135 were used on two occasions in the run up to adopting the Decision, further details of which are provided in section III below.
16. Vodafone's appeal is brought under section 192 of the CA 2003, which implements Article 4 of the Framework Directive. The jurisdiction of the Tribunal to determine the present appeal arises under section 195, which provides as follows:

"195 Decisions of the Tribunal

- (1) The Tribunal shall dispose of an appeal under section 192(2) in accordance with this section.
- (2) The Tribunal shall decide the appeal on the merits and by reference to the grounds of appeal set out in the notice of appeal.
- (3) The Tribunal's decision must include a decision as to what (if any) is the appropriate action for the decision-maker to take in relation to the subject-matter of the decision under appeal.

(4) The Tribunal shall then remit the decision under appeal to the decision-maker with such directions (if any) as the Tribunal considers appropriate for giving effect to its decision.

(5) The Tribunal must not direct the decision-maker to take any action which he would not otherwise have power to take in relation to the decision under appeal.

(6) It shall be the duty of the decision-maker to comply with every direction given under subsection (4).

...”

17. Finally, we were also referred during the course of these proceedings to OFCOM's guidelines entitled "*Better Policy Making: OFCOM's approach to Impact Assessment*", issued on 21 July 2005 ("the Guidelines"). The Guidelines are available from OFCOM's website.

III. BACKGROUND TO THE DECISION

18. The Decision adopted in November 2007 is the result of consultation with stakeholders commenced by OFCOM's predecessor, the Director General of Telecommunications, and continued by OFCOM. As noted by OFCOM at paragraph 2.18 of the Decision:

“Ofcom has previously considered the issue of requiring further changes to the fixed and mobile porting processes and, in particular, whether direct routing should be required. Until the advent of [Next Generation Networks], the costs of making changes to routing arrangements for calls to fixed ported numbers have been found to outweigh the benefits to consumers, and so Ofcom has previously decided against intervention.”

We set out in the following paragraphs the main material steps undertaken during this process, as set out in the various documents published by OFCOM.

19. “*An assessment of alternative solutions for UK number portability*” Consultation – August 2004

This 2004 consultation document built on the outcome of a previous Oftel consultation on number portability published in June 2002; it followed the failure of the fixed network operator Atlantic Telecom in 2001, which resulted in around 14,000 customers having to move to another provider and change their number due to the current system of onward routing. While the consultation was concerned primarily with fixed number portability, it considered too implications for mobile networks. In

relation to the risks posed by network failure and the potential benefits offered by direct routing in this regard, the consultation states:

“The size of the potential benefit will be determined by the likelihood that a network will fail and the costs associated with such a failure. These will depend partly on the extent to which consumers are put off switching because of the risks associated with network failure.”

20. The 2004 consultation included a report by Mason Communications Limited (“the Mason Report”). This was originally published in April 2004, and was commissioned better to understand the likely costs, implementation issues and direct costs and benefits to stakeholders of moving to, and operating with, a CDB solution for fixed number portability in the UK. Within that context, OFCOM’s assessment demonstrated that only when extreme assumptions were used in the modelling were the costs shown to be offset by the benefits. OFCOM invited industry stakeholders to provide their views on their initial conclusion that an intelligent network CDB solution was highly unlikely to be cost justified.

21. *“An assessment of alternative solutions for UK number portability” Policy statement – June 2005*

This policy statement was the result of the consultation of August 2004. The statement notes that almost all the respondents (including BT, Vodafone and T-Mobile) to the consultation agreed that there was not a robust economic case for a CDB solution. OFCOM concluded that mandating a CDB solution for number portability was not cost justified. The statement also noted that the Number Portability Commercial Group (an industry body) should continue to investigate potential contingency measures to address number portability continuity where business failure leads to the loss of service; and that the move to Next Generation Networks (“NGNs”) would present a timely opportunity to next revisit the implementation of number portability.

22. *1st Section 135 Notice – September 2006*

As part of their review of the existing General Conditions and their commitment to consider the issues of port lead times and reliance on donor networks, OFCOM asked

all MNOs to provide details of the total volume of mobile voice call minutes ported out on a quarterly basis for 2005 and the first two quarters of 2006. The request also asked for the average charge made by the MNOs for voice call termination (excluding ported-in and ported-out minutes) for the same period. The notice stated: “[OFCOM have] committed to considering the issues of port lead times and reliance on the donor network”.

23. *“Review of General Condition 18 – Number portability” Consultation – November 2006*

This consultation considered both the method of routing calls to ported numbers and the lead-time and process for porting mobile numbers in the context of the development of NGNs in the UK. Having considered a number of proposals, this OFCOM review stated that their preferred option was to implement an ACQ/CDB for all networks, with phased implementation for mobile and fixed networks, as this option offered the highest net present value of benefits (“NPV”). OFCOM also proposed to reduce mobile port lead times to a period of less than one working day, unless they received evidence from consultees that the costs of such a move would outweigh the benefits. OFCOM’s view was that excessive port lead times may have the potential to act as a disincentive to switching providers and be detrimental to consumers.

24. The consultation included a report by the consultants Sagentia (“the Sagentia Report”), which was completed following interviews with various industry participants. The Sagentia Report sought to update the previous work undertaken in the Mason Report in three areas:

- a. by looking at mobile networks in more detail;
- b. by examining, in the light of NGNs, architecture changes and revised approaches by the operators; and
- c. by determining whether there had been any changes in the costs and benefits of different approaches to implementing number portability.

25. The Sagentia Report concluded that the phased ACQ/CDB solution would entail implementation expenditure of £73.5 million in capital and recurring operating costs of £2.7 million per annum. Due to savings in call conveyance costs, the Sagentia Report assessed that the solution would generate overall benefits having an NPV over 10 years of £297 million.
26. OFCOM submitted that this document considered the merits and demerits of both the change to direct routing and recipient-led two hour porting, and asked the industry for further help in this regard.
27. *“Arrangements for porting phone numbers when customers switch supplier: A review of General Condition 18” – July 2007*

In this document, OFCOM reported on the comments submitted following the September 2006 consultation and announced two significant decisions. As regards the CDB, OFCOM noted that, while a majority of the 23 respondents agreed in principle that a CDB had merit, views on the form of the database and on the timing of its implementation were more varied. Vodafone, O2 and BT said that they believed the costs of the CDB would be higher than OFCOM had estimated. OFCOM also revised some of the figures set out in the Sagentia Report and, amongst other things, adopted a discount rate of 12% and amended the cost to the donor network of onward routing. In conclusion, OFCOM announced that they had decided to require the providers of mobile and fixed services to establish and populate a CDB in order to facilitate the direct routing of calls to mobile and fixed ported numbers. OFCOM wished, however, to conduct a further consultation on modalities and timescale. The second decision announced by OFCOM in this document concerned the lead time for mobile porting. OFCOM directed that, as from 31 March 2008, the lead time should be reduced from five to two business days, although the process would remain donor-led. OFCOM also opened a consultation on a proposal that the lead time should be further reduced to two hours and that the process should be recipient-led.

28. *2nd Section 135 Notice – August 2007*

This notice required MNOs to produce documents regarding the cost of implementing a system of near-instant recipient-led porting. The final notice followed an earlier draft notice, which required addressees of the notice to provide best estimates of a number of cost elements. The draft notice was criticised by Vodafone in their response to OFCOM as disproportionate, by requiring recipients to undertake significant analysis that would be unlikely to generate meaningful cost estimates because of the likelihood of divergent assumptions, as OFCOM had not set out how a CDB would operate in practice. Vodafone also submitted that the draft notice did not allow a reasonable time in which to respond. The final notice required MNOs only to provide any existing cost estimates in their possession.

29. *“Telephone number portability for consumers switching suppliers” Statement – November 2007, the Decision*

Details of the conclusions set down in the Decision are provided in section I above. Following further adjustment of some of the inputs adopted by OFCOM, the NPV of the base case was now stated to be £40 million. This figure was subjected to two sensitivity analyses, with the first assuming that only two MNOs have implemented call trap arrangements (“Sensitivity 1”) and the second assuming a 70% increase in capital expenditure (“Sensitivity 2”). Sensitivity 1 resulted in a positive NPV of £63 million whereas Sensitivity 2 resulted in a positive NPV of £2 million. OFCOM judged their cost benefit analysis (“CBA”) to have shown that the costs of a CDB were outweighed by the benefits under any reasonable scenario, and that the additional benefits of two hour recipient-led porting were self-evident.

IV. GROUNDS OF APPEAL

30. Vodafone’s grounds of appeal are set out at paragraphs 9 and 10 of their Notice of Appeal:

“9. In deciding whether to adopt its Decision, Ofcom was obliged:

9.1 to take appropriate steps to obtain all relevant evidence;

- 9.2 to take account of all relevant evidence;
 - 9.3 correctly to evaluate the likely benefits and detriments arising from the implementation of its proposed Decision, via an appropriate impact assessment, in accordance with section 7 of the [CA 2003];
 - 9.4 to consult with all interested parties and, in order to allow such consultation to be undertaken effectively, to act transparently, by publishing full details of the evidence and reasoning on which its proposed Decision was to be based; and
 - 9.5 to adopt the Decision only if, having observed all these requirements, it was reasonably satisfied that the implementation of the Decision would contribute to the attainment of the statutory objectives laid down in sections 3 and 4 of the [CA 2003], in compliance with section 47(2) of the [CA 2003].
10. Ofcom's Decision is vitiated by its breach of each of the obligations identified in paragraph 9 above, each of which breaches individually, and some or all of which collectively, amount to serious procedural and/or substantive errors, as a result of which it is likely that, or there is a serious risk that, the conclusions which Ofcom draws from its cost benefit analyses (to the effect that there will be sufficient net welfare benefits to justify the adoption of the Decision) are wrong, both in respect of the decision to adopt a phased ACQ/CDB routing solution, and in respect of the decision to adopt a recipient-led two hour porting process, with the result that the Decision fails to comply with sections 3, 4 and 47 of the [CA 2003]. Accordingly, Ofcom's Decision should be set aside in its entirety."

Vodafone seek to have the matter remitted to OFCOM under section 195(4) of CA 2003 so that OFCOM can review whether any modifications should be made to General Condition 18, so far as it deals with number portability arrangements.

31. Vodafone identified the central issue in the appeal as being whether OFCOM equipped themselves with a sufficiently rigorous analysis of the costs and benefits of the Decision to enable them to reach a lawful decision in accordance with their statutory duties under the CA 2003. Vodafone submitted that the Decision is supported by two pillars: network failure and the cost benefit analysis. If one or other of the pillars falls, then the Decision falls to be quashed and remitted to OFCOM.
32. Vodafone lodged its Notice of Appeal accompanied by a witness statement dated 28 January 2008 by Mr. Howard Roche, who is employed by Vodafone as a Senior Regulatory Finance Manager within Vodafone's Legal and Regulatory Department. Mr. Roche forms part of a team responsible for reviewing consultation papers issued by OFCOM. Further witness statements were lodged by Vodafone to accompany later written submissions, as follows: a second witness statement by Mr. Roche dated 9 May 2008; a witness statement dated 1 May 2008 by Mr. Michael Strefford, who is

employed by Vodafone as a Technology Service Partner; a witness statement dated 12 May 2008 by Mr. Timothy Sutherns, who is employed by Vodafone as a Network Expert; and a witness statement dated 8 May 2008 by Mr. David Rodman, who is employed by Vodafone as Head of Regulatory Affairs.

33. Witness statements were also lodged in support of the cases put forth by the Interveners, as follows: a witness statement dated 25 April 2008 by Mr. Graham Baxter, who is employed by H3G as Chief Technical Officer; a witness statement dated 16 May 2008 by Mr. Rob Spindley, who is responsible for signalling network design for BT and a member of the team responsible for BT's NGN voice network design; a witness statement dated 15 May 2008 by Mr. Lawrence Wardle, who is employed by O2 as a Regulatory Manager; a witness statement dated 16 May 2008 by Mr. Philip Hodgson, who is employed by Orange as Senior Business Analyst; and a witness statement dated 16 May 2008 by Mr. Paul Harrison, who is employed by T-Mobile as Product Manager for Billing and MNP.
34. Although we considered carefully the matters set out in the witness statements, as well as in oral evidence at the hearing, as our description of the principal events leading up to the Decision and our findings set out in this judgment do not depend to a material extent on the credibility of any of the witnesses, it is not, in our judgment, necessary to comment upon individual witnesses and to set out our assessment of them.

V. STANDARD OF REVIEW

35. We heard arguments from Vodafone, OFCOM and some interveners, both in written submissions and at the hearing, in relation to the standard of review to be applied by the Tribunal in these proceedings.
36. Vodafone reminded us that their challenge is brought under the same section of the CA 2003 as that considered by the Tribunal in *Hutchison 3G UK Ltd v Office of Communications* [2008] CAT 11 (“H3G MCT”) and is to be decided on the merits (section 195(2)). The test set out by the Tribunal in that case was whether OFCOM’s analysis could stand up to “profound and rigorous” scrutiny (paragraph [164]). This

is not a judicial review test; it is more intensive. Vodafone accepted that OFCOM enjoyed a measure of discretion as to exactly how they conducted the CBA and submitted that their appeal does not amount to saying that there is only one way that OFCOM could have carried out their analysis and that they were not entitled to deviate from Vodafone's preferred view. The question for the Tribunal was whether the CBA, which was the foundation of all that followed, was sufficiently secure.

37. At the hearing, Vodafone submitted that the question to be assessed by the Tribunal was whether OFCOM's assessment that benefits would outweigh costs was sufficiently robust. Vodafone's submission was that it was manifestly inadequate.
38. T-Mobile supported Vodafone's submissions and argued at the hearing that a test of "robustness" equates to "profound and rigorous scrutiny", as adopted by the Tribunal in *H3G MCT*. We were also referred to *Genzyme Limited v The Office of Fair Trading* [2004] CAT 4, an appeal under section 46 of the Competition Act 1998, which also requires determination on the merits by virtue of paragraph 3 of Schedule 8 of that Act. In that case, one of the questions asked by the Tribunal was whether the regulator's analysis of the application of the law to the facts at issue was "robust and soundly based" (paragraph [150]). We note that this was also the question considered by the Tribunal, again in a Competition Act context, in its judgment in *Aberdeen Journals Limited v The Office of Fair Trading* [2003] CAT 11 at paragraph [125]. T-Mobile argued too that it would not be possible for the Tribunal to decide whether the Decision was in fact right or wrong, as the challenge by Vodafone was to the approach adopted by OFCOM and, in any event, the Tribunal does not have sufficient material before it in order to decide the issue.
39. T-Mobile submitted that the right approach for the Tribunal is to consider a twofold question: (i) was OFCOM's approach sufficiently rigorous; and (ii) if not, is there a material risk that the outcome might have been different? They submitted too that, if it is possible that the CBA is flawed, then the reasoning adopted by OFCOM falls apart and the Decision must be remitted.
40. OFCOM accepted that the appeal before the Tribunal is not to be decided by reference to ordinary principles of judicial review. However, OFCOM argued that Vodafone's

adoption of “robustness” as a legal standard is meaningless, or, at least, unhelpful. The Tribunal should not consider whether the decision is robust enough, but rather whether it is wrong, by focusing on whether a significant error of fact, or a material error of law, has been made. OFCOM submitted that a finding that there was a substantial or serious risk that the decision was wrong would not be sufficient grounds to allow the appeal. In their Defence (at paragraph 19(i)), OFCOM argued that, even allowing for appeal on the merits, decisions as to how statutory objectives are best attained are, as a matter of primary legislation, for OFCOM as the regulator.

41. At the hearing, Mr. Saini QC for OFCOM conceded that a finding that certain significant sensitivities were not taken into account, or if the Tribunal were to find that the CBA was unsoundly based, could be sufficient grounds for the Tribunal to allow the appeal. OFCOM further agreed that the standard to be adopted is on the balance of probabilities, in relation to the facts in issue.
42. H3G argued that as long as OFCOM reached the right answer, even if not by the right method, then the Tribunal must dismiss the appeal. H3G also submitted that they were entitled to put forward additional reasons to those adopted by OFCOM in their Decision (see, further, section VIII below).
43. It is common ground, as indeed it must be, that the present appeal before the Tribunal is to be decided on the merits, as is required under section 195(2) of the CA 2003. The wording of section 195(2) substantially mirrors that of paragraph 3(1) of Schedule 8 to the Competition Act 1998 in respect of appeals made to the Tribunal under section 46 of that Act. As to the exact standard an “appeal on the merits” must meet in this context, we were referred, in particular, to two very recent judgments of the Tribunal in relation to the same statutory provisions under consideration.
44. In *H3G MCT*, the Tribunal considered an appeal by H3G against certain aspects of decisions taken by OFCOM concerning the prices that mobile network operators charge for mobile call termination. In determining the test to be applied, the Tribunal (at paragraph [164]) held:

“...this is an appeal on the merits and the Tribunal is not concerned solely with whether the [decision of OFCOM] is adequately reasoned but also whether those reasons are correct. The Tribunal accepts the point made by H3G [...] that this is a specialist court designed to be able to scrutinise the detail of regulatory decisions in a profound and rigorous manner. The question for the Tribunal is not whether the decision to impose a price control was within the range of reasonable responses but whether the decision was the right one.” (emphasis added)

45. The judgment of the Tribunal in *T-Mobile (UK) Limited and others v Office of Communications* [2008] CAT 12 (handed down on the same day as *H3G MCT*) considered appeals against determinations made by OFCOM under section 185 of the CA 2003 in disputes between BT and each of the five MNOs. OFCOM argued before the Tribunal that, while determining the issue on the merits as required under statute, the Tribunal should be slow to interfere where errors of appreciation are alleged, as opposed to errors of fact or law. At paragraphs [82] and [83] of the judgment the Tribunal states:

“82. It is [...] common ground that there may, in relation to any particular dispute, be a number of different approaches which OFCOM could reasonably adopt in arriving at its determination. There may be no single “right answer” to the dispute. To that extent, the Tribunal may, whilst conducting a merits review of the decision, be slow to overturn a decision which is arrived at by an appropriate methodology even if the dissatisfied party can suggest other ways of approaching the case which would also have been reasonable and which might have resulted in a resolution more favourable to its cause.

83. But the challenges raised by the Appellants in these appeals are more fundamental. It was not suggested by OFCOM that the points raised by the parties were points which it had not been asked to consider during the consultation process. The grounds of appeal go far beyond alleging errors of appreciation...”

46. As noted by the Tribunal on numerous occasions (see, for example, *Freeserve.com plc v Director General of Telecommunications* [2003] CAT 5), the way in which the Tribunal exercises its jurisdiction is likely to be affected by the particular circumstances under consideration. What the above judgments clearly demonstrate is that the Tribunal may, depending on particular circumstances, be slower to overturn certain decisions where, as here, there may be a number of different approaches which OFCOM could reasonably adopt. There may be a variety of entirely legitimate reasons why the amendment of the current system of number portability in the UK is a desirable aim in pursuance of OFCOM’s statutory duties (for example, conflicts of interest between different operators may prevent united action without regulatory intervention). Vodafone accepted that there were a number of approaches open to

OFCOM in arriving at the Decision. However it is still incumbent on OFCOM, in light of their obligations under section 3 of the CA 2003, to conduct their assessment with appropriate care, attention and accuracy so that their results are soundly based and can withstand the profound and rigorous scrutiny that the Tribunal will apply on an appeal on the merits under section 192 of the CA 2003.

47. During the hearing, Mr. Saini QC for OFCOM submitted that there was not a legal standard of “robustness” as proposed by Vodafone. Whatever linguistic label is applied to the legal standard to be adopted, we do not find in practice there to be a meaningful distinction between a “robust” analysis and one that would withstand “profound and rigorous” scrutiny. The essential question for the Tribunal is whether OFCOM equipped itself with a sufficiently cogent and accurate set of inputs to enable it to perform a reliable and soundly based CBA. The Tribunal notes in this regard the position as set out in OFCOM’s Guidelines, which, at paragraph 5.30, provide that sensitivity analysis “should help ensure that the Impact Assessment and the final policy decision are more robust” (emphasis added). It is the duty of a responsible regulator to ensure that the important decisions it takes, with potentially wide ranging impact on industry, should be sufficiently convincing to withstand industry, public and judicial scrutiny.
48. The Tribunal was referred to several decided cases concerning the legal standard to be applied in carrying out prospective analysis. For example, Vodafone in their submissions sought to rely upon *Hutchison 3G Ireland Limited v Commission for Communications Regulation* (Decision No: 02/05 of the Electronic Communications Appeals Panel in respect of Appeal No: ECAP 2004/01), where the Irish Electronic Communications Panel (following consideration of the judgment of the European Court of Justice in Case C-12/03 *Commission of the European Communities v Tetra Laval BV* ECR I-987) held as follows (at paragraph 4.23):

“[B]ecause the likelihood of error is greater in a prospective analysis, the prospective analysis must be proportionately more rigorous to account for this possibility”.

In contrast, Mr. Saini QC on behalf of OFCOM referred to the judgment of Lightman J in *R v Director General of Telecommunications ex p Cellcom Ltd* [1999] COD 105 (at paragraph 26):

“If (as I have stated) the court should be very slow to impugn the decisions of fact made by an expert and experienced decision-maker, it must surely be slower to impugn his educated prophesies and predictions for the future.”

The Tribunal, however, notes that the observations of Lightman J were made in the materially different context of judicial review proceedings. The current appeal, as set out in section 195(2) of the CA 2003, falls to be determined on the merits.

49. In any event, as in our judgment the Decision of OFCOM does not meet the test of profound and rigorous scrutiny as adopted by this Tribunal (see section VI below), we do not consider it necessary, in the circumstances, to address further the question of whether a higher standard applies in the context of prospective analysis.

VI. DIRECT ROUTING OF CALLS TO MOBILE AND FIXED PORTED NUMBERS

50. As noted at paragraph [4] above, the Decision mandated two modifications to the system of telephone number portability as set down in General Condition 18. First, the Decision required the establishment of a CDB in order to enable the current system of onward routing of calls to ported numbers to be modified to a system of direct routing. Second, the Decision required that the porting process be recipient-led and that the length of time to complete the porting process be reduced from two business days to two hours. In their Decision, OFCOM considered the costs and benefits of each element and we follow a similar structure in our consideration of these modifications in this and the following section.

Costs of Direct Routing

51. At the hearing, O2 stated that they were, in principle, in favour of some form of direct routing, as long as the benefits outweighed the costs and any other disbenefits. It is a question of proportionality. This, in our view, is a proposition of attractive simplicity. The principle of proportionality requires that any action by OFCOM shall not go beyond what is appropriate and reasonably necessary to achieve their stated objectives. Also, where a choice exists between equally effective measures that might

be adopted to address a problem, recourse should be had to the least onerous measure that will achieve the stated aims. The requirement that OFCOM have regard to the principle of proportionality in performing their duties is set out in section 3(3)(a) of the CA 2003.

52. OFCOM argued that, in adopting a conservative approach to the CBA, they actually underestimated the savings that would be made. In performing the CBA, OFCOM said they did not take into account the benefits that could be expected to arise: (i) as a protective measure for consumers in the event of network failure; or (ii) as a consequence of recipient-led two hour porting.
53. They also submitted that, throughout the consultation process, they regularly revised the inputs they adopted by reference to those proposed by Vodafone (and other consultees) in their responses to the various consultation documents and section 135 notices. They said that they had done their best (in the face of alleged reluctance by consultees to provide timely and useful information). They had been conservative in their assumptions, which were derived largely, though not entirely, from those adopted in the Sagentia Report. Following these efforts, they had concluded that, even on adopting the most unfavourable assumptions, the modifications set out in the Decision would result in a positive NPV. Further, OFCOM, in their Defence (at paragraph [35]), stated:

“Since, even without seeking to quantify the benefits of protecting consumers from network failure, the CBA calculation indicated positive net benefits of the move to direct routing, there was no need for OFCOM to seek to quantify the other benefits in order to conclude that mandating a transition to direct routing was justified.”

54. In their Notice of Appeal, Vodafone pointed out that the CBA did not take into account the costs incurred by MNOs in operating the CDB for the first four years of their base case i.e. the period during which it would be used only for mobile-to-mobile porting. As pleaded by OFCOM in their Defence (at paragraph 52(1)(iii)), these costs were estimated by Sagentia as £625,000 per year, leading to a cumulative total of £2 million (on a discounted basis). OFCOM conceded that this reduced the overall NPV of the direct routing solution by £2 million. Applying this further reduction to the sensitivity analysis performed by OFCOM in the Decision leads to neutral NPV when capital expenditure costs are increased by 70% (i.e. under

Sensitivity 2). Vodafone argued that, as a result of these changes, the purportedly positive NPV generated by the CBA must now be regarded as wholly unreliable. In addition, on 8 January 2008 (i.e. nearly six weeks after the publication of the Decision) OFCOM, at Vodafone's request, provided MNOs with a table showing the key inputs used in the CBA, which directly informed the Decision. Vodafone submitted that delayed release of the inputs used in the CBA further hampered their ability to respond cogently to OFCOM's analysis. In sum, Vodafone argued that the costs of direct routing are, in effect, the capital and operating costs of the CDB, which were mainly derived from the Sagentia Report, which itself updated the work undertaken in compiling the Mason Report of 2004. Given the estimated ranges adopted in the report as regards certain costs and savings of implementing call trap, which varied from ten to thirty fold and which were subsequently relied upon in estimating the costs of establishing a CDB, Vodafone submitted that the analysis was completely inadequate; and that when the NPV has been reduced as far as it has, it cannot support a confident conclusion that the NPV will remain positive.

55. There are a number of distinct but related aspects to Vodafone's challenge to OFCOM's CBA, which we consider in turn below.

(a) *Absence of a technical specification for the ACQ/CDB*

56. Vodafone argued that OFCOM should have set out in greater detail the technical parameters of the CDB before reaching a final decision as, in order to know what the costs of implementation of a project are, it is necessary to know what is being costed. It would have been better for OFCOM to ask for the industry's help in estimating the costs of creating and populating the CDB before, rather than after, deciding they would proceed with direct routing. In these circumstances, one needs to look closely at the technical specification of a project before regulating; it would be better to work out costs of creating and populating a CDB in advance and then have a reasoned decision as to whether or not it will benefit the industry overall.
57. Vodafone also pointed to the Sagentia Report, which stated (at paragraph 5.12.2): "Cost information is not really known due to lack of specific implementation experience and uncertainty over aspects of implementation." It also stated (in section

- 7): “Industry needs directives to agree a common approach so that the costs can be estimated.”
58. If OFCOM had gone some way towards working out a specification, even in outline, or even with a range of options, then, Vodafone submitted, the industry could have known at least what the upper and lower bounds of costs might turn out to be. OFCOM did not need to prepare a fully costed and worked out technical specification down to the last detail. However, a form of specification was the least the industry could expect, argued Mr. Ward, counsel for Vodafone.
59. Mr. Pickford for T-Mobile submitted that the necessity of setting out a detailed technical specification is context-dependent and would not be required in every case. However, there is at present a well-functioning system of MNP in the UK; in these circumstances, he submitted, persuasive justification for change is required. In addition, T-Mobile argued that it was pointless, even futile, to ask individual operators to devise and cost separate specifications when the solution mandated by OFCOM would require industry cooperation in order to function correctly.
60. BT submitted that OFCOM, in undertaking the CBA, posed a question that, at the stage it was asked, was incapable of a sensible answer. In their response to OFCOM’s November 2006 consultation, BT stated that they would prefer OFCOM to agree more realistic shorter and intermediate technical and commercial milestones, rather than setting a December 2012 deadline for full implementation of a CDB for fixed and mobile number portability.
61. In response to these arguments, in their Defence (at paragraph 52(1)(i)), OFCOM stated:
- “OFCOM did not consider it appropriate for it to seek to design, and to then consider imposing on industry, a detailed technical specification for direct routing. Industry participants are considerably better placed than OFCOM to develop such a specification.”
62. OFCOM submitted that industry would have incurred costs anyway in working out the specification. Those costs would be affected by the design of the technological

solution that the industry chooses to adopt, the willingness of industry participants to work together to develop a solution and the prices tendered by third parties to deliver the solution. It was, therefore, more appropriate to lay down the necessary functionality of the system and allow industry to develop the full technical specification.

63. During the hearing, OFCOM's counsel Mr. Saini QC stated that the appeal raised a question of principle, as follows (Transcript, 19 June 2008, p. 24):

"Can OFCOM, or indeed any other sectoral regulator, only ever require industry to take certain actions when the regulator has itself specifically costed the exercise by way of drawing up a technical specification?"

OFCOM submitted that all that the regulator has to do is specify the necessary functionality of the system which it is requiring to be put in place and, for the purpose of a cost benefit analysis, the regulator should at least put forward a figure of what it believes delivering this system will cost. Such an approach, OFCOM argued, allows industry participants to assess the solution proposed and to come back and respond.

64. The Tribunal does not accept that Mr. Saini's question can be described as one of principle. It may be a key question in relation to some issues, but not others. The Tribunal finds that the uncertainty generated by the absence of a technical specification was, in the circumstances, such as to render any estimate of costs by individual industry participants speculative and potentially misleading. This situation was exacerbated by the potential for considerably divergent cost estimates, as each consultee replied separately and on the basis of their own particular individual assumptions. In the Tribunal's view, in the circumstances, this position could have been cured at an earlier stage in the consultation process by requiring MNOs and other industry participants to design a provisional sample solution, to cost this solution and thereby remove a large element of uncertainty in the figures that were subsequently adopted by OFCOM in their CBA.
65. However, we emphasise that it will not be necessary in every case in which OFCOM intends to carry out a CBA to provide specific cost estimates only following the design of an exact technical specification. What is required is that stakeholders

consulted on proposals should be able to provide realistic estimates of the likely costs of adopting a proposed solution founded on a comprehensive range of specification. It will be a matter for the regulator to decide, in each individual case, whether it is best placed to design the initial specification that will be consulted upon and costed by industry or whether it will require industry to cooperate on the formulation of the technical parameters.

(b) *CDB as an extension of call trap*

66. The Tribunal heard divergent views as to whether the implementation of a CDB would entail the simple extension of the call trap arrangements which had already been put in place by a number of MNOs, or would rather require significant additional work.

67. In the Sagentia Report, it was noted (at page 67) that:

“A mobile network is inherently more “intelligent” than a fixed network so is capable of doing the ACQ with minor capacity upgrade.

At least two mobile networks have already implemented the Call Trap function. To do this they perform an ACQ on an internal database of ported-in numbers to identify calls to ported-in numbers and directly route them.

Moving to an ACQ system for all routing (not just for ported-in numbers) is a simple extension of this process. The database would have to be much larger (a copy of the main CDB) and the routing prefix would have to be added to all ported numbers as they leave the network.”

68. While the Sagentia Report found that some additional work would be needed to extend current call trap arrangements in order to operate with a CDB, it did not allow for any further costs in its estimation. Instead, it took the estimated costs of implementing call trap by working back from the savings that it estimated would be made by an MNO implementing call trap. Vodafone submitted that the costs of establishing the CDB could be very large indeed and far in excess of those incurred in relation to call trap (which does not necessitate coordination of investment decisions and the choice of hardware and software solutions with other networks).

69. Mr. Sutherns for Vodafone, in witness evidence before the Tribunal, stated that it was not simply a case of adapting Vodafone’s current call trap functionality to download

data from the CDB. They would need to effectively re-engineer the current system totally and have two separate databases – one for their current call trap function and one for the new CDB function. O2 also stated that the implementation of a CDB is not merely a simple extension of call-trap, but that two look ups would still be necessary.

70. During the hearing, counsel for OFCOM argued that at no stage during the consultation process did Vodafone respond stating that the proposed solution for mobile networks would not comprise a simple extension of call trap. However, in their skeleton argument for the hearing (at paragraph 10(ii)(d)), OFCOM recognised:

“direct routing will entail *some* additional costs above those that are involved in implementing Call Trap for a single network (in particular, because networks will have to co-ordinate between themselves the development of a central database)” (emphasis included).

71. Miss Rose QC for H3G argued that extra switching capacity is not required for direct routing of mobile to mobile numbers and that only some simple modifications to existing call trap systems would be required, with the result that the costs of implementing direct mobile to mobile routing are very much lower than suggested by Vodafone and O2.
72. We note that some of the parties were uncertain as to whether operators will have real time access to the CDB or whether they will retain copies of it within their own systems and routinely download updates. They were also uncertain as to whether the CDB would be an entirely separate system from call trap.
73. While OFCOM recognised (as did the Sagentia Report) that some additional costs would be incurred over and above the costs of implementing call trap, in our judgment insufficient provision was allowed in the CBA to take such costs into account. In addition, Mr. Ward for Vodafone, in closing at the hearing, was correct in reminding us that substantially differing views as to the costs over and above call trap were argued before the Tribunal. These differences arose for a variety of reasons, some of which stem naturally from the inherent particularities of the internal systems employed by separate independent enterprises. However, what did emerge from the

submissions before us is that additional, potentially significant, costs will be incurred over and above those relating to the implementation of call trap. The Tribunal therefore considers that the absence of an allowance for additional costs over and above those estimated in relation to the implementation of call trap further undermines the accuracy of the CBA.

(c) ***Switching capacity, transit networks and the NICC***

Network switching capacity

74. Vodafone submitted that the technical demands of providing a direct routing capability for fixed, in addition to mobile, numbers will constitute a large element of the costs resulting from the Decision. This will arise from the need to acquire additional switching capacity because of a technical difference between mobile routing and fixed routing in terms of destination code prefixes. They submitted that, though costs may vary between networks for sensible commercial reasons, OFCOM needed to examine what the actual costs would be.
75. H3G submitted that it would cost them considerably less than other MNOs to implement direct routing due to the presence of additional capacity on their network, but that in any event the mobile-to-fixed direct routing aspect of the Decision is wholly severable from the mobile-to-mobile aspect. In their submission, the mobile-to-mobile element of the Decision is the most important. H3G argued that the additional cost to Vodafone of complying with the Decision results from: (i) the poorer quality switches adopted by Vodafone; and (ii) a decision taken by the Network Interoperability Consultative Committee (“NICC”) to adopt a 19 digit standard (see paragraphs [79] to [82] below).
76. In reply, OFCOM complained that the operators did not put forward these costs to Sagentia at the time of compiling the report. Vodafone responded that they made clear that this would be a serious problem in their consultation responses (including their response to OFCOM’s consultation in November 2006), even though they did not realise at that time how big a problem it would be.

77. At the hearing, OFCOM argued that the evidence put forward by Mr. Sutherns as to costs was legally inadmissible (as it was submitted too late in the process) and that, in any event, the evidence from Mr. Baxter for H3G showed that the costs for an “efficient operator” are much lower. OFCOM also submitted that, whether or not one is dealing with an efficient operator, the use of transit operators can avoid these costs. Vodafone replied that this assertion did not form a part of the Decision and that, due to differences in scale between MNOs, questions of costs may not necessarily be simply read across.
78. While H3G may have additional switching capacity, thereby enabling them to handle mobile to fixed direct routing without incurring substantial additional costs, the same situation is not true for Vodafone, which currently operates at close to full capacity. In assessing the costs to industry of the proposed solution for the purposes of performing a CBA, the Tribunal considers that it was incumbent on OFCOM to assess the actual costs of implementation faced by the industry as a whole. That one MNO may have additional capacity (either due to superior efficiency or as a result of other factors) is not a sufficient basis on which to disadvantage other operators who may, again for a variety of reasons, be operating at close to full capacity.

NICC

79. The NICC is a technical forum for the UK communications sector that develops interoperability standards for public communications networks and services in the UK. OFCOM act as a non-participating observer in the NICC, while all five MNOs act as full participants. The effect of this arrangement is that OFCOM have or have access to, in effect, full and continuous knowledge of the discussions that take place in, and activities of, the NICC.
80. To summarise briefly a complex technical issue, the purported need for extra switching capacity is linked to the work undertaken by the NICC, which has decided that each fixed line net telephone number will have to be accompanied by an explicit indicator of geographical location. This will result in a need to send longer chains of numbers than the existing systems employed by some MNOs can handle.

81. OFCOM submitted (at paragraph 42 of their skeleton argument) that the decision of NICC to adopt a 19 digit standard does not present a difficulty for which the Decision of OFCOM is responsible. Vodafone replied that OFCOM could, and indeed did, see that the NICC decision was part of the framework in which they regulate and that they were well aware that standard-setting by NICC would be necessary in light of their action. During the consultation process, NICC drew OFCOM's attention to the need for each ported number on the CDB to be associated with a destination code (see, for example, paragraph 3.63 of the Decision). Vodafone submitted, with justification in our view, that OFCOM cannot claim they were regulating in a vacuum; but rather that the NICC's work was part of the context in which OFCOM operated and was a relevant factor they were bound to take into account. As such, the costs associated with longer routing codes should have been considered in carrying out the CBA. Vodafone submitted that a better approach would have been to involve NICC, along with other industry operators, in the process of specification design in the first place – in our judgment a statement of common sense.
82. Further, the Tribunal does not consider that the work undertaken by the NICC in setting industry standards can, as claimed by OFCOM, be considered as a factor outside their perspective and, therefore, not amenable for inclusion in the CBA. OFCOM had, or at least had ready access to, knowledge of the proposals being discussed in the NICC that should have informed their analysis of the costs of implementing the proposed direct routing solution. To assert otherwise is an abdication of their responsibility to gather all relevant facts that they reasonably can before deciding whether or not to impose further regulation on industry. Such a responsibility is also consistent with OFCOM's statutory obligations under section 3(3) of the CA 2003, which requires OFCOM to have regard in all cases to "the principles under which regulatory activities should be transparent, accountable, proportionate, consistent and targeted only at cases in which action is needed".

The use of transit networks to overcome difficulties associated with switching capacity

83. OFCOM submitted that, in any event, it is open to MNOs in order to comply with the Decision to route calls to fixed networks via a transit network, such as those operated

by BT and Cable & Wireless. This would remove the need to acquire additional switching capacity. As noted by OFCOM at paragraph 3.147 of the Decision:

“Ofcom did not intend to exclude, or dissuade, transit arrangements as a result of its proposed changes to General Condition 18.”

84. Vodafone responded that the “look up” element of using a transit network entails additional substantial costs to the actual carriage of a call, and that this element was not costed by OFCOM. The “look up” element associated with using transit networks involves ascertaining a call’s destination via the destination code. In any event, Vodafone submitted, increased use of transit networks would lead to increased network interdependence, a situation OFCOM are trying to move away from in their Decision.
85. In evidence given before the Tribunal, Mr. Sutherns for Vodafone stated that, while theoretically possible, he did not believe that the use of transit networks would be a commercially or technically acceptable solution for Vodafone. In cross examination by Miss Rose QC for H3G, Mr. Sutherns accepted that Vodafone’s main concern in this regard would be the concern of dependence on another network and the potential for technical or possibly even commercial failure.
86. The use of transit networks to perform the required look ups was raised before us as an option in order to comply with the Decision. In this regard, Mr. Baxter, in evidence for H3G, suggested that the look up function could be undertaken via transit operators, but he admitted to not knowing how much this would cost. Vodafone expressed strong reservations about the costs and functionality of transit facilities. In our judgment, the issue of accessing the CDB via a transit operator is one that merits being properly factored into the CBA in a way that takes account of the interests of all operators.

(d) *Sensitivity testing*

87. In the Decision, OFCOM stated that their base case had been subjected to two specific sensitivity analyses i.e. Sensitivity 1 and Sensitivity 2, described further in section III above.

88. Vodafone submitted that OFCOM did not, but should have, followed the position as set out in their own Guidelines, which provide at paragraph 5.30:

“Where there is uncertainty about the impact of an option, it is good practice to present an analysis of the sensitivity of the results to changes in some of the most important variables. This should help ensure that the Impact Assessment and the final policy decision are more robust.”

At the hearing, OFCOM argued that, having adopted conservative assumptions in the calculation of a number of inputs used in the CBA, any further sensitivity testing on that basis would have been pointless.

89. Vodafone submitted that what OFCOM in fact performed was a stress test with a view to testing, in OFCOM’s own words as set out at paragraph A1.58 of the Decision, “the extent to which forecast capital costs could increase compared to the Base Case without the costs to industry exceeding the savings to industry.” As noted at paragraph [54] above, increasing costs by a further £2 million, as is required due to the omission by OFCOM of the costs incurred in operating the CDB during the first four years, results in neutral NPV under one of the two sensitivity analyses performed. Given the now neutral NPV under Sensitivity 2, any further increase in any other variable would make the analysis negative. In performing this second sensitivity analysis, OFCOM adopted a 70% capital expenditure increase, but, Vodafone argue, there is no reasoning to suggest that 70% is the highest increase in capital expenditure that could reasonably be expected. During the hearing, OFCOM pointed to the fact that they had considered six separate sensitivities in their consultation published in July 2007. However, the Decision itself only contains two sensitivity analyses.
90. The Tribunal does not consider that the adoption of purportedly conservative assumptions and inputs at the outset of the CBA removes the desirability of performing sensitivity analysis in order to test the results obtained. This would not be, as OFCOM describe, an “empty exercise” but rather a necessary means of checking the accuracy and reliability of the results obtained in the first stage of the CBA. The Tribunal notes that in the original Mason Report attached to OFCOM’s

August 2004 consultation (at paragraph 6.8), sensitivity testing was performed by running scenarios with low and high values of each of the critical inputs.

(e) ***Industry consultation***

91. In their Notice of Appeal at paragraph 9, Vodafone argued that OFCOM failed in their obligation to consult with all interested parties and to act transparently, as set out in section 48 of the CA 2003. The point of consultation, Vodafone submitted, is that people affected by a potential decision should have an opportunity to be heard as to what they think of the merits of the proposal and how they will be affected. Consultees should also expect that the decision maker will listen to the responses received, even if the decision maker is not required to adopt every suggestion put forth by consultees. This requires consultation at an appropriate level of specificity and detail. It is not supposed to be an empty exercise. It was OFCOM's job to satisfy themselves that their impact assessment was sufficient and their statutory duties discharged.
92. OFCOM, Vodafone argued, did not disclose sufficient inputs and Vodafone was required to backsolve figures in order to understand the inputs adopted. As noted at paragraph [54] above, certain inputs were only provided to MNOs after the publication of the Decision, and then only following a request by Vodafone. The lack of detail in the consultation paper affected the detail of the consultation responses, which in turn affected the quality of OFCOM's reasoning.
93. During the hearing and in their written submissions, OFCOM referred the Tribunal to public law decisions in relation to the standard that must be met in carrying out consultation processes, including *R v North and East Devon Health Authority, Ex p Coughlan* [2001] QB 213 and *R (on the application of Greenpeace Ltd) v Secretary of State for Trade and Industry* [2007] EWHC 311. They submitted that Vodafone were able to make detailed submissions, both to OFCOM during the consultation process and later to this Tribunal. Vodafone therefore had adequate disclosure of inputs and, in any event, further information was supplied once asked for.

94. The Tribunal notes that the Decision followed a lengthy process, including two consultation documents and two notices issued under section 135 (as described further in section III above). It can hardly be suggested therefore that, at least in form, the consultation process was inadequate. However, mere consultation and transparency alone are not sufficient grounds to save a decision which is in itself flawed as a substantive matter to the extent we find in this case. The purpose of consultation is to seek the informed views of, and best available information from, industry and, with the benefit of the expertise inherent in a specialised regulatory body, apply those views and information to the perceived industry failings. The Tribunal notes the comments of Lord Woolf M.R., giving the judgment of the Court of Appeal in *ex p Coughlan* (albeit in a judicial review context), at paragraph 108, as follows:

“It is common ground that, whether or not consultation of interested parties and the public is a legal requirement, if it is embarked upon it must be carried out properly. To be proper, consultation must be undertaken at a time when proposals are still at a formative stage; it must include sufficient reasons for particular proposals and allow those consulted to give intelligent consideration and an intelligent response; adequate time must be given for this purpose; and the product of consultation must be conscientiously taken into account when the ultimate decision is taken...”.

95. This Tribunal finds that, in the circumstances, the process undertaken by OFCOM did not allow stakeholders fully to provide intelligent and realistic responses to the questions asked of them. For example, as noted above, in the absence of a provisional technical specification on which consultees could provide useful data, OFCOM deprived themselves of the opportunity properly to inform their analysis of the potential costs of their proposals.
96. During the hearing, OFCOM raised, as a point of general principle, the following question (Transcript, 19 June 2008, p. 25):

“How far can a regulated entity [...] decline to engage with the regulator and to provide the regulator with information in its possession as to the costs of the proposal, and then subsequently complain that the regulator’s cost benefit analysis failed to take that matter into account?”

OFCOM submitted that they cannot be criticised by the Tribunal for not taking into account something which they were never shown. Relevant to this point, OFCOM’s counsel made it clear that they did not wish to allege a breach of any statutory duty on the part of the MNOs: it was not asserted that material information was withheld or

the process undermined by unlawful action by any MNOs. However, OFCOM, both in their written submissions and at the hearing, submitted that Vodafone and the other MNOs (H3G aside) had brought this appeal in an attempt to “derail and delay” the process undertaken by OFCOM to modify the system of porting in the UK. This sentiment echoes the findings of the Mason Report, which at page 5 provides as follows:

“A principle of seeking minimum reasonable costs was adopted in the modelling. This was because the cost elements put forward by operators were generally somewhat higher than experience elsewhere would deem reasonable, an observation that Mason considers to be consistent with the relatively high level of resistance to change articulated by the operators interviewed.”

97. Of course, it is not a suitable response to a consultation undertaken in good faith to withhold potentially pertinent information in the hope of delaying or derailing a process that is believed, for whatever reason, to be undertaken in the public interest. However, the Tribunal finds that no such activity took place during the process under consideration. To find otherwise would be a serious matter, as breach of section 135 of the CA 2003 can result in the imposition of a penalty under section 139. Rather, industry participants were unable to provide informed views to OFCOM on the likely costs of the proposed solution due to the uncertainties inherent in OFCOM’s proposals, for example, in relation to the absence of a technical specification.

Benefits of Direct Routing

(a) Protection against the effects of network failure

98. It appears on the face of the Decision that protecting customers from the effects of network failure was OFCOM’s key objective (see, for example, paragraph 2.30). However, some of OFCOM’s written submissions, in particular their Defence, appeared to move markedly away from this position, describing network failure (at paragraph 2) as a “yet further disadvantage” of onward routing, in addition to the inefficiency of adding an additional leg to the conveyance of each call. This position shifted again in their skeleton argument, where they described the need to protect customers from network failure arising from insolvency of an operator as their

“primary motivation” and “primary amongst [OFCOM’s public policy] objectives” (paragraph 2).

99. Vodafone and O2 submitted that no attempt of any kind has been made to quantify the consumer gain in terms of protection from network failure. If a large network were to fail, it would not only be customers who had previously ported their numbers who would be affected, but also anyone who might be using the network for any part of their call conveyance. As such, the benefit offered by direct routing, such as it is, does not address the whole problem. Vodafone submitted too that, in the case of commercial failure, assets are only likely to completely exit the market where they embody a failed technology. It should also be noted that, in summarising the responses received following OFCOM’s consultation in August 2004, the June 2005 Policy Statement noted (at paragraph 4.2) that some consultees did not view protecting customers against network failure to be a primary benefit of number portability, while BT were of the view that the issues surrounding network failure had nothing to do with number portability.
100. At the hearing, counsel for OFCOM reminded us that at paragraph A1.59 to A1.62 of the Decision there was some attempt (albeit somewhat speculative) by OFCOM to quantify the risks of network failure in the amount of around £9 million. OFCOM also argued that it was incorrect to suggest that the Decision was made purely on the basis of network failure.
101. However, as conceded by OFCOM at the hearing, no attempt was made to assess the probability of such an event occurring. OFCOM argued that the risk of network failure is something which a responsible regulator should take steps to protect customers from. H3G submitted that, if the direct routing solution mandated by OFCOM imposed a net cost on industry, then it would be appropriate to consider whether such costs were proportionate in order to protect customers from network failure. However, if direct routing is found to be positively beneficial or neutral in terms of costs, as under OFCOM’s analysis, then there is no need to quantify the risks of network failure as there is no cost to be offset. In any event, even if the NPV is negative, the benefits of protecting consumers against the risks of network failure can

be taken into account qualitatively, in terms of improving the experience of customers, and not necessarily just by means of a mathematical calculation.

102. H3G further submitted that one should consider two aspects under the head of network failure i.e. both financial and technical failure. As recognised at paragraph 3.5 of the Decision, technical faults or congestion on the donor network can cause problems for the service of a person on a recipient network who has ported his or her number. H3G argued that customers porting to their network are unable to take full advantage of their network due to ongoing reliance on the donor network. Issues may also arise in relation to the introduction of innovative services, such as had arisen in relation to video calling in the past. Such problems are all the more acute for new entrants such as H3G as, in order to grow market share in a saturated industry, it will be necessary to build a customer base from consumers who already have mobile phones and who must be persuaded to switch from their former MNO. H3G accepted that the Decision will not prevent network failure, but that it will reduce the adverse consequences of a network failure for customers. Vodafone, in reply, argued that it would not be possible for a network to discriminate, in terms of its service offering, between customers who had ported out from their network (and to whom they onward routed calls) and their current customers. Both would have to be treated equally.
103. H3G also raised the distinction between reliance on transit networks and donor networks, with the former relationship being co-operative and subject to contractual recourse, while the latter relationship is essentially one between competitors. In the case of donor-led porting, there is little incentive on the part of the donor network to cooperate with the recipient network in order to resolve technical issues. In contrast, problems arising from the relationship with a transit network could be resolved by exercising legal rights under contract law.
104. O2 argued that the Decision cannot stand if the Tribunal finds against OFCOM in relation to network failure, as the public policy reasoning underpinning the Decision would be lost. In their submissions, O2 referred to OFCOM's August 2004 Consultation where it considered (at paragraph 3.54): "how likely it is that the problem of network failure will recur and if it were to recur the likely magnitude of

the problem in terms of how consumers would be affected.” O2 submitted that this should have been the approach adopted by OFCOM in their Decision.

105. H3G argued that the August 2004 Consultation dealt with fixed and not mobile networks and, therefore, the problems regarding technical failures and congestion did not arise. Moreover, things have moved on since 2004 with a different technological setting and OFCOM have changed their view.
106. While OFCOM’s case as to the primary rationale in adopting the Decision has varied somewhat over the course of these proceedings, it appears clear to the Tribunal that the main (but not sole) purpose of the Decision was to protect consumers from the effects of network failure (both financial and technical). The phrase “key objective” in paragraph 2.30 of the Decision speaks for itself.
107. However, the Tribunal is not persuaded that the proposed consumer benefits that the Decision is intended to bring about in relation to network failure were a sufficient basis on which to ground the Decision.
108. At paragraph 3.19 of the Decision, OFCOM stated that, given their statutory duties, they should act to address the effects of network failure “where it is consistent with its other duties to do so (for example, that this can be done at a reasonable cost and in a way that reflects the need to act proportionately)”. However, the failure of OFCOM to attempt adequately to assess the probability of network failure and to quantify its adverse effects on consumers represents, in the Tribunal’s judgment, a substantial error. To consider a perceived problem worthy of measures of redress, one would at least expect to find an analysis of the likelihood of such problems arising. Moreover, the benefits of £9 million set out briefly in the Decision are not sufficiently reasoned. The Tribunal also finds that the assertion that the (potential) growth in the number of MNOs increases the probability of network failure is unsupported by any evidence we have seen. Though there have been past network failures (for example, Atlantic Telecom and Ionica), these occurred a considerable time ago, and in companies different in type and far smaller in scale than any relevant to the issues before us.

109. Moreover, in the event of network failure of an MNO, it is likely that other problems, for example, the disruption faced by those customers still with the failed network and the ability of others to call those customers, would be of equal, if not greater, significance to issues relating to former customers of the failed MNO who had ported their number. In fact, anyone using the failed network for any part of their call conveyance would be adversely affected. The Tribunal does not consider that the decision of OFCOM to provide for direct routing sufficiently addressed these additional and potentially more significant problems.
110. The Tribunal also finds that OFCOM have not sufficiently justified the move away from the position they adopted in their consultation of August 2004, even though at that stage OFCOM were mainly (though not solely) focussed on issues related to fixed number portability. In that document (at paragraphs 3.57 to 3.59), to which we were referred at the hearing, OFCOM noted the failure of Atlantic Telecom in 2001 and stated:
- “...it is worth noting that a relatively small proportion of total UK customers were affected by the network failure. Moreover it is Ofcom’s view that a permanent network closure, such as occurred with Atlantic, is likely to be rare... it seems likely that the two key examples, Atlantic and Ionica, were exceptional... If a network faces financial difficulties it would be likely that its assets, notably its customer base, would be purchased or the company taken over or successfully refinanced... Moreover consumers do not seem to be avoiding switching supplier or porting their number because of the risk of network failure. Consequently the benefit in these terms of introducing a CDB is likely to be very low.”
111. Therefore, the Tribunal is far from persuaded by the arguments of OFCOM that circumstances at the time of the Decision were sufficiently altered as regards the risks of network failure to warrant the implementation of direct routing in order, as a key objective, to protect consumers against the effects of network failure. Doubtless there will be new entrants into the industry, and OFCOM will have to take into account the protection of consumers against commercial failures. However, the Tribunal is not persuaded that direct routing is a key means of defence against such failure.

(b) Efficiency and cost savings

112. OFCOM argued that there is a substantial amount of wasted costs incurred in donor conveyance charges as a result of the current system of onward routing and that these

potential savings should be taken into account in the CBA. The parties agreed that the calculation of efficiency savings to be generated by the Decision should, in principle, be performed by taking: (i) the volume of ported minutes; and (ii) multiplying that figure by the cost of ported minutes. However, this exercise is complicated by the fact that OFCOM are required to make projections about the likely levels of both figures. We consider both of these calculations in turn.

Volume of ported minutes

113. In the Sagentia Report, it was estimated that the annual growth in traffic to ported mobile numbers would be 2% each year for all years until 2016. In the Decision, OFCOM noted (at paragraph A1.44), however, that market research they had commissioned indicated that an increase of 5% is more likely. They also noted that data received from the MNOs in response to the 1st Section 135 Notice showed that the growth in the volume of ported-out minutes for all the mobile operators between the first two quarters of 2005 and 2006 was above 8%. Taking what they state is a “conservative approach”, OFCOM proceeded to adjust Sagentia’s model to assume that call minutes to ported mobile numbers will increase by 5% each year.
114. Vodafone criticised OFCOM’s approach by saying that, in relation to the volume of traffic, OFCOM relied on overly complex calculations rather than by simply looking at real up-to-date trend data, which could have been obtained from MNOs. Among the factors considered by OFCOM was the rate at which people were porting their numbers. As noted above, the figure adopted of 5% was taken from market research and produced a cumulative percentage of traffic to ported mobile numbers of 33% by 2018 under the base case. Mr. Roche, in evidence for Vodafone, estimated that the actual percentage for the industry is closer to 2 to 3%, based on real trend data.
115. Vodafone submitted that one has, in addition, to identify the net number of new ports by removing from the calculation customers who have previously ported, customers who port back to their original subscriber and those who give up their mobile service, by either abandoning their mobile telephone or moving abroad. The number of new ports in any given year does not provide a proxy for the actual net volumes of ported minutes. While OFCOM proposed using a formula to account for these factors,

Vodafone submitted that the figures adopted by OFCOM were substantially out of line with Vodafone's actual experience, which has actually remained constant in recent years, as Vodafone's net rate of porting (including call trap) is approximately neutral. In simple terms, averaged over the period envisaged by OFCOM, the net ported minutes are likely to remain approximately neutral if counted MNO by MNO, whatever the gross number of ports.

116. Vodafone also submitted that the benefits, if any, offered by recipient-led two hour porting cannot be used to reinforce the justification for the direct routing solution itself, as the former is premised on the latter.
117. OFCOM (supported by H3G) argued that, in referring to figures for 2005 and the first half of 2006 (taken from the 1st Section 135 Notice), they were being overly conservative, as there had been substantial growth in ported-out volumes between 2005 and 2007. On their own estimates, there will in effect be a doubling of the percentage of ported traffic by 2010.
118. H3G submitted that many consumers are unaware of the right to port their number and that there is considerable capacity for growth in the number of ported minutes. H3G also argued that OFCOM should have considered whether the implementation of the Decision as a whole, including the effect of recipient-led porting on the growth in the number of ported minutes, would be of benefit to consumers. However, as noted by Vodafone and conceded by OFCOM, the decision to proceed with recipient-led two hour porting was only mandated once it had been concluded that the costs and benefits of direct routing were in themselves sufficient to justify the Decision.
119. The arguments presented in written submissions and at the hearing do not enable us to reach any firm conclusions on the level of net growth of ported minutes. On balance, we would expect some modest growth. However, this view is not a material factor in our decision.

Unit cost of onward routing

120. At the hearing, OFCOM explained that with increasing use of 3G switches, infrastructure costs will decrease over time and, therefore, the unit cost of onward routing will reduce. All the parties accepted that costs will decline over time. However, the rate of such decline is a matter of dispute and is noted as such at paragraph A1.55 of the Decision: “It is not clear, however, how quickly or how far costs will fall”.
121. In terms of the rate of decline over time, Vodafone submitted that OFCOM should have adopted figures used by OFCOM themselves and devised with the help of consultants (Analysys) in calculating the change in mobile call termination costs over the period to 2020. It was argued that OFCOM provided no reasoning for their departure from their previously adopted figures; and that adopting the cost figures used by Analysys reduced the NPV in OFCOM’s base case by £16 million.
122. OFCOM replied that they were perfectly entitled to adopt an informed assumption as to a different rate of decline and that, even taking into account the report performed by Analysys, there is no right or wrong answer.
123. The position adopted by OFCOM in relation to the rate of decline of the unit costs of onward routing allowed for no change over the first four years i.e. from 2007 to 2010. This is important in terms of the CBA as, due to the discount rate of 12% adopted by OFCOM, the early years of the analysis have a correspondingly greater impact on the outcome. The larger the margin of error and the greater the scope for making an error in the first few years, the more likely it is that the results drawn from the CBA are flawed. In these circumstances, the Tribunal’s view is that it was incumbent on OFCOM to ensure that the figures they adopted were better justified and more rigorous than was the case. No compelling evidence was adduced by OFCOM as to why they had departed from the costs used in the context of mobile call termination rates.

The Tribunal's conclusions on the CBA

124. In written submissions and at the hearing, the Tribunal was referred to the decision of the Competition Commission (“CC”) in *E.ON UK plc and GEMA and British Gas Trading Limited* CC02/07, where the CC considered an appeal brought by E.ON UK plc (“E.ON”) under section 173 of the Energy Act 2004 against a decision of the Gas and Electricity Markets Authority (“GEMA”) in relation to proposed changes to arrangements for the off take of gas from the National Transmission System as set out in the Uniform Network Code. Included as part of GEMA’s decision was a cost-benefit analysis, which was challenged by E.ON. The CC held that:

“6.156 [We] accept GEMA’s submission that a code modification appeal should not be regarded as an opportunity for rival parties to debate exactly what value should be ascribed to particular items within a quantitative assessment of the costs and benefits of a proposal. Cost benefit analysis involves a degree of judgement and discretion. Unless the regulator has erred in logic or principle in quantifying a benefit, the CC will be slow to overturn the regulator’s quantification of that cost or benefit.

6.157 [We] accept GEMA’s submission that benefits need not be quantified in order for them to be reflected in a CBA, and that non-quantified benefits may be as important, or more important, than quantified benefits. However if a CBA is to be transparent, benefits should be quantified where possible. For the same reason, qualitative benefits should be explained clearly and in detail, so that it can fairly be seen whether there is any potential overlap between the qualitative and quantitative benefits.”

125. The CC concluded that the decision of GEMA “contained insufficient material to support the conclusion that [the decision challenged] will, or is sufficiently likely to, deliver benefits to consumers, and insufficient explanation of the nature and extent of the benefits to be expected.” While adopted under the specific statutory framework laid down in the Energy Act 2004, we agree with the CC’s general approach to analysing a regulator’s assessment of the costs and benefits of a proposed modification to existing processes.

126. In considering the CBA as a whole, the Tribunal finds that it was not carried out to the requisite standard and does not withstand the level of scrutiny which we are required to apply under section 195 of the CA 2003. In particular, for the reasons given above, the CBA contained unreliable estimates of the costs of direct routing, relied upon

insufficiently justified or explained benefits, and is therefore flawed to an extent requiring a remedy from this Tribunal.

127. We add that we were referred throughout these proceedings to the position with regard to number portability in other countries, especially Ireland. In our view, as noted by the Tribunal in *H3G MCT* (at paragraph [261]), it is difficult to draw any firm conclusions derived from disparate facts plucked out of the information about a range of international markets. For example, as regards the position in Ireland, on the evidence it became apparent that it was a significant over-simplification to describe the situation there genuinely as two-hour porting (see further, section VII below), given other delays to the process prior to the initiation of the electronic porting activity.

VII. RECIPIENT-LED TWO HOUR PORTING

128. The parties agreed that the decision to require implementation of recipient-led two hour porting was itself premised on the existence of direct routing (see, for example, paragraph A1.64 of the Decision). Given our finding against OFCOM in relation to the CBA and direct routing, we do not need to reach a decision in relation to recipient-led two hour porting, as the latter is premised on the former being justified. However, having heard evidence on the issue, for the assistance of the parties and completeness we include the following paragraphs.

Costs of Recipient-Led Two Hour Porting

129. Vodafone submitted that OFCOM thought that the CDB itself would essentially deliver recipient-led two hour porting. The Decision provided as follows:

“A1.66 The main task of deploying a recipient led process for porting numbers relates to the automation of systems to allow easy communication between the providers, and modification of call routing tables. To a large extent, the CDB itself will offer this functionality. Some customer-facing staff of recipient providers will also need to be trained and enabled to initiate port requests...

A1.68 Ofcom has estimated that the incremental one-off total industry costs of moving to a recipient-led process is about £5 million (approximately £2.5 million in changes to network operator systems, £0.5 million in changes to network operator

processes, £1 million in retailer processes and systems and £1.0 million contingency)."

130. Vodafone argued that they do not know the basis of the figure of a cost of £5 million adopted by OFCOM in the Decision. They, together with Orange, also submitted that, similar to the position as regards the move to direct routing, there was an absence of any technical specification in the Decision. There are also additional substantial cost elements involved in the move to recipient-led two hour porting that have not been properly considered by OFCOM in adopting the Decision.
131. One additional crucial activity not taken into account sufficiently, according to Vodafone, was that of authentication i.e. the necessity for the recipient network to confirm the identity of the customer wishing to port his or her number. Other activities, as argued by O2 and Orange, included the need to protect consumers against "slamming" (a practice whereby customers of a particular mobile or fixed network are transferred to a new network without their express consent) and avoiding liability following contract termination. Orange submitted that it is not in the recipient network's interest to highlight these issues to the consumer as they want potential customers to switch provider as soon as possible. Vodafone argued too that OFCOM have not identified the costs involved in setting up the procedures they envisage to protect against mis-selling and slamming.
132. Orange submitted that OFCOM's estimate of the costs of implementing recipient-led two hour porting was speculative. They pointed to two elements in the porting process: authorisation of the port between the two operators; and the physical implementation of the port. Although the CDB may have some impact in facilitating the latter process, Orange submitted that it has no impact on authorisation and that this would have substantial cost implications.
133. OFCOM responded that, in the presence of a CDB to enable direct routing, the incremental costs of recipient-led mobile number porting processes are not likely to be significantly higher than those for a donor-led process. As quoted in paragraph [127] above, OFCOM provided an estimate (at paragraph A1.68 of the Decision) of the incremental one-off costs of about £5 million. Also, in their Decision, OFCOM

stated that it would be inefficient to design the new process to extend across two business days when it can be completed near-instantly. They submitted that the incremental costs of, for example, staff training, would be minimal under an automated process and that “[t]o a large extent, the CDB itself will offer this functionality” (paragraph A1.66).

134. At the hearing, counsel for OFCOM stated that the figure of £5 million was adopted from internal working by OFCOM staff. The calculation did not appear in any documents before the Tribunal. OFCOM submitted that, to the extent further issues arise with respect to customer contract liabilities, these issues should be dealt with by the industry. In addition, concerns surrounding slamming are already addressed by an existing regulatory scheme.
135. H3G argued that slamming could be appropriately dealt with by a proper authentication process, which would not be expensive or difficult to operate. Issues surrounding contractual liability in respect of the customer’s former network should also not arise, as the Decision only relates to number portability and does not affect contractual relationships.

The use of section 135

136. As noted in section III above, OFCOM produced a draft section 135 notice in August 2007, which required addressees to submit estimates of the costs of introducing a near-instant recipient-led porting process, and circulated it for comment. Vodafone responded, saying that the request embodied in the notice was disproportionate and that they could not answer the request as it was insufficiently clear how a central database would operate in practice and that, if further diverging assumptions were to be adopted by MNOs, the information would be of little value to OFCOM. In a revised section 135 notice, OFCOM limited their request to documents already in Vodafone’s possession. Vodafone were able to submit limited information falling within the terms of the notice and argued that, by failing to specify the costs they were requiring information about, OFCOM deprived themselves of the opportunity properly to understand what the cost elements would be.

137. During the hearing, we were referred by Mr. Saini QC to the judgment of the Court of Appeal in *Royal Mail Group plc v The Postal Services Commission* [2008] EWCA Civ 33. The Court of Appeal considered a challenge to a decision by the Postal Services Commission (“Postcomm”) to impose a penalty on Royal Mail for breaches of the conditions of its licence. In his judgment, Pill LJ observed that, during the course of Postcomm’s investigation, Royal Mail proffered “less than full co-operation” (paragraph 33) and appeared to “take the approach traditional in criminal cases in which a defendant could do nothing and see whether the prosecution can prove its case” (paragraph 34). However, as noted by Pill LJ, that approach is now much qualified even in criminal cases. The Court held that the decision to impose a penalty was soundly based and that Postcomm had used its best endeavours to discharge its duties.
138. Orange made the logical point to us that it would not be in the MNOs interests to withhold information showing that the costs to industry would be higher than those estimated by OFCOM. Orange submitted too that *Royal Mail* arose in very different circumstances to those under consideration as it involved an alleged breach of Royal Mail’s licence and, in any event, Royal Mail had a clear incentive not to provide the information sought by the regulator.
139. We agree with Orange’s submissions that there is a clear distinction to be made between the present case and the facts under consideration in *Royal Mail*. We are mindful too that Mr. Saini QC was keen to stress that OFCOM did not seek to allege that there had been a breach of section 135 by any of the MNOs in submitting their responses. The Tribunal notes that breaches of section 135 carry their own serious consequences and penalties can be imposed by OFCOM on persons who contravene a notice issued under section 135. In this case, section 135 was merely part of the background, as no breach was held or even claimed to have occurred.

Benefits of Recipient-Led Two Hour Porting

140. OFCOM submitted that the current onward routing process acts as a major disincentive to promote porting, in that the possibility of porting a number puts the customer back in touch with their old network and allows it to engage in “save”

activity, i.e. offering a better tariff or more modern handset to remain with the network. They also note that quantitative market research is not generally a reliable tool for gauging consumers' likely behaviour in a hypothetical situation, but that in any event, market research carried out in February 2007 found that only a small minority of consumers had considered switching mobile provider and been deterred from doing so. Nonetheless, OFCOM found at paragraph 3.97 of the Decision that it is "reasonable to conclude that the improvements to arrangements for porting mobile numbers may increase the propensity of some consumers to switch"; and at paragraph 3.109: "OFCOM does not have any compelling evidence to suggest that overall there will be a reduction in competition". OFCOM recognised that MNOs will need to ensure that robust systems are put in place to protect against mis-selling and slamming.

141. At the hearing, OFCOM agreed that there may be a benefit to consumers resulting from save activity. However, the view of OFCOM was that there is equally a benefit in preventing such activity, as MNOs may have an incentive to offer improved terms to all customers to prevent them from switching, and not just to those who contact the MNO to request a PAC in order to port their number to a new network.
142. Orange argued that save (or "win-back") activity, by allowing a customer to play off one operator against another, enhances bargaining power and is beneficial from the customer's point of view.
143. H3G submitted that, while save activity may result in a short term gain for the individual customer, new entrant MNOs are placed at a serious disadvantage, leading to less competition in the market and higher prices overall. Easier porting should lead to more switching, which will in turn lead to improved customer service throughout the industry, thereby benefiting consumers.
144. In the view of the Tribunal, the evidence that was put to us on save activity was insufficiently conclusive either way so as to assist our determination.
145. In relation to two hour porting, OFCOM submitted that the benefits of faster porting are "self-evident" (paragraph 75 of their skeleton argument) and that the change to

two hour porting would contribute towards the achievement of OFCOM's statutory objectives under sections 3 and 4 of the CA 2003. As noted in the November 2006 consultation at paragraph 1.12: "In OFCOM's view the shorter the process, the better it is for competition and consumers." At the hearing, counsel for OFCOM stated that consumer research in this area would have been pointless as the benefits of shorter lead times "are so obvious".

146. In response, Vodafone submitted that changing from a two day to two hour porting lead time is unlikely to produce appreciable improvements for consumers, especially when competition in the industry is already effective; and that no evidence had been adduced to show that there is an additional benefit to outweigh the additional cost of porting numbers in two hours rather than two days.
147. Miss Demetriou, counsel for Orange, submitted that OFCOM need to show that a move to two hour porting would result in tangible benefits, i.e. it would have a real impact on customer switching between MNOs – such as increasing the number of customers who would be persuaded to switch who otherwise would not have switched if lead times were longer.
148. Whether or not it is, in OFCOM's own words, "self-evident" that it would be in the interests of consumers who had decided to change providers for that decision to be given effect to in the shortest possible timeframe, such purported benefits must, in the view of the Tribunal, be weighed against the costs of implementation. Consumers who may value faster porting in theory may prefer a slightly longer timeframe if the costs of near instant porting outweigh the associated convenience.
149. As with save activity, this Tribunal has concluded that the evidence on recipient-led and two hour porting was insufficiently conclusive either way so as to assist us in our determination. In any event, in light of our conclusions in relation to the CBA, it is not necessary to reach any further findings in this regard.

VIII. H3G'S ARGUMENTS ON DISTORTION OF COMPETITION

150. In written pleadings and at the hearing, H3G argued that the current system of donor-led porting distorts competition between MNOs. This is due both to the potential for the donor network to engage in save activity (see paragraphs [140] to [144] above) and the current system of regulation of mobile call termination rates between MNOs. At present, where a customer has ported out from H3G to a 2G network, the 2G network operator recovers the higher 3G termination rate of H3G on calls to the ported-out customer. Conversely, where a customer has ported from one of the 2G/3G MNOs to H3G, H3G receives the lower 2G termination rate.
151. Vodafone submitted that H3G's arguments are in relation to the regulation of termination charges and donor conveyance charges as between operators. The Decision and CBA contained therein, however, purport to weigh the costs imposed on industry as against the benefits to consumers. The Decision did not look at much broader questions of competition between MNOs, which, in any event, H3G did not quantify in terms of consumer detriment. Moreover, the current system of price controls was already the subject of separate challenge before this Tribunal in *H3G MCT* and the alleged distortion identified by H3G is currently the subject of separate consultation by OFCOM.
152. T-Mobile submitted that the Tribunal cannot substitute H3G's reasoning for that contained in the Decision, which provides at paragraph 3.26 as follows:

“[OFCOM] has not considered whether the current arrangements for the payment of termination charges should or should not be subject to change. However, [OFCOM] notes that, where direct routing is in place, the recipient network would receive its own termination charge.”
153. OFCOM argued in their skeleton argument (at paragraph 36) that: “while interveners are, of course, entitled to make observations in relation to [the Appellant's grounds of appeal] either to protect their own positions or to assist the Tribunal, they are neither co-appellants nor co-respondents, and should not be permitted to introduce what are new grounds”. In response to arguments levelled at the content of their arguments intervening in support of OFCOM, H3G responded that, as they supported the

outcome of the Decision, they had no other way of advancing their separate arguments before the Tribunal, except by way of intervention in this appeal in support of OFCOM.

154. Under section 195(2) of the CA 2003, the Tribunal must determine the appeal “on the merits and by reference to the grounds of appeal set out in the notice of appeal”. Rule 16(6) of the Competition Appeal Tribunal Rules 2003 (SI 2003, No. 1372), in relation to intervention, provides:

“If the Tribunal is satisfied, having taken into account the observations of the parties, that the intervening party has a sufficient interest, it may permit the intervention on such terms and conditions as it thinks fit.”

155. While the provisions of the CA 2003 and the Tribunal’s Rules appear to allow a degree of latitude with respect to interventions, the Tribunal does not at this stage reach a conclusion on H3G’s entitlement to adduce additional matters in support of the Decision which were not specifically considered by OFCOM themselves. We merely note that it would not be open to the Tribunal, in the interests of procedural fairness, to seek to base the Decision on grounds other than those set out therein in the absence of the ability to consult all those stakeholders potentially affected by such a decision and consider their responses. In some circumstances, it may be appropriate to remit the matter to OFCOM under section 195(4) with specific directions as the Tribunal considers appropriate for giving effect to its decision. However, this option should only be open to the Tribunal provided that it has all the necessary relevant material before it, the requirements of procedural fairness have been fully respected and the approach is desirable from the point of view of the need for expedition and saving costs. We do not consider that these conditions have been met in this case.

IX. CONCLUSION

156. For the reasons set out above, the Tribunal holds that the appeal brought against the Decision is well founded.

X. ACTION TO BE TAKEN

157. Vodafone seek to have the entire Decision set aside and remitted to OFCOM under section 195(4) of CA 2003. Vodafone submitted that the mobile-to-mobile and mobile-to-fixed aspects of the Decision are inextricably bound together and cannot, therefore, be separated as they currently stand. The correct analysis is that if the CBA is flawed, the rest of the Decision is also flawed and the only right course is to remit the entire Decision to OFCOM for reconsideration.
158. H3G submitted that the Tribunal has a wide discretion under section 195 CA 2003 in relation to the form of relief the Tribunal may grant. They submitted that the Decision with respect to mobile-to-mobile direct routing can be distinguished from that with respect to mobile-to-fixed, and that Vodafone's principal objections were directed to the mobile-to-fixed solution. There is also a larger window of opportunity in relation to the mobile-to-fixed solution, as this is only required to be implemented by 2012 under the timetable set out in the Decision.
159. Our conclusion is that the appropriate course is for the Tribunal to remit, under section 195(4) CA 2003, the whole matter to OFCOM for reconsideration. OFCOM should seek the fresh views of the industry on the issue of altering the current arrangements in the UK for fixed and mobile porting, on the basis of appropriate evidence and analysis in light of the findings set out in this judgment. The Tribunal further considers that a staged approach to decision making in a matter of such complexity may be advantageous. Such an approach would enable information gathered from earlier stages to provide the basis for CBA-based decisions upon whether to proceed to the next stage(s), although by this time matters already proceeding may well enable reduced uncertainty with respect to certain factors and allow for measures of previously unknown inputs to be quantified and incorporated in OFCOM's revised analysis.
160. We were referred during the hearing to work carried out and continuing by the industry, through UKPorting, following the OFCOM decision of November 2007. That work has been designed to provide detailed specifications and cost estimates to inform an improved decision-making process. We hope that this work will not be

wasted in the event of new proposals for direct routing. In due course, the parties will be given an opportunity to comment on the form of a draft Order, so as to ensure that the directions made by the Tribunal give effect to the decision set out in the judgment in this appeal.

161. Finally, the Tribunal wishes to thank all parties for their cooperation in the management of this case. The quality of the skeleton and oral arguments, and the distribution of issues among the parties and interveners, shortened the hearing significantly without in any way diminishing the overriding objectives of procedural fairness and just outcome.

Lord Carlile of Berriew

Dr Arthur Pryor CB

Professor Paul Stoneman

Charles Dhanowa
Registrar

18 September 2008