

IN THE COMPETITION APPEAL TRIBUNAL

CASE NO: 1018/3/3/03

BRITISH TELECOMMUNICATIONS PLC

Applicant

and

DIRECTOR GENERAL OF TELECOMMUNICATIONS

Respondent

and

VODAFONE LIMITED

First Intervener

O2 (UK) LIMITED

Second Intervener

RESPONDENT'S SKELETON ARGUMENT

Introduction

1. This is an appeal by British Telecommunications plc ("BT") against a Direction of the Director General of Telecommunications ("the Director") of 23 June 2003 [1/5]¹ ("the Direction") and against a Continuation Notice dated 21 July 2003 [1/6] ("the Continuation Notice") which provides that the Direction will continue to have effect until further notice.
2. The Direction concerned a dispute between BT and Vodafone Limited ("Vodafone") about the provision of radio base station ("RBS") backhaul circuits. Vodafone asked BT to provide it with RBS backhaul circuits on

¹ References to BT's Appeal Binders are in the form [binder/tab/page].

wholesale terms². BT refused. The Director determined the dispute under Regulation 6(6) of the Telecommunications (Interconnection) Regulations 1997 [3/1] ("the 1997 Regulations"). By the Direction, the Director ordered BT to provide the RBS backhaul service to Vodafone at cost-oriented prices and on non-discriminatory terms. As Condition 57 of BT's licence requires it to provide interconnection products on non-discriminatory terms, BT will also be required to provide the RBS backhaul service on the same terms to other mobile operators who might request it.

3. The appeal raises only one issue. That is whether or not the provision of the RBS backhaul service involves "interconnection" such that the dispute between BT and Vodafone can be categorised as a "dispute concerning interconnection" for the purposes of Regulation 6(6) of the 1997 Regulations. The Director (supported by Vodafone and O2) says that it does. BT says that it does not.
4. The answer to that question turns, first, on the facts of the present case, and, secondly, on the proper construction of the 1997 Regulations and applicable Directives.

The facts

5. There should be an agreed statement of facts before the Tribunal. The Tribunal has also had the benefit of a site visit. In summary, however, the relevant facts are as follows.
6. The provision of RBS backhaul constitutes a service whereby BT conveys signals on behalf of Vodafone between the latter's RBSs and its MTXs. To be accepted by and conveyed over BT's equipment, Vodafone's signals have to

² The expression "Wholesale terms" is used to refer to the terms for services supplied at the wholesale level (i.e. to another operator who onells them to the end user) and they are terms that are required to be non-discriminatory and cost-oriented. A cost-oriented price at the wholesale level will be lower than a cost-oriented price at the retail level, since it will be based on the costs of providing a wholesale product rather than the costs of providing a retail product.

conform to certain protocols³ governing their format, frequency and so on. In the first stage of the backhaul service, BT first converts the signals to optical impulses then transmits them from Vodafone's RBS to BT's local serving exchange ("LSE") using equipment belonging to BT, including a transmitter located at the RBS. The equipment at this first stage may be dedicated to transmitting and conveying signals for Vodafone or it may also be used for transmitting and conveying signals for other mobile operators who make use of the RBS in question.

7. At the LSE, the signals pass from such dedicated (or partially dedicated) equipment to other BT equipment that is also used for the transmission and conveyance of signals from other sources (which may include BT's own voice telephony customers). From the LSE, there is no part of the equipment in question that is dedicated to the conveyance of signals for Vodafone. Rather, Vodafone's signals will be "multiplexed" by BT so that the cables are "time sliced", at one micro-second carrying Vodafone signals, at the next signals for another party or for BT itself, in a sequence which is predetermined by BT and which BT remains free to alter. Although the time slots that BT has allocated to Vodafone will always be used for Vodafone's signals (even if the signals convey no message), the equipment itself is shared.
8. From the LSE serving the RBS in question, BT conveys the signals to an LSE serving the MTX which is the "host" to that RBS. The route that the signals take between those two LSEs is determined by BT and may be changed by BT in the event, for example, of technical faults on the line. The route may involve several different transmission systems and several different BT exchanges, at each of which the Vodafone signals will be "multiplexed" from the incoming transmission system to the outgoing transmission system.
9. On their final stage the signals pass from the LSE serving the host MTX to that MTX, usually across BT equipment that is dedicated to this purpose.

³ For transmission over BT's SDH (Synchronous Digital Hierarchy) or MSH (Marconi Synchronous Hierarchy) networks, the signals must conform to the protocols specified at length in the International Telecommunication Union G774 series of recommendations.

The meaning of “interconnection”

10. The definition of “interconnection” for the purposes of the 1997 Regulations is found in Regulation 2(2) of the 1997 Regulations and is in the same terms as the definition contained in Directive 97/33/EC [3/3] (“the Interconnection Directive”).

11. As is apparent from Case *C-79/00 Telefonica de Espana SA* [2001] ECR I-10075⁴, a broad approach should be adopted in construing the Interconnection Directive. In that case, the Advocate General emphasised that the Directive should be interpreted flexibly and to leave a significant margin of appreciation to Member States: see paragraphs 69-74 of Advocate General Jacob’s Opinion. In particular, he said (at paragraph 73)

“In Member States where as a result of former special or exclusive rights the incumbent has a very strong position in the market, asymmetric regulation and strict supervision of access and interconnection agreements is indispensable in order to create competitive markets. ... Member States must thus necessarily enjoy a certain margin of appreciation to adapt their regulatory framework to the evolving economic features of their national telecommunications market”.

12. Article 2.1 of the Interconnection Directive provides that, for the purposes of the Directive,

“... ‘interconnection’ means the physical and logical linking of telecommunications networks used by the same or a different organisation in order to allow the users of one organisation to communicate with users of the same or another organisation, or to access services provided by another organisation. Services may be provided by the parties involved or other parties who have access to the network”.

13. Article 2.1 of the Interconnection Directive also provides that

“... ‘telecommunications network’ means transmission systems and, where applicable, switching equipment and other resources which permit the conveyance of signals between defined termination points by wire, by radio, by optical or by other electromagnetic means”.

14. Interconnection for the purposes of the Directive therefore involves three elements:

⁴ At Annex 1 to this Skeleton Argument.

- i) The existence of two (or more) "telecommunications networks" that are linked.
- ii) A linking between those telecommunications networks that is physical and logical.
- iii) A linking that takes place in order to allow the users of one organisation to communicate with users of the same or another organisation, or to access services provided by another organisation

(i) The relevant telecommunications networks

15. The Director's case is that the telecommunications networks that are being interconnected comprise: (a) Vodafone's MTX network defined by reference to termination points that include the interfaces with every switched on mobile telephone, the interconnection points between Vodafone's network and other networks, and other points where messages originate and terminate; and (b) the BT network comprising the transmission systems and other resources used by BT to convey the Vodafone signals between the Vodafone MTX at the one end and the Vodafone RBS at the other.
16. BT denies that either set of equipment comprises a telecommunications network as defined by the Interconnection Directive, on the grounds that the termination points referred to by the Director, in particular the points of interconnection, do not constitute "defined termination points" within the meaning of the Interconnection Directive.
17. In this regard, BT purports to rely upon the definition of "network termination point" contained in Directive 90/387/EEC (as amended)⁵, which provides:

" 'network termination point' shall mean the physical point at which a user is provided with access to a public telecommunications network. The locations of network termination points shall be defined by the national regulatory authority and shall represent a boundary, for regulatory purposes, of the public telecommunications network".

⁵ At Annex 2 to this Skeleton Argument.

18. BT claims that network termination points are points at which an *end* user has access to the network in order to initiate or receive messages and are the points at which a call or message terminates. It argues that an intermediate point where, for example, one network connects with another, cannot be a defined termination point.
19. BT is simply wrong. Its argument is based upon an unwarranted limitation of the meaning of “users”, and ignores the fact that “network termination points” is clearly used to refer to the points at which the *network* terminates, including points of interconnection.

“Users”

20. As BT notes⁶, “users” is defined in Directive 90/387/EEC as meaning

“individuals, including consumers, or organisations using or requesting publicly available telecommunications services”.
21. BT however assumes⁷, without any justification, that “users” means *end* users and that the reference to “termination points” is to the points at which the call or message terminates. That is not the case. The termination points referred to are the points where the *network* terminates, representing the “boundary” of the network. And “users” is defined to include “organisations using or requesting publicly available telecommunications services”.
22. The meaning of this latter expression is made clear in the fifth recital to the Interconnection Directive [3/3], which states:

“for the purpose of this Directive, ‘public’ does not refer to ownership, nor does it refer to a limited set of offerings designated as ‘public networks’ or ‘public services’, but means any network or service that is made *publicly available for use by third parties*” (emphasis added).
23. As described in paragraph 1.3 of the Decision [1/5/7], the connection between Vodafone’s core network of MTXs and its network of RBSs (i.e. the RBS

⁶ Reply para 7.

⁷ Reply para 8.

backhaul circuit) is currently provided by a service that BT makes available on a retail basis. It is therefore a service that is made publicly available for use by third parties or a "publicly available telecommunications service". Vodafone is an organisation that uses that service (and requests use of the RBS backhaul service). It is therefore a "user" as defined in Directive 90/387/EEC.

24. Further, in Directive 98/10/EC on open network provision ("Directive 98/10/EC")⁸ a distinction is made between "users", which is defined in identical terms to those contained in Directive 90/387/EEC, and "consumer", which is defined as

"any natural person who uses a publicly available telecommunications service for purposes which are outside his or her trade, business or profession".

25. This reaffirms that, while the term "users" in Directive 90/387/EEC includes consumers or end-users, it is not limited to them. There is no justification for excluding organisations such as Vodafone from the "users" referred to in the definition of "network termination point" and no justification for limiting that definition to points at which an end user has access to the network.

"Network termination points"

26. That "network termination point" is not limited to points at which end users have access to the network is further borne out by the use made of the expression elsewhere.
27. In particular, Article 16 of Directive 98/10/EC (which incorporates the definitions given in Directive 90/387/EEC: see Article 2) refers to "network termination points" in circumstances that make it clear that these include the interconnection points at which other telecommunications organisations have access to the network. Article 16 concerns special network access, and provides

⁸ At Annex 3 to this Skeleton Argument.

"National regulatory authorities shall ensure that organisations with significant market power in the provision of fixed public telephone networks deal with reasonable requests from organisations providing telecommunications services for access to the fixed public telephone network at network termination points other than the commonly provided network termination points referred to in Annex II".

28. In that context it is manifest that "network termination point" does not refer to a point at which an end user receives a message. Contrary to BT's contentions, the expression is plainly used to encompass points at which organisations providing telecommunications services (such as Vodafone) require access to the network.
29. Furthermore, the definition in Directive 90/387/EEC itself provides that "network termination points" shall represent a "boundary", for regulatory purposes, of the public telecommunications network. The boundary of the network (ie where the network terminates) must plainly include not only the points where an end user has access to the network (such as telephone handsets) but also points at which the network of one operator interconnects with the network of another operator. These points represent a part of the boundary of a public telecommunications network.
30. The definition in Directive 90/387/EEC also provides that the national regulatory authority shall define the locations of network termination points. In the United Kingdom, the Director has done this in the licences issued to operators at Annex A, which defines the limit of the "Applicable Systems" (i.e. the extent of the telecommunications systems which are authorised by the relevant licence). Annex A defines "network termination points" expressly to include *both* points at which an end user is provided with access to the network *and* points at which other networks connect to the licensee's network. A copy of Annex A as incorporated in BT's Telecommunications Act 1984 licence is attached to this skeleton at Annex 4. The same definition of "network termination point" was used in all other operators' licences.

Conclusion on "telecommunications networks"

31. It is thus clear that "network termination points" are not limited to points at which an end user has access to a network in order to initiate or receive messages. They also include the interconnection points between one network and another network, for example, where the Vodafone network connects with the equipment used by BT to provide the RBS backhaul service.
32. BT is therefore wrong in contending that Vodafone's MTX network is not a "telecommunications network" on the grounds that it does not permit the conveyance of signals between end-users' telephone handsets. In fact it does comprise a "telecommunications network" since it is made up of transmission systems and other resources which permit the conveyance of signals between defined termination points (including mobile handsets and the interconnection with other networks including the RBS backhaul circuit).
33. Similarly, in effecting the service comprising RBS backhaul, BT conveys signals between defined termination points (at the MTX at one end and the RBS at the other) by means of transmission systems and other resources. Those transmission systems and other resources fall squarely within the definition of "telecommunications network" in Article 2.1 of the Interconnection Directive.
34. BT argues that the Director's conclusion in this regard "defies logic and is not the intention of the Interconnection Directive", because it would mean that what has been conventionally understood to constitute Vodafone's telecommunications network would in fact comprise many individual networks.
35. But there is no absurdity in such a conclusion. It is readily apparent that a telecommunications network that has grown through the merger of previously separate networks would comprise parts which, looked at separately, could constitute more than one telecommunications network. Equally, even on BT's case, each combination of RBS, MTX and the connection between the two

would be capable of constituting a separate network, so that if physical and logical linkage were limited to access to that combination alone, there could still be interconnection.

36. Moreover, far from being contrary to the intention of the Interconnection Directive, such an approach clearly accords with that intention, as can be seen from the Directive's treatment of leased lines. In Annex I to the Interconnection Directive, "the leased lines service" is one of the "public telecommunications networks and/or publicly available services" as regards which operators with significant market power are subject to specific interconnection and access obligations. Further, in Annex II to the Directive, "organisations which provide leased lines to users' premises" are subject to rights and obligations to interconnect.
37. If organisations that provide leased lines are subject to obligations to interconnect, that must be because the provision of the leased line service involves the use of a "telecommunications network" capable of being physically and logically linked with the telecommunications network of the organisation wishing to interconnect. Unless that were so, there would be no "interconnection" within the meaning of Article 2.1 of the Directive. Inconsistently with the Interconnection Directive, on BT's case the provision of leased lines could never involve interconnection since it would not involve two "telecommunications networks" and there would be no "physical and logical" linking. Because it is inconsistent with the Interconnection Directive, BT's case cannot be right.
38. In fact, the provision of a leased line involves a service which is technically the same as that involved in RBS backhaul, with the leased line operator similarly conveying signals over its transmission systems on behalf of the user of the leased line, and without on-demand switching. It is therefore not the case, as suggested by BT, that the Directive applies only to complete networks (as that term is commonly understood) such as Vodafone's whole mobile telephone network; rather, it can apply to part of that network, such as the facilities used in providing a leased line service or an RBS backhaul service.

(ii) Physical and logical linking

39. BT not only disputes that RBS backhaul involves the linking of two telecommunications networks; it also disputes that the linking between the BT equipment (to use a neutral term) and the Vodafone equipment is “physical and logical” as required by the definition of “interconnection”.
40. There can plainly be no dispute that, for RBS backhaul, the Vodafone equipment is *physically* linked with the BT equipment. As the Tribunal saw during the site visit, the physical linkage takes place at each end of the “RBS backhaul circuit”, that is the Vodafone MTX switch at one end and the RBS at the other.
41. As for *logical* linkage, this occurs in at least the following respects:
- (i) the signals that BT conveys for Vodafone between the latter’s MTXs and its RBSs have to conform to given protocols which determine the logical architecture of the signals so that the conveyance can take place;
 - (ii) as was explained during the site visit, BT conveys the signals on behalf of Vodafone by way of time segmented multiplexing; the Vodafone signals are broken down by BT and interleaved with other data signals (including voice telephony) in “packages” of a microsecond’s duration, giving rise to an intricate logical linkage; and
 - (iii) as in the examples seen on the site visit, the logical route for the signals may differ from the physical route through which BT conveys them.
42. BT seeks to argue⁹ that “physical and logical linkage between two networks necessarily envisages an element of interaction between them and a mutual comprehension of signalling and protocols employed”. BT refers to the example¹⁰ of an interconnection provided so that a Vodafone customer can communicate with a BT customer. The Director agrees that in such a situation,

⁹ Reply para 25.

¹⁰ Reply para 24.

where BT is required to switch the call, it will have to interact in the manner described.

43. But switching is not a necessary part of interconnection. That is apparent from the definition of "telecommunications network" in Article 2(c) of the Interconnection Directive which makes it clear that a telecommunications network does not necessarily include switching equipment.
44. The fact is that the degree of interaction involved in the provision of RBS backhaul services is no different from the degree of interaction where BT provides other leased line interconnection services. In particular, BT has no greater degree of interaction with the signals when the service given is a Partial Private Circuit ("PPC"); as explained in Peter Walker's witness statement (at paras 53-54)¹¹, the European Commission treats the provision of PPCs as involving interconnection. That is consistent with the treatment of leased lines in the Interconnection Directive itself (see paras 36-38 above).
45. In any event, even if BT were right that an element of interaction was a necessary element of logical linkage between two networks, there is ample interaction here. First, although at paragraph 21 of its Reply, BT says that it "does not transmit signals"¹², it plainly does so. Indeed, during the site visit, at the RBS, the Tribunal saw the BT transmitter, which converts the electronic signals received from the RBS into optical impulses and then transmits those signals in optical form through the fibre optic cable. Secondly, as noted above, BT multiplexes the Vodafone signals so that they are interleaved in a highly complex way with other signals being conveyed across its equipment. Thirdly, BT is responsible for determining the route that the signals take, for changing

¹¹ Attached to the Director's Defence.

¹² This appears to be based on paragraph 17 of Mr Butterworth's Second Witness Statement. What Mr Butterworth actually says is that BT does not route signals for Vodafone nor transmit messages "in the sense in which those processes are used in relation to traffic passing through BT's network". Thus Mr Butterworth appears to accept that there is a sense in which BT routes signals and transmits messages for Vodafone. The distinction he draws seems to derive from the fact that the RBS backhaul service is not switched, although switching is not a necessary ingredient of interconnection: see para 43 above.

the route in the event of faults, and for monitoring what is happening in order to provide an alarm in the event of a break of service¹³.

46. Insofar as BT seeks to argue that capacity “dedicated” to Vodafone RBS backhaul is “no longer a resource available for use by BT”¹⁴ which is “excised from the BT network”¹⁵ and “becomes part of the mobile operator’s network”¹⁶, BT’s position is disingenuous. Although *capacity* may be reserved for the RBS backhaul service supplied to Vodafone, there is no *equipment* that is dedicated to that service once the signals have passed into the “cloud” of BT’s network. The route over which the signals pass, and the time-sliced sequence in which they pass over that route (interleaved with other signals) remain under the control of BT. There is nothing that could sensibly be regarded as “excised from the BT network”. And again in this respect the position is no different from the supply of PPC services, which the European Commission regards as involving interconnection.

(iii) Enabling users to communicate with users

47. BT seeks to argue that the function of interconnection is to provide end-to-end interoperability of services and that RBS backhaul does not facilitate end-to-end user interoperability. BT’s arguments in this respect are wrong.
48. First, the scope and aim of the Interconnection Directive, as stated in Article 1, is to secure in the Community “the interconnection of telecommunications networks and in particular the interoperability of services”. Thus it is not limited to interoperability of services let alone end-to-end interoperability of services.
49. Secondly and in any event, contrary to BT’s assertion, the function of RBS backhaul *is* to allow inter-communication between users, as envisaged by the definition of “interconnection” in the Interconnection Directive. By

¹³ See the first page of BT’s description of its MegaStream circuits at Tab 10 in the Defence bundle.

¹⁴ Reply para 20.

¹⁵ Reply para 26.

¹⁶ Reply para 27.

connecting the RBSs to the MTXs, RBS backhaul allows Vodafone users to communicate with other Vodafone users as well as with users of other networks. The definition specifically refers to communication between users of *the same* organisation, as well as between users of different organisations.

50. In this regard, BT now seeks to place a wholly artificial and restrictive interpretation on the reference in the definition to communication between users of the same organisation. Originally, in his first witness statement for BT Mr Butterworth said [1/5/4]:

“Similarly, if a customer of Operator X wishes to talk to another customer of operator X, then the service that links the terminating ends of operator X’s network together may also be interconnection (e.g. transit services) but only because the call transits another operator’s network.”

51. BT now seeks to resile from that statement, which was entirely appropriate to cover the sort of transiting interconnection that occurs with RBS backhaul. There is no justification for BT’s change of tack. And the argument that BT now seeks to run – that the reference to allowing communication between users of the same organisation is intended only to cover circumstances where one organisation owns multiple networks – makes no sense. BT suggests that what is envisaged is, say, a cable company which owns two separate networks. Thus on BT’s case, a cable operator owning separate networks in London and Bristol may be able to require BT to provide transiting interconnection to allow his users in the respective networks to communicate with each other. But on BT’s case, there is interconnection only for as long as the operator has not created any of his own links between London and Bristol. Once the operator creates his own link so that the two networks become one, BT says that there can no longer be interconnection to allow users of the *same* network to communicate with each other (even if, it would seem, the operator’s own link had insufficient capacity to carry all its traffic between London and Bristol).

52. The distinction that BT seeks to draw is spurious. The definition of “interconnection” means what it says and covers linkages, as in the present

case, that allow Vodafone users to communicate with other Vodafone users as well as with the users of other networks.

53. Thirdly, there is no difference of principle in this regard between the provision of partial private circuits (“PPCs”) and the provision of the RBS backhaul service¹⁷. Yet BT accepts¹⁸ that the function performed by PPCs is that which it says is envisaged by the definition of interconnection – namely facilitating increased interoperability for the end user. But when BT provides a PPC to another operator so that the latter can provide a complete leased line service to an end user, the purpose is to allow the other operator’s customers at one end of the leased line to communicate with the same operator’s customers at the other end. The provision of that service involves interconnection in the view of the European Commission (see para 44 above). But there is no discernable difference in principle between this situation and that where a Vodafone customer communicates with another Vodafone customer across an “RBS backhaul circuit”. In each case the service provided by BT fills a gap in the other operator’s coverage – in the case of the PPC the gap being the linkage to the user’s premises, in the case of RBS backhaul the gap being between the RBS and the MTX.

Conclusion

54. The provision of the RBS backhaul service by BT to Vodafone fulfils all three requirements of “interconnection” under the Interconnection Directive. The dispute between BT and Vodafone was therefore an interconnection dispute for the purposes of the 1997 Regulations, and the Director had the power to determine that dispute.

¹⁷ BT’s attempt (at para 35 of the Reply) to distinguish PPCs on the ground that they operate in a “wholly different market” is misplaced. What is relevant in the respect is whether the activities being performed fall within the definition of interconnection. The market in which those activities take place is immaterial to that question.

¹⁸ Reply para 40.

55. Therefore, the Director respectfully requests the Tribunal to find that

- a) the dispute between Vodafone and BT about the provision of RBS backhaul circuits, which gave rise to the Direction, was “a dispute concerning interconnection” under Regulation 6(6) of the 1997 Regulations;
- b) the Direction was not ultra vires the Director and was properly made under Regulation 6(6) of the 1997 Regulations; and
- c) the Continuation Notice was also within the power of the Director and was properly made.

RICHARD FOWLER QC
KASSIE SMITH

24 November 2003

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BRITISH TELECOMMUNICATIONS PLC

Applicant

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ANNEXES TO RESPONDENT'S SKELETON ARGUMENT

1. Case C-79/00 *Telefonica de Espana SA* [2001] ECR I-10075.
2. Council Directive 90/387/EEC on open network provision (as amended by Council Directive 97/51/EC).
3. Council Directive 98/10/EC on open network provision.
4. Annex A to BT's Telecommunications Act 1984 licence.

