



Notification under Section 94 of the Communications Act 2003 of Contravention of General Condition 18

**Notice served on Spacotel UK Limited (“Spacotel”) by
the Office of Communications (“Ofcom”)**

**This is the non-confidential version. Confidential information and data
have been redacted. Redactions are indicated by “[<]”**

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Notification to Spacetel UK Limited under section 94 of the Communications Act 2003 of contravention of General Condition 18

Ofcom's determination

1. Ofcom hereby determines that there are reasonable grounds for believing that Spacetel UK Limited ("Spacetel") has contravened and is contravening General Condition 18.1 ("GC18.1") and General Condition 18.2 ("GC18.2"):
 - (a) Spacetel is a Communications Provider, defined in General Condition 18 ("GC18") as a person who provides an Electronic Communications Network or an Electronic Communications Service.
 - (b) Spacetel is required by GC18.1 to provide Number Portability (a facility that enables Subscribers to port) as soon as it is reasonably practicable on reasonable terms to any of its Subscribers who so requests.
 - (c) Spacetel is required by GC18.2 to provide Portability (a facility between Communications Providers to enable porting) at the request of another Communications Provider as soon as is reasonably practicable in relation to that request on reasonable terms.
 - (d) BT, a Communications Provider, has asked Spacetel to provide Portability in respect of the non-geographic numbers 0870 207 7329 and 0870 207 7377.
 - (e) Spacetel has failed to provide BT with Portability as soon as is reasonably practicable, in contravention of GC18.2.
 - (f) Spacetel has failed to provide Number Portability as soon as it is reasonably practicable, in contravention of GC18.1.
2. The reasons for Ofcom's determination are set out in the explanatory statement accompanying this notification.

General Condition 18

3. Section 45 of the Communications Act 2003 ("the Act") gives Ofcom the power to set conditions binding Communications Providers, namely persons who provide an electronic communications network and/or electronic communications service.
4. Section 94 of the Act enables Ofcom to issue a notification to a person where Ofcom has reasonable grounds for believing that a person is contravening, or has contravened, a condition set under section 45 of the Act.
5. On 22 July 2003 the Director General of Telecommunications issued a notification under section 48(1) of the Act setting, pursuant to section 45 of the Act, a number of general conditions, as set out in the schedule to that notification ("the General Conditions").
6. The General Conditions took effect from 25 July 2003.
7. The General Conditions apply to all communications providers.

8. General Condition 18 sets out the requirement to provide Number Portability and Portability.
9. General Condition 18.1 requires that:
“The Communications Provider shall provide Number Portability as soon as it is reasonably practicable on reasonable terms, including charges, to any of its Subscribers who so requests.”
10. General Condition 18.2 requires that:
“The Communications Provider shall, pursuant to a request from another Communications Provider, provide Portability (other than Paging Portability) as soon as is reasonably practicable in relation to that request on reasonable terms and in accordance with the Functional Specification.”

Action required by Spacetel

11. Spacetel is required to comply with General Condition 18.2 by providing Portability to BT in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.
12. Spacetel is required to comply with General Condition 18.1 by providing Number Portability in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.
13. Ofcom considers that, in this case, “as soon as reasonably practicable” means a time period in line with the processes agreed by the Number Portability Commercial Group for establishing Portability, as set out in the Number Portability End To End Process Manual¹ and Non-Geographic Number Portability Service Establishment Test Schedule².
14. In this case, Ofcom recognises that the Prerequisites, Initial Contact, Planning and Network Databuild stages of the process set out in the Number Portability End To End Process Manual have been completed. Ofcom would therefore expect the Engineering Test and Operational Readiness Test to be completed in accordance with the timescales set out in aforementioned documents.
15. In accordance with the statutory period set out in section 94(4) of the Act, Spacetel has until 14 February 2006 to make representations to Ofcom about this notification.
16. If Spacetel does not comply with General Condition 18.1 and General Condition 18.2 by providing Number Portability and Portability as set out in this

¹ *Non-Geographic Number Portability End-to-End Process Manual*, Version 10, issued 1 October 2004, published at:
www.ofcom.org.uk/telecoms/ioi/numbers/num_port_info/non_geogr_num_portab/NGNPE2EVersion10.pdf.

² Published at:
www.ofcom.org.uk/telecoms/ioi/numbers/num_port_info/non_geogr_num_portab/service_establishment_test.doc

notification, Ofcom may issue an enforcement notification under section 95 of the Act and may impose a penalty on Spacotel under section 96 of the Act.

Interpretation

17. Words and expressions used in this notification have the same meaning as in the General Conditions and in the Act except as otherwise stated in this notification.

David Stewart

Director of Investigations

13 January 2006

Explanatory statement

Section 1

Summary

- 1.1 Number portability refers to the ability of consumers to change communications providers whilst retaining their telephone numbers.
- 1.2 All communications providers are required to provide number portability to their subscribers, and to provide portability (being the arrangements between communications providers to enable porting between their networks) to each other, on request. These obligations are set out in General Condition 18.
- 1.3 On 30 August 2005 BT submitted a complaint to Ofcom which stated that Spacetel had failed to make the necessary arrangements with BT to enable porting from Spacetel to BT, contravening Spacetel's obligations under General Condition 18.
- 1.4 On 15 September 2005 Ofcom opened an investigation to consider BT's complaint and published details of the case on its website³.
- 1.5 Ofcom has completed its investigation and concludes that there are reasonable grounds for believing that Spacetel has contravened, and is contravening, General Condition 18.1 and General Condition 18.2.
- 1.6 Ofcom therefore gives Spacetel a notification under section 94 of the Act. This explanatory statement sets out Ofcom's reasons for the decision to issue that notification, including the findings of Ofcom's investigation.
- 1.7 That notification requires that Spacetel comply with General Condition 18.2 by providing Portability to BT in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.
- 1.8 That notification also requires that Spacetel comply with General Condition 18.1 by providing Number Portability in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.
- 1.9 Ofcom considers that, in this case, "as soon as reasonably practicable" means a time consistent with the processes agreed by the Number Portability Commercial Group for establishing Portability as set out in the Number Portability End To End Process Manual and Non-Geographic Number Portability Service Establishment Test Schedule.
- 1.10 In accordance with the statutory period set out in section 94(4) of the Act, Spacetel has until 14 February 2006 to make representations to Ofcom about this notification.
- 1.11 If Spacetel does not comply with General Condition 18.1 and General Condition 18.2 by providing Number Portability and Portability as set out in

³ www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ocases/open_all/cw_861/

this notification, Ofcom may issue an enforcement notification under section 95 of the Act and may impose a penalty on Spacetel under section 96 of the Act.

Section 2

Background

General Condition 18

- 2.1 Section 45 of the Act gives Ofcom the power to set conditions binding communications providers (which the Act defines to mean persons who provide an electronic communications network or electronic communications service).
- 2.2 On 22 July 2003 the Director General of Telecommunications issued a notification under section 48(1) of the Act setting, pursuant to section 45 of the Act, a number of general conditions, as set out in the schedule to that notification (“the General Conditions”).
- 2.3 The General Conditions took effect from 25 July 2003 and apply to all communications providers. General Condition 18 requires communications providers to provide Number Portability (under General Condition 18.1) and Portability (under General Condition 18.2).
- 2.4 General Condition 18.1 requires that:
- “The Communications Provider shall provide Number Portability as soon as it is reasonably practicable on reasonable terms, including charges, to any of its Subscribers who so requests.”*
- 2.5 General Condition 18.2 requires that:
- “The Communications Provider shall, pursuant to a request from another Communications Provider, provide Portability (other than Paging Portability) as soon as is reasonably practicable in relation to that request on reasonable terms and in accordance with the Functional Specification.”*
- 2.6 “Communications Provider” is defined in General Condition 18.5(b) as:
- “a person who provides an Electronic Communications Network or an Electronic Communications Service”⁴*
- 2.7 “Number Portability is defined in General Condition 18.5(h) as:
- “a facility whereby Subscribers who so request can retain their Telephone Number on a Public Telephone Network, independently of the person providing the service at the Network Termination Point of a Subscriber*
- 2.8 “Portability” is defined in General Condition 18.5(k) as:
- “any facility which may be provided by a Communications Provider to another enabling any Subscriber who requests Number Portability to continue to be provided with any Publicly Available Telephone Service by reference to the same Telephone Number irrespective of the identity of the person providing such a service.”*

⁴ This definition is also set out in section 405 of the Act.

- 2.9 The requirement to provide number portability flows from Article 30 of the Universal Service Directive (“USD”)⁵, which states that:

“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.”

- 2.10 Recital 40 of the USD states that:

“Number portability is a key facilitator of consumer choice and effective competition in a competitive telecommunications environment such that end-users who so request should be able to retain their number(s) on the public telephone network independently of the organisation providing the service...”

The industry Number Portability processes

- 2.11 The Number Portability Commercial Group is an group of communications providers which develops and maintains non-geographic number portability processes. Membership of the Group is open to all communications providers⁶. It has issued a set of documents which set out the processes for implementing Portability and Number Portability in respect of non-geographic numbers.
- 2.12 There are two documents that are relevant in this case: the Non-Geographic Number Portability End-to-End Process Manual (“the Process Manual”)⁷ and the Non-Geographic Number Portability Service Establishment Test Schedule⁸.
- 2.13 The Process Manual sets out the method for establishing and maintaining Non-Geographic Number Portability (“NGNP”) between two communications providers. NGNP is the term used in these documents to describe both Portability and Number Portability in respect of non-geographic numbers.
- 2.14 Section 7 of the Process Manual sets out the Service Establishment Process for NGNP, i.e. the steps that two communications providers are expected to follow in order to establish NGNP.

⁵ Directive 2002/22/EC of the European Parliament and of the Council of 7 March 2002 on universal service and users’ rights relating to electronic communications networks and services.

⁶ With the exception of mobile communications providers, who have their own equivalent number portability group.

⁷ *Non-Geographic Number Portability End-to-End Process Manual*, Version 10, issued 1 October 2004, published at: www.ofcom.org.uk/telecoms/ioi/numbers/num_port_info/non_geogr_num_portab/NGNPE2EVersion10.pdf.

⁸ Published at: www.ofcom.org.uk/telecoms/ioi/numbers/num_port_info/non_geogr_num_portab/service_estab_test.doc

2.15 The Service Establishment Process is divided into the following stages, which are set out in detail in section 7 of the Process Manual (the time suggested in the Process Manual for completing each stage is included in brackets):

- **Prerequisites:** this stage is to check that a number of criteria have been met before two communications providers attempt to establish NGNP. The communications providers must:
 - (a) provide an electronic communications network⁹;
 - (b) operate a Non-Geographic Numbering Service (i.e. provide a service using non-geographic numbers);
 - (c) have obtained from Ofcom a Number Portability Prefix Code, which is a unique six-digit code that identifies a particular communications provider for the purposes of establishing portability so that calls can be correctly routed after numbers are ported; and
 - (d) follow the process documented in the Process Manual.
- **Initial Contact (five working days):** in order to start the NGNP Service Establishment process, the gaining provider (in this case BT) needs to make contact with the donor¹⁰ provider (in this case Spacetel), using the NGNP Establishment Request (“PE”) form, which has been developed to exchange contact information. Within five days of receiving a PE form, the donor provider sends its own PE to the gaining provider, which includes its contact details and states whether the donor provider wants to establish porting in both directions (communications providers may only need to establish porting in one direction if they do not anticipate requests to port in the other direction).
- **Planning Stage (20 working days):** using the Portability Planning (“PP”) form, the communications providers exchange information to enable them to move on to the next stage. The gaining provider provides the donor provider with the following information:
 - (a) forecasts of ported traffic per number type;
 - (b) forecasts of numbers to be ported;
 - (c) a draft routing plan for ported traffic;
 - (d) contact information; and
 - (e) its Number Portability Prefix Code.

The donor provider provides the gaining provider with the following information:

- (a) a Databuild test Number for each Number Portability Prefix Code (which the gaining provider will retain for use in any future tests);
- (b) test numbers for engineering tests;

⁹ As defined in section 32(1) of the Act.

¹⁰ In the context of service establishment the “donor provider” is the provider on whose electronic communications network the telephone number(s) to be ported have been built.

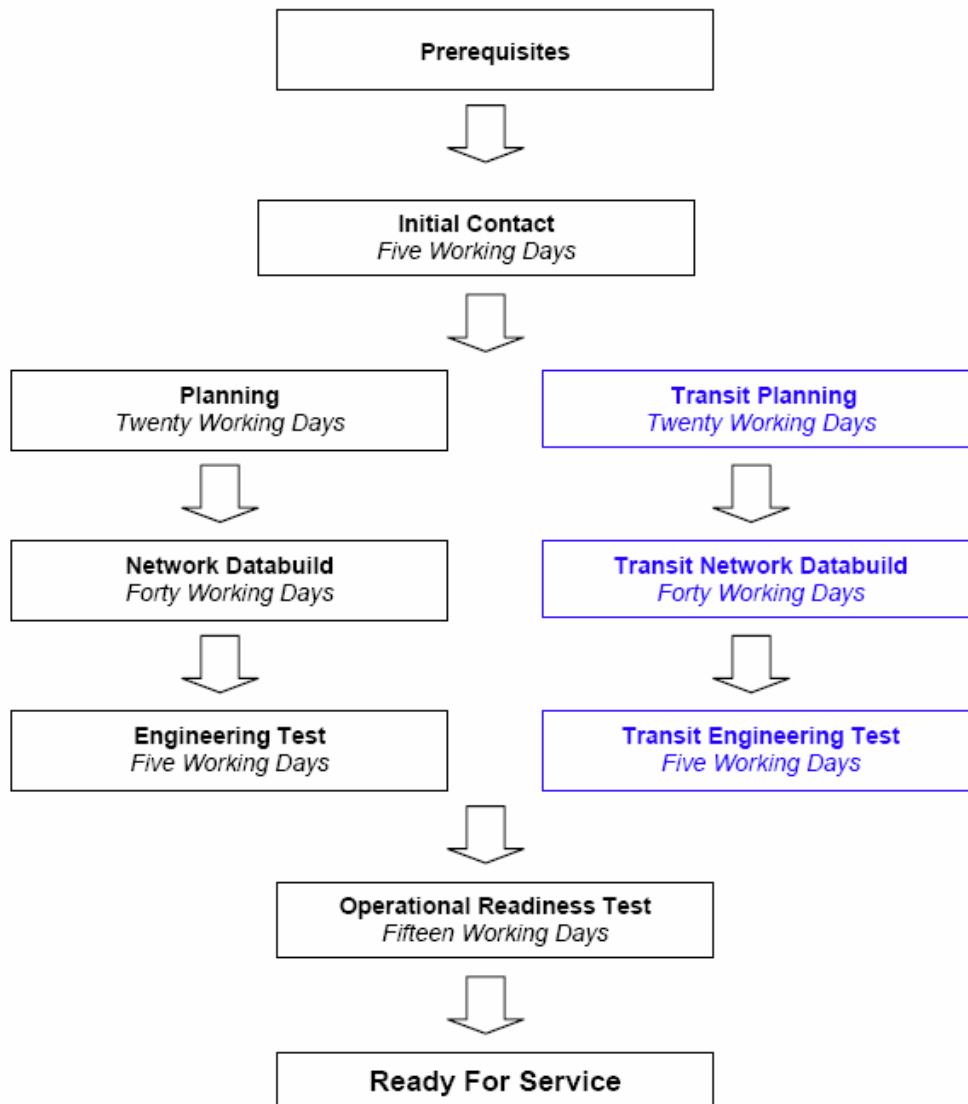
- (c) test numbers for the Operational Readiness Testing stage;
- (d) a draft routing plan for ported traffic; and
- (e) contact information.

The gaining provider then organises a planning meeting to finalise details and agree a date for the Engineering Test stage.

- **Network Databuild (40 working days):** the donor provider builds the gaining provider's Number Portability Prefix Code into its network, which means that its network will route calls to ported numbers on to the gaining provider's network.
- **Engineering Test (five working days):** once the databuild is completed, a set of tests (as described in the Service Establishment Test Schedule discussed at paragraph 2.18 below) are carried out to ensure that calls are being correctly routed between the two networks in order to support number portability. This stage is completed once the tests are successfully passed (if they are not, the parties may agree that it is necessary to conduct a repeat test and agree a suitable timetable beyond the five-day target).
- **Operational Readiness Testing (15 working days):** the purpose of this stage is to ensure that order handling and repair can successfully be supported between the two Communications Providers. The standard test is set out in section 8 of the Process Manual, although the details are agreed by the parties in each case. If the tests are not passed, the parties may agree that it is necessary to conduct a repeat test and agree a suitable timetable beyond the 15-day target.
- **Ready for Service:** once the Databuild, Engineering Testing and Operational Readiness Testing stages have been completed and signed off by both parties, NGNP is ready for service.

2.16 These different stages are shown in the following diagram:

Figure 1: NGNP Service Establishment Process flow



- 2.17 As the above diagram shows, the Process Manual sets out an establishment process that takes 85 working days, from initial contact (the point at which the Communications Provider requesting NGNP Service Establishment contacts the other Communications Provider with which it wants to establish Portability) to the point at which the port is implemented.
- 2.18 The Non-Geographic Number Portability Service Establishment Test Schedule (the “Service Establishment Test Schedule”) includes a number of tests which have been developed by the industry and are considered a necessary requirement for NGNP Service Establishment.

Section 3

The complaint and Ofcom's investigation

Background to the complaint

- 3.1 On 29 September 2004, BT received a request from a customer to port non-geographic numbers 0870 207 7329 and 0870 207 7377 from Spacetel to BT.
- 3.2 BT and Spacetel had not at that time established Portability. BT and Spacetel therefore met on 18 October 2004 to discuss the service establishment process. On the same date, BT initiated the Service Establishment Process by sending Spacetel the Porting Establishment ("PE") and Porting Contact ("PC") forms (see section 7.4 of the NGNP Service Establishment Process).
- 3.3 Spacetel informed BT on 26 October 2004 that its switch was capable of supporting Portability and, on 28 October 2004, sent BT their PE and PC forms (see section 7.4 of the NGNP Service Establishment Process).
- 3.4 On 29 October 2004 Spacetel and BT embarked on the Planning stage of the Service Establishment Process. The Planning stage was completed on 22 November 2004, in line with target timescales.
- 3.5 On 23 November 2004 Spacetel and BT embarked on the Network Databuild stage of the Service Establishment Process. The target for completion of this stage is 40 working days, i.e. 13 January 2005.
- 3.6 On 14 January 2005, BT advised Spacetel that completion of the BT databuild would be delayed until 17 January 2005. On 18 January 2005, BT informed Spacetel that the BT databuild had been completed and asked for confirmation that Spacetel had also completed its databuild.
- 3.7 On 19 January 2005 Spacetel informed BT that it had not completed its data build. Following correspondence between the parties, Spacetel informed BT on 17 February 2005 that it had completed its databuild. The Network Databuild stage was completed in 65 working days, rather than the target of 40 working days.
- 3.8 On 17 February 2005 Spacetel and BT embarked on the Engineering Testing stage of the Service Establishment Process (i.e. the process set out in the Service Establishment Test Schedule), which has a target of five working days.
- 3.9 On 25 February 2005 BT informed Spacetel that it had completed Service Establishment Testing, based on Spacetel's existing switch, and had identified nine "issues to be resolved" before Portability could proceed (see Annex 1).
- 3.10 On March 7 2005 BT asked Spacetel to provide an update on resolution of the issues that it had identified during Service Establishment Testing and a timetable for repeating Service Establishment Testing. BT repeated this request on 15 March 2005.
- 3.11 On 15 March 2005 Spacetel told BT it would resolve the issues identified by 18 March 2005.

- 3.12 On 22 March 2005 BT asked Spacetel to provide a progress update. Spacetel advised BT that it would not be able to continue with work on the issue until 5 April 2005.
- 3.13 On 5 April 2005 BT wrote to Spacetel requesting a progress update.
- 3.14 On 8 April 2005 BT wrote to Spacetel expressing its frustration with the lack of progress and asking Spacetel when it expected to resolve the issues BT had communicated to it on 25 February 2005, when Spacetel would be ready to repeat Service Establishment Testing, and when Spacetel would be ready to undertake Operational Readiness Testing.
- 3.15 On 12 April 2005 Spacetel wrote to BT stating that it would resolve the issues BT had communicated to it on 25 February 2005 by 16 May 2005, that it would be ready to repeat Service Establishment Testing by 19 May 2005 and that it would be ready to undertake Operational Readiness Testing by 23 May 2005.
- 3.16 On 10 May 2005 Spacetel advised BT that it had consulted its switch supplier, Ericsson, on the work that needed to be carried out to resolve the issues identified BT, and that it was waiting for Ericsson to confirm a date for completion of work that needed to be carried out on Spacetel's switch.
- 3.17 On 17 May 2005 BT asked Spacetel whether Ericsson had confirmed a date for carrying out the necessary upgrade. Spacetel replied that it expected this work to be carried out in the last week of May 2005 or the first week of June 2005.
- 3.18 On 2 June 2005 Spacetel advised BT that they had experienced difficulty obtaining a commitment from Ericsson to complete the necessary work on Spacetel's switch.
- 3.19 On 5 July 2005 Spacetel advised BT that in order to resolve the issues that BT had identified during Service Establishment Testing, it would need to upgrade its switch [redacted¹¹]. Spacetel suggested that "the actual set up allows calls to complete after number portability between BT and Spacetel UK successfully" but that there were "some signalling issues that cannot be resolved". Spacetel asked BT whether, given the small number of customers involved and the high cost, it would be possible in fact to complete NGNP service establishment without resolving the issues identified by BT.
- 3.20 On 13 July 2005 BT advised Spacetel that:
- "To ensure that both networks (BT and Spacetel's) are capable of routing calls to ported numbers it is essential that all the tests in the test schedule are completed successfully. Not to complete the tests would jeopardise calls to ported numbers and put at risk the quality of service customers have a right to expect, remembering that Number Portability is designed to ensure customers benefit from their rights to change providers and keep their numbers".*
- 3.21 In the same e-mail BT again asked Spacetel when it expected to resolve the issues BT had communicated to it on 25 February 2005, when Spacetel

¹¹ Text redacted for confidentiality.

would be ready to repeat Service Establishment Testing, and when Spacetel would be ready to undertake Operational Readiness Testing. BT advised Spacetel that unless it could provide these assurances it would refer the matter to Ofcom.

3.22 On 13 July 2005 Spacetel suggested to BT that a “commercial solution” might be reached “in the event that a technical option is not available”.

3.23 On 20 July 2005 Spacetel wrote to BT proposing a number of possible solutions, as follows:

“1. investigate further technical solutions through escalating the matter with Ericsson technical team;

2. investigate costs/timescales for signalling conversion to enable current switch to handle NP with BT;

3. investigate costs/timescales of investing in a new switch;

4. consider the feasibility of a “self-port” as in the Call Trap method mentioned in the NP process Manual¹²;

5. consider the feasibility of transferring the relevant number range to BT”.

3.24 Spacetel stated that in its view, referring the matter to Ofcom would be inappropriate, since:

““Given that Spacetel has made consistent and determined efforts to enable [NG]NP through regular contact between both switch vendor and BT, [...] any regulatory involvement from Ofcom would achieve little other than to divert attention and key resources from the real task in hand – i.e. to establish [NG]NP with BT Wholesale as soon as reasonably practicable”.

3.25 On 8 August 2005 BT replied to Spacetel stating that:

- the “Call Trap” option proposed by Spacetel “*would only capture calls that are originated on the BT network, it would not capture the calls that originate on other networks and are routed to the Spacetel network*”; and
- the number range transfer proposed by Spacetel “*would require the transfer of the complete 10K block [...] In practice this only happens where the gaining communications provider gains all the customers in the block.*”

3.26 BT concluded that:

“Having considered your proposed solutions, BT does not consider them feasible and we require NGNP S[ervice] E[stablishment] to be completed as per the industry process manual”.

The complaint

3.27 On 17 August 2005 BT submitted a complaint to Ofcom.

¹² Section 5.3 of the Process Manual.

3.28 In its complaint, BT stated that:

“BT believes that Spacetel’s protracted and ongoing failure either to complete [non geographic number portability] Service Establishment, or to respond with committed timescales for its completion, represents a clear and deliberate breach of Spacetel’s obligations under General Condition 18”¹³.

3.29 BT alleged that Spacetel’s failure to comply with General Condition 18 has three negative consequences:

“Spacetel Subscribers, whose rights to number portability are ensured through EU directive, are being denied those rights;

BT has directly been deprived of revenues of £56k per annum, which the specific Subscriber wishes to place with BT; and

BT has also been foreclosed from competing for the business of other customers of Spacetel.”¹⁴

3.30 BT petitioned Ofcom to:

“direct Spacetel to comply with its regulatory obligations and to complete both the [non geographic number portability] Establishment process and the outstanding number portability request, within the shortest possible timescales”.

Spacetel’s comments on BT’s complaint

3.31 On 2 September 2005 Ofcom invited Spacetel to comment on BT’s complaint.

3.32 On 9 September 2005 Spacetel provided Ofcom with its comments on BT’s complaint.

3.33 In its comments, Spacetel submitted that:

“our switch...has been capable of providing [number portability] in accordance with the Non-Geographic Number Portability Functional Specification all along. The technical matters raised by BT with us, and repeated in their complaint to Ofcom, are not so much technical “faults”, as BT describes them, but compatibility issues between the earlier version of the IUP signalling protocol used by our system (and by BT at the time we concluded our interconnect with them) and the later version of the IUP protocol to which BT have now upgraded their system.”¹⁵

3.34 Spacetel concluded that:

“the difficulties faced in the current situation arise more through Signalling incompatibility issues than they do through any default by Spacetel”.

¹³ Section 1 of BT’s submission to Ofcom of 17 August 2005.

¹⁴ Section 1.6 of BT’s submission to Ofcom of 17 August 2005.

¹⁵ Spacetel submission to Ofcom of 9 September 2005.

- 3.35 Spacetel noted that BT had referred, in its complaint, to the contract between BT and Spacetel, the Process Manual and the Service Establishment Testing Schedule.
- 3.36 Spacetel submitted that:
- “BT appears to have referenced all of the above documents as though they were all integral to, or even referred to by, General Condition 18.2. This is clearly not the case and it is submitted that the proper scope of BT’s complaint ought to be limited to Spacetel’s compliance with General Condition 18.2 alone as the only relevant provision referred to in BT’s complaint capable of regulatory enforcement”.*
- 3.37 Spacetel stated that it was actively exploring “as many as five distinct options” for completing complete NGNP Service Establishment with BT, referring to its e-mail to BT of 20 July 2005 (see paragraph 3.23 above).

Ofcom’s investigation

- 3.38 On 15 September 2005 Ofcom opened an investigation to consider BT’s complaint.
- 3.39 On 3 October 2005 Ofcom met Spacetel. Spacetel suggested that the issues that BT had identified during Service Establishment Testing (see paragraph 2.15 above) had arisen from a change that BT had made to its signalling protocols that had not been advised to Spacetel¹⁶. Ofcom advised Spacetel that, on the evidence available to Ofcom, there had been no change to the relevant signalling protocol since Spacetel had acquired its switch. Spacetel told Ofcom that in light of this information it intended to discuss the matter further with Ericsson.
- 3.40 On 7 October 2005 Spacetel sent BT high-level details of a proposed solution based on a signalling converter (a signalling converter is a piece of equipment which is connected to a switch and converts signalling without the need to rebuild the switch. See paragraph 3.51 below).
- 3.41 On 10 October 2005 (and again on 12, 18, 19 and 27 October 2005) Spacetel told Ofcom that it continued to discuss the matter with Ericsson.
- 3.42 On 1 November 2005 Spacetel told Ofcom that Ericsson had provided Spacetel with a “commitment in principle” to resolving the issues identified by BT during Service Establishment Testing and that they were working out details for completing the necessary work on Spacetel’s switch.
- 3.43 On 15 November 2005 Ofcom met Spacetel. Spacetel told Ofcom that it was attempting to progress negotiations with Ericsson and that it intended to provide a “roadmap” for resolution by the end of November 2005. Spacetel proposed a number of possible alternative solutions, as follows:
- the installation of a signalling converter (see paragraph 3.40 above);

¹⁶ For further details of the technical background to this case, including signalling, see Annex 1 below.

- “troubleshooting” Spacetel’s existing setup to enable it to pass Service Establishment Testing;
 - the possibility of resolving the issue through ongoing regulatory work, i.e. Ofcom’s 28 September 2005 consultation document *Number Translation Services: A way forward* and Ofcom’s 3 November 2005 consultation document *Number portability and technology neutrality*¹⁷; and
 - “third party hosting”, which means transferring the number block including the numbers which are the subject of a porting request to a provider other than BT.
- 3.44 Ofcom notes that none of the possible solutions proposed by Spacetel on 15 November 2005 has been developed sufficiently to enable Ofcom to assess whether Portability could be provided in these ways.
- 3.45 On 29 November 2005 Spacetel told Ofcom that it was attempting to progress negotiations with Ericsson and that it intended to provide a “roadmap” for resolution by the end of November 2005.
- 3.46 On 9 December 2005, Spacetel advised Ofcom that it intended to provide a “roadmap” for implementation of its proposed solution based on a signalling converter by 16 December.
- 3.47 On 16 December 2005, Spacetel advised Ofcom that it intended to provide a “roadmap” for implementation of its proposed solution by 23 December.
- 3.48 On 6 January 2006, Spacetel advised Ofcom that the supplier it had been intending to use was no longer able to provide Spacetel with its proposed signalling converter solution. Spacetel told Ofcom that it was therefore discussing other options with BT.

Information provided by BT

- 3.49 On 24 November 2005 Ofcom sent BT a Notice under section 135 of the Act requiring BT to provide information on the (potential) impact of the issues identified by BT during Service Establishment Testing on the service provided to end users.
- 3.50 On 2 December 2005, BT responded to Ofcom’s Notice of 24 November 2005 providing details of the (potential) impact of the issues identified by BT during Service Establishment Testing on the service provided to end users (see Annex 1).

¹⁷ *Number Translation Services: A way forward* (published at http://www.ofcom.org.uk/consult/condocs/nts_forward/) invited stakeholders’ comments on proposals for the future regulation of NTS, including an end to revenue sharing on the 0870 range. *Number portability and technology neutrality* (published at <http://www.ofcom.org.uk/consult/condocs/numport/#content>) invited stakeholders’ comments on proposals for future arrangements for number portability between fixed and mobile networks. Ofcom does not however consider that possible future changes to the regulation of NTS or fixed-to-mobile portability would resolve the nine issues identified by BT in the context of the current General Condition 18.

Further discussions between the parties

- 3.51 On 29 November 2005, BT and Spacotel discussed Spacotel's proposed signalling converter solution. BT invited Spacotel to provide further details and an indicative timetable for implementation of such a solution, with a view to repeating SET tests by 9 December 2005.

Section 4

Ofcom's decision

Breach of General Condition 18.2

4.1 General Condition 18.2 ("GC18.2") requires that:

"The Communications Provider shall, pursuant to a request from another Communications Provider, provide Portability (other than Paging Portability) as soon as is reasonably practicable in relation to that request on reasonable terms and in accordance with the Functional Specification."

Communications Provider

4.2 Spacetel's website states that it "*focuses on the provision of carrier network services to anywhere in the world*". In its meeting with Ofcom on 3 October 2005, Spacetel stated that its core business was the termination of international calls. Spacetel has its own network switch and interconnects with BT.

4.3 Ofcom considers that Spacetel is providing an electronic communications network and is a Communications Provider for the purposes of GC18.2.

4.4 It is not disputed that BT is a Communications Provider for the purposes of GC18.2.

Portability

4.5 On 18 October 2004, BT initiated the NGNP Service Establishment Process by sending Spacetel the Porting Establishment ("PE") and Porting Contact ("PC") forms that are described in section 7 of the Process Manual.

4.6 Ofcom considers that BT has requested Portability from Spacetel.

Contravention of General Condition 18.2

4.7 In determining whether there are reasonable grounds for believing that Spacetel has contravened or is contravening GC18.2, Ofcom has considered the process documents published by the Number Portability Commercial Group (see paragraph 2.10 *et seq*).

4.8 Ofcom accepts Spacetel's submission (see paragraph 3.36 above) that the processes agreed by the Number Portability Commercial Group are not legally binding on Communications Providers as they are not incorporated into GC18.

4.9 Nevertheless, Ofcom considers that the processes documents as agreed by industry may often provide a useful benchmark for Ofcom to determine whether Number Portability and Portability have been provided in accordance with GC18. For example, Ofcom may consider the process documents to determine whether Number Portability and/or Portability have been provided on reasonable terms and/or as soon as is reasonably practicable.

- 4.10 Further, a Communications Provider may wish to provide Portability in a way which does not fully comply with the Service Establishment Testing process. This might still constitute Portability (as defined in General Condition 18(k)) where the functionality of the service that a ported customer receives from his new provider will not be materially affected by the change in provider. Ofcom considers that the functionality of the service is “materially affected” where end users are able to perceive an impairment of their service after porting.
- 4.11 Ofcom considers that this approach will ensure that Portability and Number Portability are provided in a way that facilitates consumer choice and promotes competition, consistent with Ofcom’s obligations under the Universal Service Directive. Recital 40 states that:
- “Number portability is a key facilitator of consumer choice and effective competition in a competitive telecommunications environment such that end-users who so request should be able to retain their number(s) on the public telephone network independently of the organisation providing the service...”*
- 4.12 In order to establish whether Spacetel has contravened GC18, Ofcom has assessed whether the nine issues for resolution identified by BT during the Service Establishment Testing process, based on Spacetel’s existing switch, would materially affect the functionality of the service provided to end users. As noted at paragraph 3.44 above, Ofcom does not consider that any of the other solutions proposed by Spacetel has been sufficiently developed for it to assess whether Portability could be provided in these ways.
- 4.13 Ofcom required BT to provide an assessment of the potential impact on the service provided to end users for each of the nine issues for resolution notified by BT to Spacetel on 25 February 2005.
- 4.14 Ofcom has assessed each of the nine issues for resolution identified by BT to determine whether they have the potential to materially affect the functionality of the service to end users. Ofcom has estimated this potential because to quantify it precisely would depend on the use that the Subscriber makes of the service after porting, for example the types of calls he wants to make. The nine issues for resolution, BT’s comments on these issues and Ofcom’s assessment of whether they have the potential to materially affect the functionality of the service to end users are set out in detail in Annex 1.
- 4.15 Ofcom considers that, of the nine issues for resolution identified by BT:
- four issues would not have the potential to materially affect the functionality of the service provided to end users who had ported their numbers;
 - five issues would have the potential to materially affect the functionality of the service provided to end users who had ported their numbers: two issues would lead to transmission of incorrect Calling Line Identification (CLIs), and three issues would potentially lead to call failures.
- 4.16 Ofcom considers that even if only one of the issues identified by BT had the potential to materially affect the functionality of the service provided to end users who had ported their numbers, this would be sufficient for it to conclude that Spacetel had not provided Portability. This is because that would be

enough for an end user to perceive a difference in the functionality of the service after porting.

- 4.17 As described at paragraph 2.8 above, the definition of Portability is any facility which may be provided by a Communications Provider to another enabling any Subscriber who requests Number Portability to continue to be provided with any Publicly Available Telephone Service by reference to the same Telephone Number irrespective of the identity of the person providing such a service.
- 4.18 Ofcom's view in this case is that more than one of the issues for resolution identified by BT has the potential to materially affect the functionality of the service offered to end users. Ofcom considers that this means that the facility offered by Spacotel to BT would not enable a Subscriber who requests Number Portability to continue to be provided with any Publicly Available Telephone Service. Ofcom does not therefore consider that the offer of Portability in the context of Spacotel's existing switch constitutes the provision to BT of Portability.
- 4.19 In addition, Ofcom has considered whether Spacotel has provided Portability as soon as reasonably practicable. As noted above at paragraph 4.7 *et seq* Ofcom considers it is reasonable to have regard to the target timescales set out in the NGNP Service Establishment process as a way of assessing what timescales are reasonably practicable in the context of providing Portability.
- 4.20 Ofcom notes that BT and Spacotel completed the earlier stages of the NGNP Service Establishment process within the targets specified in the process. However, BT and Spacotel completed the Network Databuild stage in 65 working days, rather than the target of 40 working days, and have not yet completed the next stage of the process (the Engineering Test stage).
- 4.21 The overall target for completion of the NGNP Service Establishment Process is 85 working days, from initial contact (the point at which the Communications Provider requesting NGNP Service Establishment contacts the other Communications Provider with which it wants to establish Portability) to the point at which the port is implemented.
- 4.22 BT and Spacotel initially discussed NGNP Service Establishment on 18 October 2004. The period of 85 working days envisaged by the Process Manual would have expired on 17 February 2005. Ofcom therefore concludes that Spacotel has not provided Portability as soon as is reasonably practicable.
- 4.23 Ofcom concludes that there are reasonable grounds to believe that Spacotel has therefore contravened and is contravening General Condition 18.2.

Contravention of General Condition 18.1

- 4.24 General Condition 18.1 ("GC18.1") requires that:

"The Communications Provider shall provide Number Portability as soon as it is reasonably practicable on reasonable terms, including charges, to any of its Subscribers who so requests."

- 4.25 "Number Portability" is defined in GC18.5(h) as:

“a facility whereby Subscribers who so request can retain their Telephone Number on a Public Telephone Network, independently of the person providing the service at the Network Termination Point of a Subscriber.”

4.26 A “Subscriber” is defined in GC18 as:

“...any person who is a party to a contract with the provider of Publicly Available Telephone Services for the supply of such services in the United Kingdom”.

4.27 “Publicly Available Telephone Services” are defined in GC18 as:

“...a service made available to the public for originating and receiving or only receiving national and international calls through a number or numbers in a national or international telephone numbering plan”

4.28 On 29 September 2004, BT received a request from Spacetel’s customer to port non-geographic numbers 0870 207 7329 and 0870 207 7377 from Spacetel to BT.

4.29 Under GC18.1, a Subscriber must have requested Number Portability. In this case, the fact that Spacetel’s customer is a Subscriber is not disputed by the parties. Ofcom therefore considers that a Subscriber has requested Number Portability in this case.

4.30 As discussed at paragraph 4.7 *et seq* above, Spacetel has failed to provide BT with Portability. Spacetel has not therefore been able to fulfil the Subscriber’s request for Number Portability.

4.31 Ofcom concludes that there are reasonable grounds to believe that Spacetel has therefore contravened and is contravening General Condition 18.1.

Ofcom’s decision and action required by Spacetel

4.32 Ofcom concludes that Spacetel is in breach of its obligations under General Condition 18.1 and General Condition 18.2 to provide number portability.

4.33 Spacetel is required to comply with General Condition 18.2 by providing Portability to BT in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.

4.34 Spacetel is required to comply with General Condition 18.1 by providing Number Portability in respect of non-geographic numbers 0870 207 7329 and 0870 207 7377 as soon as is reasonably practicable after 14 February 2006.

4.35 Ofcom considers that, in this case, “as soon as reasonably practicable” means a time period in line with the process agreed by the Number Portability Commercial Group for establishing Portability as set out in the Number Portability End To End Process Manual and Non-Geographic Number Portability Service Establishment Test Schedule.

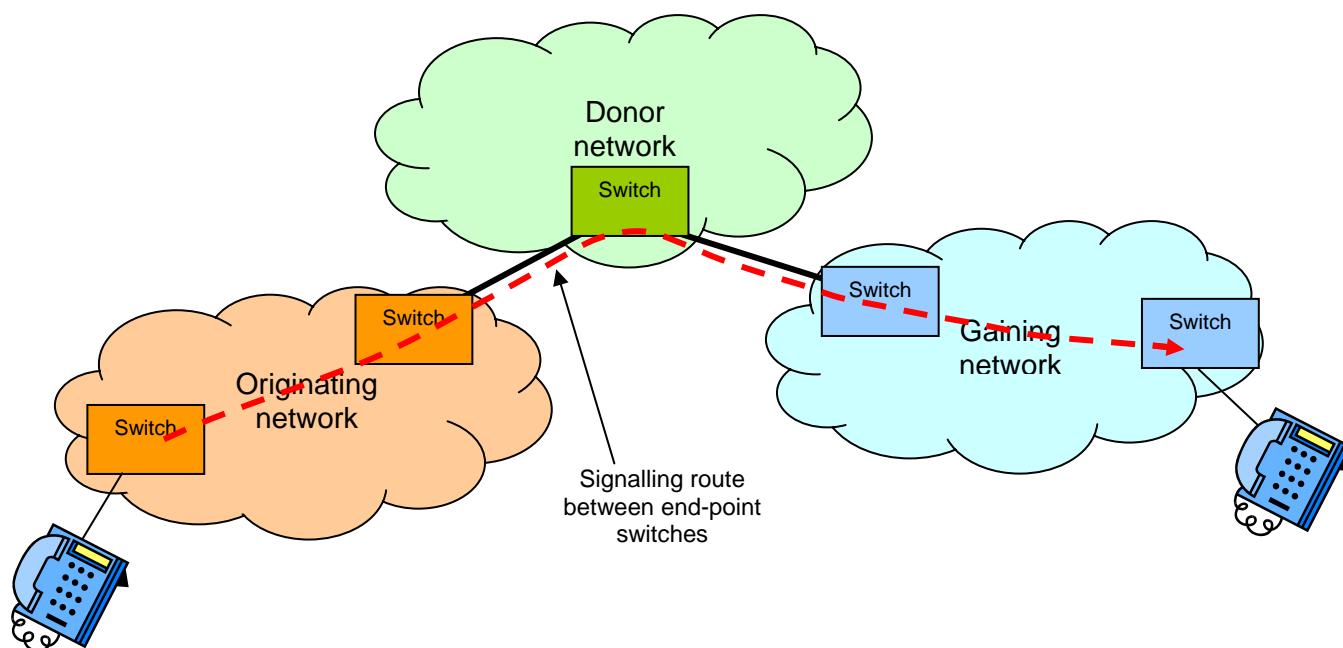
Annex 1

Technical background

Signalling

1. Signalling can be described as a request from a telephone switch to another telephone switch to enable the set-up and completion of a telephone call. This occurs as a result of an attempt to make a call from a telephone apparatus such as a telephone or fax machine to another telephone apparatus. The signalling occurs between the switches to which each telephone apparatus is connected across the Public Switched Telephone Network.
2. The signalling of a call carries the call request, ring signal and engaged tone, as well as information about the calling party such as Caller Line Identification, i.e. the telephone number that the caller is calling from, and Call Type, e.g. PSTN (Public Switched Telephone Network) or ISDN (Integrated Services Digital Network), enabling the network that receives the call to provide services such as Caller Identification (which enables the recipient of a call to see what number it is coming from). Signalling is also used for billing purposes.
3. Signalling is transmitted between telephone switches so that a call can be routed to the right place. Where a number is ported, the normal expectation is that the signalling will be forwarded unchanged from the donor network to the gaining network, so that the call can be set up and completed without any impact on the functionality of the service experienced by the end user who has ported his number.
4. Figure 1 below shows signalling between the originating network, the donor network and the gaining network:

Figure 1: Signalling



The NGNP Service Establishment Test Schedule

5. The NGNP Service Establishment Test Schedule contains a range of tests that are designed to ensure that all aspects of telephony signalling function according to the Number Portability Commercial Group's specification.
6. If these tests are not passed, this may result in impaired functionality. This could have a range of outcomes for end users. In some cases, the service provided to end users would be unaffected, while in other cases they could perceive a deterioration in service including call failures.
7. In this case (as set out in paragraph 4.12 *et seq* above) Ofcom has considered the nine issues for resolution identified by BT and assessed the potential for those issues to materially affect the functionality of the service provided to end users. Ofcom's analysis is set out in the following section.

Issues for resolution identified by BT

8. This section describes the nine issues in detail, BT's comments on each of the issues, and Ofcom's view of whether the failure of Spacetel's network to pass the tests set out in the NGNP Service Establishment Test could have the potential to materially affect the functionality of the service provided to end users.

Issue 1: Spacetel are setting a reserved value in the ACM message (does not happen on every call)

9. An Address Complete Message ("ACM") is a message that is sent from the incoming network to indicate that all address signals required for routing the call have been received. Once an ACM message is received by the outgoing network, the caller will hear a ring tone. The ACM message carries Address

Complete Message Indicators which contain information about the type of line that has been called (e.g. ISDN business or Payphone).

10. BT states that on some calls Spacotel sets a reserved value which is a value that carries no agreed meaning in the signalling standard and thus carries no meaningful information.

BT's comments

11. BT is concerned that this issue only affects some calls, so it would be difficult to interpret what if anything was amiss, particularly if this value was to come into use in the future. The fact that the reserved value has no current meaning does not preclude the possibility that this value may be brought into use in the future by industry agreement and changes to the specification therefore leading to greater difficulty in fault analysis.
12. BT recognises that this is one of the less serious of the nine issues. BT states that, had this been the only issue that it had identified, it would have been likely to issue a waiver for the problem to be resolved at a later date.

Ofcom's view

13. Ofcom concurs with BT's assessment and concludes that this issue would not have the potential to materially affect the functionality of the service provided to end users.

Issue 2: Spacotel are sending Release Reason 47, Release Reason 48 would be expected

14. A Release Reason is a signalling message containing information as to the cause of the termination of a call. This is often because the calling party or the called party has ended the call, in which case Release Reason 48 (Subscriber Call Termination) would be sent.
15. BT states that in this case, Spacotel is sending Release Reason 47 (Null) instead of Release Reason 48. Release Reason 47 indicates that the reason for the termination of a call is unknown or has previously been received.

BT's comments

16. BT states that this issue could lead to problems with fault investigation and delays in resolving faults.

Ofcom's view

17. Ofcom considers that this issue would not materially affect the functionality of the service normally provided to end users. The primary impact is on the quality of the diagnostic information provided to BT under fault conditions.

Issue 3: Spacotel remove the Hex B Separator from a User Provided Presentation Number

18. A User Provided Presentation Number is a service that allows a caller to send a Presentation Number to the called party in place of their network number (for example, the called party would see the number of caller's direct line rather than the number of the number of the company switchboard as the caller would have intended).
19. There are different types of Presentation Number and the Hex B separator indicates the type of Presentation Number to be displayed. BT states that in this case the Hex B separator is incorrectly positioned in the signalling, which means that the caller's Presentation Number may not be displayed and their Network Number will be displayed instead.

BT's comments

20. BT states that Calling Line Identity information should not be changed, as it is important for fault diagnosis and resolution, and for tracing the origin of a call when investigating possible criminal activity.

Ofcom's view

21. Ofcom concurs with BT's assessment that this issue would mean that the caller's Presentation Number would not be transmitted correctly. Ofcom considers that this would have the potential to materially affect the functionality of the service provided to end users.

Issue 4: Spacotel respond to a forward Clear message with Release Reason 47, Release Reason 48 would normally be expected

22. A forward Clear message indicates that the calling party has terminated the call and is a signal to the called party network to terminate the call. A Release Reason (see issue 2 above) is sent back from the called party network to the calling party network to indicate that this has been completed.
23. BT states that in this case, Spacotel is responding to a forward Clear message with Release Reason 47 (Null) instead of Release Reason 48. Release Reason 47 indicates that the reason for the termination of a call is unknown or has previously been received.

BT's comments

24. BT recognises that this is one of the less serious of the nine issues. BT states that, had this been the only issue that it had identified, it would have been likely to issue a waiver for the problem to be resolved at a later date.

Ofcom's view

25. Ofcom considers that this issue would not have the potential to materially affect the functionality of the service provided to end users.

Issue 5: Spacotel change ISDN Speech to ISDN Basic Telephony

26. Signalling carries various pieces of information that describe the type of call that is being made to set up the parameters of the call. These include the Call

Path Indicator (CPI), which indicates the types of transmission and signalling paths required for a call; the Calling Party Category (CPC), which indicates the type of subscriber making the call (residential, payphone, ISDN etc), and the Serving Handling Protocol (SHP), which indicates the end-to-end message protocols requested by the call originating switch (basic telephony, ISDN etc) to enable the call to be routed according to these requirements.

27. BT states that Spacotel's switch alters the indicated CPI (from "ISDN Speech" to "ISDN Basic Telephony"¹⁸).

BT's comments

28. BT states that some networks and terminating equipment will reject certain ISDN Calling Party Category (CPC)/Service Handling Protocol (SHP)/Call Path Indicator (CPI) combinations if the settings are not those that they are programmed to accept.
29. BT states that the effect of changing the CPI for ISDN calls (which is what Spacotel's switch does) could thus be call failures which would be difficult for Communications Providers to identify and resolve.

Ofcom's view

30. Ofcom agrees with BT's analysis and concludes that this issue has the potential to lead to call failures. Ofcom considers that this issue has the potential to materially affect the functionality of the service provided to end users.

Issue 6: Spacotel change ISDN 3.1khz to ISDN Basic Telephony

31. As set out above (see issue 5), signalling carries various pieces of information that describe the type of call that is being made to set up the parameters of the call. These include the Call Path Indicator (CPI), which indicates the types of transmission and signalling paths required for a call; the Calling Party Category (CPC), which indicates the type of subscriber making the call (residential, payphone, ISDN etc), and the Serving Handling Protocol (SHP), which indicates the end-to-end message protocols requested by the call originating switch (basic telephony, ISDN etc) to enable the call to be routed according to these requirements.
32. BT states that Spacotel's switch alters the indicated CPI from "ISDN 3.1khz" to "ISDN Basic Telephony".

BT's comments

33. As noted above, BT states that some networks and terminating equipment will reject certain ISDN Calling Party Category (CPC)/Service Handling Protocol (SHP)/Call Path Indicator (CPI) combinations if the settings are not those that they are programmed to accept.

¹⁸ As discussed below, it is not the CPI itself, but the combination of CPI, CPC and SHP which has the potential to cause problems here.

34. BT states that the effect of changing the CPI for ISDN calls (which is what Spacetel's switch does) could thus be call failures which would be difficult for Communications Providers to identify and resolve.

Ofcom's view

35. Ofcom agrees with BT's analysis and concludes that this issue has the potential to lead to call failures. Ofcom considers that this issue has the potential to materially affect the functionality of the service provided to end users.

Issue 7: On ISDN data calls Spacetel change the position of the Hex B Separator in the SIM B message

36. As set out above (see issue 3), a User Provided Presentation Number is a service that allows a caller to send a Presentation Number to the called party in place of their network number (for example, the called party would see the number of a caller's direct line, rather than the number of the company switchboard as the caller would have intended).
37. As set out above (see issue 3), there are different types of Presentation Number and the Hex B separator indicates the type of Presentation Number to be displayed. BT states that, for ISDN calls, the Hex B separator is incorrectly positioned in the signalling, which means that the caller's Presentation Number may not be displayed and their Network Number will be displayed instead.

BT's comments

38. BT states that Calling Line Identity information should not be changed, as it is important for fault diagnosis and resolution, and for tracing the origin of a call when investigating possible criminal activity.

Ofcom's view

39. Ofcom concurs with BT's assessment that this issue would mean that the caller's Presentation Number would not be transmitted correctly. Ofcom considers that this issue has the potential to materially affect the functionality of the service provided to end users.

Issue 8: On ISDN data calls Spacetel return address signals of 1234567891 in the SIM C message, it would be expected that the SIM C message BT send Spacetel, be transited

40. A Service Information Message (SIM) is used to request and/or send ISDN related information. The SIM contains 'Information Requested' and 'Information Contained' fields and carries important information for ISDN data calls. There are several types of SIM but only certain configurations of these messages are allowed.
41. BT states that in this case Spacetel is changing the SIM C message instead of transiting it unchanged to the recipient network.

BT's comments

42. BT states that this issue could lead to end users experiencing call failures.

Ofcom's view

43. Ofcom agrees with BT's analysis and concludes that this issue has the potential to lead to call failures. Ofcom considers that this issue has the potential to materially affect the functionality of the service provided to end users.

Issue 9: Various CNA reasons were sent to Spacetel with various anomalous results

44. A CNA (Connection Not Admitted) reason is a signalling message that indicates that the call cannot be connected for some reason, enabling the calling party's network operator to send a tones (e.g. an engaged tone) or messages informing the caller that there is a fault on the line.

45. BT states that in this case Spacetel is sending incorrect CNA reasons, leading to incorrect information being received by the calling party. For example, the CNA message is being sent as "Network Termination" when it should have been sent as "Number Unobtainable".

BT's comments

46. BT states that these incorrect announcements could lead to an impaired service to end users as callers would be misled in the cases where calls could not be completed. This could affect fault diagnosis and resolution, which could in turn lead to an increase in customer complaints and a decline in Network Performance Measures (which are statistics compiled by BT on the performance on its network).

Ofcom's view

47. Ofcom considers that this issue would not materially affect the functionality of the service normally provided to end users. The primary impact is on the quality of the diagnostic information provided to BT under fault conditions.

Ofcom's conclusion

48. Of the nine issues considered above, Ofcom considers that:

- issues 1, 2, 4 and 9 would not have the potential to materially affect the functionality of the service provided to end users who had ported their numbers;
- issues 3,5, 6, 7 and 8 would have the potential to materially affect the functionality of the service provided to end users who had ported their numbers: issues 3 and 7 would lead to transmission of incorrect Calling Line Identification (CLIs), and issues 5, 6 and 8 would potentially lead to call failures.