



Review of the fixed narrowband services wholesale markets

Further statement on wholesale transit markets and
remedies in the wholesale call termination market

Statement

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Section 1

Summary

Background

- 1.1 On 15 September 2009 Ofcom published its statement and further consultation entitled “*Review of the fixed narrowband services wholesale markets*”¹ (the September consultation). This contained Ofcom’s final decisions in relation to the various wholesale narrowband markets and associated services. The document also discussed how, having noted the responses to the preceding narrowband market review consultation published on 19 March 2009² (the March consultation), Ofcom identified two areas where further analysis and re-consultation were required. These were:
- a) Wholesale transit services; and
 - b) Whether CPs other than BT and KCOM should be subject to an additional obligation to publish charges for fixed geographic call termination.
- 1.2 This statement contains Ofcom’s analysis and final decisions on these two areas.

Wholesale Transit Services

Background

- 1.3 The Single Transit (ST) market is a small market compared to other fixed wholesale transit markets in the UK. Despite its relative size, it remains an important market as the ST service allows for interconnection between networks where direct interconnection is not economically viable. The market in the UK has a very large number of CPs (some of which generate relatively small traffic volumes) that rely on the ability to interconnect through this service.
- 1.4 In 2003 the ST market was found not to be competitive, with BT having SMP in the market. SMP conditions were imposed on BT under the authority of that decision which have been in force until the present.
- 1.5 In the 2003 review we also found BT to have SMP in the market for Inter-Tandem Conveyance and Transit (ITC/ITT) services. However, in 2005 we re-reviewed the ITC/ITT market and found it to be competitive, with all SMP conditions being revoked in accordance with section 84 of the Communications Act 2003 (‘the Act’).
- 1.6 In our March consultation we proposed a single market for Wholesale Transit covering both the ST and ITC/ITT markets. We proposed that this Wholesale Transit market was effectively competitive.
- 1.7 We received a number of detailed responses from stakeholders providing additional information. We carefully considered all of the responses we received and considered that we needed to review our proposals on market definition. We therefore made the following revised proposals in our September consultation.

¹ http://www.ofcom.org.uk/consult/condocs/wnmr_statement_consultation/

² http://www.ofcom.org.uk/consult/condocs/review_wholesale/

Proposed market definition

- 1.8 In making our revised proposals we took account of the fact that there was less potential for supply side switching between ST and ITC/ITT services to the extent that they should not be considered in the same market. We therefore proposed two separate markets, the ST market and the ITC/ITT market, and that these markets should be defined as per the existing market definitions.

Proposed market power analysis

- 1.9 Following our assessment of competition in the proposed ITC/ITT market we considered that it remained competitive and therefore proposed that no provider held SMP.
- 1.10 Having proposed a separate ST market, we further proposed that this separate market is not effectively competitive and BT holds SMP in this market. In particular we noted that, whilst it may not be economically attractive for BT to price and bill on a route by route basis, it may be possible for BT to price differently on certain routes (for example where traffic volumes are large) . This would, in effect, mean that BT would have an incentive to set excessive prices on some less competitive routes. We invited stakeholder views on whether each of the proposed remedies should be imposed to address the problems identified in our market analysis.

Consultation Responses

- 1.11 We are grateful for the seven responses received to the consultation which have assisted us by providing further information which we have used in making our decisions.
- 1.12 The majority of the responses received largely supported our proposals. One key point that emerged, however, was the question of whether the proposed requirement not to unduly discriminate meant that BT could reasonably charge different prices. ST is, by its nature a simple and somewhat unusual service involving only a single switching stage without any transmission. In particular, stakeholders commented that the costs of providing the service were unlikely to vary to any extent between CPs and thus pricing differentials in this particular market would be difficult for BT to justify in the presence of a no undue discrimination obligation. We have had particular regard to that evidence in coming to our decision in this document.

Conclusion on ST

- 1.13 In considering all the responses to the September consultation, we have reviewed the somewhat unusual characteristics of the ST service and, in particular, the effect of a no undue discrimination obligation when applied to this specific market. We have concluded that given the nature of the ST service, the identified market failures are addressed without the need to impose a specific price control remedy. We consider that this outcome addresses the exceptional circumstances of this case and the need, amongst other things, to ensure that the proposed remedies are proportionate to what they are intended to achieve in accordance with our duties under the Act.

Market Definition and Market Analysis

- 1.14 We have decided to adopt the proposals made in our September consultation. Accordingly we have identified two markets:

- a) The ITC/ITT market in the UK excluding the Hull Area; and
 - b) The ST market in the UK excluding the Hull Area.
- 1.15 In relation to the ITC/ITT market we have found that it is effectively competitive and in relation to the ST market, we have decided that BT holds SMP in that market.
- 1.16 The basis of our decisions on market definition and market analysis can be found in Section 4.

Remedies

- 1.17 We have decided to modify our approach to the proposed remedies in the ST market and to impose the following remedies proposed in our September consultation, namely:
- a) Requirement to provide network access on reasonable request;
 - b) Requirement not to unduly discriminate;
 - c) Requirement to publish a reference offer;
 - d) Requirement to notify technical information;
 - e) Requirement to notify charges, terms and conditions; and
 - f) Accounting separation.
- 1.18 As we described in paragraph 1.13 we no longer consider it appropriate to impose the proposed specific price control remedy (basis of charges), or the cost accounting obligations which primarily supported that remedy.
- 1.19 The basis of our decisions on remedies can be found in Section 5 of this document.

Conclusions on Call Termination

- 1.20 In our September consultation we also proposed imposing a further remedy on communications providers other than BT and KCOM, requiring them to publish their fixed geographic termination rates.
- 1.21 We received six responses on this matter. All respondents apart from COLT were supportive of this proposal. In addition we received comments from the European Commission.
- 1.22 We have reviewed whether our proposal remains appropriate in light of these responses and we have concluded that it is. We have therefore decided to impose this obligation. Our reasoning is set out in Section 6.
- 1.23 Our conclusions in the statement in respect of ITC/ITT, ST and the additional transparency obligation in the call termination market are based to a significant extent on the analysis, information and evidence set out in the September consultation. We continue to rely on that analysis and information and therefore this document must be read in conjunction with the September consultation. Our conclusions in this statement are drawn from that original analysis and the further

consideration we have afforded to each issue after carefully considering each of the responses to our consultation.

Section 2

Introduction

2.1 This Section provides an overview of the previous consultations in the 2009 Wholesale Narrowband Market Review³ process. It also explains Ofcom's approach to its impact assessment and equality impact assessment in the Wholesale Narrowband Market Review.

Wholesale Narrowband Market Review Consultation

- 2.2 On 19 March 2009, we published the initial consultation as part of the Wholesale Narrowband Market Review process (the March consultation). In that document, we proposed to deregulate certain markets because in our view BT no longer had SMP in those markets. This was chiefly because, since the last review in 2005, several CPs had deployed their networks to more extensively interconnect with BT at the local exchange level and with each other. As a result they were less reliant on BT to provide additional services to carry traffic from its local exchanges to their own networks, or for BT to provide transit services. We thus proposed that BT no longer had SMP in local-tandem conveyance and transit and further that the inter-tandem conveyance, inter-tandem transit and ST services formed a single wholesale transit market and that BT did not have SMP in this market.
- 2.3 A number of respondents to the March consultation disagreed with our proposals arguing that market conditions were not entirely as Ofcom described. Rather, they argued that the UK market differed from others in the European Union by virtue of the large numbers of carriers offering services in competition to BT and each other. As a result there was a continued requirement for originating communications providers (OCPs) to use BT's transit services in order to interconnect with smaller terminating communications providers (TCPs) where it remained uneconomic to interconnect directly. Accordingly there remained a substantial number of routes ('thin routes')⁴ where CPs had no alternative than to purchase transit from BT.
- 2.4 In regard to the continued SMP in fixed geographic termination of CPs other than BT and KCOM, responses to the March consultation identified that the proposed deregulation of markets could have an effect on the call termination market. BT currently publishes other CPs' termination rates as part of its Carrier Price List ('CPL'). This provides transparency to CPs when they negotiate rates between each other. If, as a result of any proposed deregulation, this transparency is reduced by a change in what BT publishes, then an additional requirement for all networks to publish their termination charges could be imposed to ensure the continued transparency. Although this was discussed, in our March consultation we decided not to propose an additional condition. We did, however, invite stakeholder comments on this issue.
- 2.5 The March consultation responses led Ofcom to conclude that further analysis and re-consultation was required for:
- a) Wholesale transit services; and

³ http://www.ofcom.org.uk/consult/condocs/review_wholesale/

⁴ In discussing the market we have used the concept of "thick" and "thin" routes as a convenient way of describing the range of competitive conditions within the market. We discuss this in more detail at paragraph 4.33 onwards.

- b) The obligation for CPs other than BT and KCOM to publish charges for fixed geographic call termination.
- 2.6 The September consultation was published on 15 September 2009 alongside the final statement confirming our decisions for the remaining services within the Wholesale Narrowband Market Review⁵. The September consultation proposed that the market for ST was not competitive and that a range of remedies was required to address the identified competition concerns.
- 2.7 In the September consultation, we asked a series of questions about whether or not stakeholders agreed with our revised assessments and whether they agreed with the imposition of each of the proposed remedies. Where stakeholders disagreed they were invited to give their reasons for doing so.
- 2.8 We also asked three questions in relation to the requirement for the additional remedy in call termination to aide transparency.

Responses to the September consultation

- 2.9 We have summarised the consultation responses in Section 3 and consider them further in Sections 4 and 5.
- 2.10 BT disagreed both with the finding of SMP in ST and the imposition of regulation arguing that its ability to price anti-competitively was constrained by competition on the thick routes. BT's competitors re-iterated their arguments that BT's pricing of ST on the large number of less competitive routes was not constrained by competition elsewhere and that BT had the ability and incentive to charge considerably more, which could have the potential to force market exit by some smaller CPs.

Number Translation Services (NTS)

- 2.11 ST is also a key service in NTS interconnection where again direct interconnection between competing networks is often uneconomic. Recent events have led Ofcom to consider whether NTS regulation remains the most effective means of ensuring the continued viability of these services whilst creating an environment that does not encourage ongoing disputes. Ofcom thus proposes to conduct a review of NTS commencing early in 2010. Once this NTS review is completed it may be appropriate to consider whether there are any resulting changes in the ST market.

Legal Framework

- 2.12 In this review we identify relevant wholesale transit markets, undertake an analysis of those identified markets and make market power determinations where appropriate in accordance with section 79 of the Act. Having made a decision that BT has significant market power in the ST market, we impose appropriate SMP conditions as authorised under section 87 of the Act in that market.
- 2.13 We also impose an additional SMP condition on the identified dominant providers in the previously defined call termination market.
- 2.14 We summarise the regulatory framework within which we operate below. The framework was also described in more detail at Annex 6 of our September consultation.

⁵ Excluding ISDN30 markets which are now the subject of a separate, on-going, review.

- 2.15 The Common Regulatory Framework ('CRF') that regulates electronic communications across the European Community comprises of mainly four EU Communication Directives. These Directives were implemented into UK law by the Communications Act 2003 ('the Act') on 25 July 2003.

Market Review Process

- 2.16 The CRF, as implemented by the Act, sets out the procedure to be followed when undertaking market reviews.
- 2.17 A market review normally has three stages:
- a) Definition of relevant markets (market definition);
 - b) Assessment of competition in each market; in particular whether any undertakings have SMP in a given market (market analysis); and
 - c) Assessment of appropriate regulatory obligations where there has been a finding of SMP (remedies).
- 2.18 In defining appropriate wholesale transit markets we have taken utmost account of the European Commission's Recommendation on relevant service and services markets⁶ ('the Recommendation').
- 2.19 In assessing competition in the markets we have taken utmost account of the Commission's Guidelines for market analysis and the assessment of SMP⁷ ("the SMP Guidelines") as required under Article 15(3) of the Framework Directive.
- 2.20 In particular, the Recommendation states that in order to identify markets that are susceptible to *ex ante* regulation, it is appropriate to apply three cumulative criteria ('the three criteria test'). NRAs should analyse the service and service markets identified in the Recommendation and when identifying markets other than those set out should apply the three criteria test. We consider this test in our consideration of the ST market in Section 4.
- 2.21 SMP remedies can only be imposed following a finding of SMP in any particular market. Ofcom is empowered to impose remedies under section 45 of the Act, to be imposed in accordance with section 46. Remedies should, in accordance with Article 8 of the Access Directive, be based upon the competition problem identified. In determining which remedies are appropriate in light of the identified competition problems we have had regard to the Revised ERG Common Position on the approach to appropriate remedies⁸.
- 2.22 Any remedy applied has to comply with section 47(2) of the Act, in that it has to be objectively justifiable, not unduly discriminatory, proportionate and transparent. sections 87 and 88 also impose further tests on conditions that relate to network access and network access pricing. We apply these tests in Section 5 in relation to ST and in Section 6 in relation to call termination.

⁶ Commission Recommendation of 17 December 2007 on relevant product and services markets (2007/879/EC) - http://eur-lex.europa.eu/LexUriServ/site/en/oj/2007/l_344/l_34420071228en00650069.pdf

⁷ Guidelines for market analysis and the assessment of SMP dated 11 July 2002 (2002/C 165/03) - <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:C:2002:165:0006:0031:EN:PDF>

⁸ Revised ERG Common Position on the approach to Appropriate remedies dated May 2006 (ERG (06) 33) - http://erg.ec.europa.eu/doc/meeting/erg_06_33_remedies_common_position_june_06.pdf

Section 3 – Ofcom’s general duties

- 2.23 Under the Act, our principal duty in carrying out functions is to further the interests of citizens in relation to communications matters and to further the interests of consumers in relevant markets, where appropriate by promoting competition.
- 2.24 In so doing, we are required to secure a number of specific objectives and to have regard to a number of matters, as set out in section 3 of the Act. As to the prescribed specific statutory objectives in section 3(2), we consider that the objective of securing the availability throughout the UK of a wide range of electronic communications services objectives as particularly relevant to this Statement.
- 2.25 In performing our duties, we are also required to have regard to a range of other considerations, as appear to us to be relevant in the circumstances. In this context, we consider that it is important to have regard to the desirability of promoting competition in the ST market.
- 2.26 We must also have regard to the principles under which regulatory activities should be transparent, accountable, proportionate, consistent, and targeted only at cases in which action is needed, as well as the interest of consumers in respect of choice, price, quality of service and value for money.
- 2.27 Ofcom has, however, a wide measure of discretion in balancing its statutory duties and objectives. In so doing, we have taken account of all relevant considerations, including responses received during this consultation process, in reaching our conclusions and further proposals set out in this Statement.

Section 4 – European Community requirements for regulation

- 2.28 As noted above, our decisions and further proposals involve Ofcom exercising functions falling under the CRF. As such, section 4 of the Act requires us to act in accordance with the six European Community requirements for regulation.
- 2.29 In summary, these six requirements are:
- a) to promote competition in the provision of electronic communications networks and services, associated facilities and the supply of directories;
 - b) to contribute to the development of the European internal market;
 - c) to promote the interests of all persons who are citizens of the European Union;
 - d) to take account of the desirability of Ofcom’s carrying out of its functions in a manner which, so far as practicable, does not favour one form of or means of providing electronic communications networks, services or associated facilities over another, i.e. to be technologically neutral;
 - e) to encourage, to such extent as Ofcom considers appropriate for certain prescribed purposes, the provision of network access and service interoperability, namely securing efficient and sustainable competition and the maximum benefit for customers of communications providers;
 - f) to encourage compliance with certain standards in order to facilitate service interoperability and secure freedom of choice for the customers of communications providers.

- 2.30 We consider that the first and fifth of those requirements are of particular relevance to this Statement and that no conflict arises in this regard with those specific objectives in section 3 of the Act that we consider are particularly relevant in this context.

Impact assessment

- 2.31 Impact assessments provide a valuable way of assessing different options for regulation and showing why the preferred option was chosen. They form part of best-practice policy making. This is reflected in section 7 of the Act which requires that generally Ofcom has to carry out impact assessments where its proposals would be likely to have a significant effect on businesses or the general public, or where there is a major change in Ofcom's activities. However, as a matter of policy, Ofcom is committed to carrying out and publishing impact assessments in relation to the majority of its policy decisions. For further information about Ofcom's approach to impact assessments, see the guidelines, "Better policy making: Ofcom's approach to impact assessment"⁹.
- 2.32 The analysis presented in this Statement represents an impact assessment as defined in section 7 of the Act. In particular Sections 4 and 5 deal with our considerations and decisions in relation to the ST market and Section 6 sets out our views on the imposition of a further remedy in the call termination market.

Equality impact assessment

- 2.33 Ofcom is separately required by statute to assess the functions, policies, projects and practices on race, disability and gender equality. Equality impact assessments (EIAs) also assist us in making sure that we are meeting our principal duty of furthering the interests of citizens and consumers regardless of their background or identity.
- 2.34 We have therefore also considered what (if any) impact the issues under consideration may have on equality. We do not consider the impact of the decisions made in this statement to be to the detriment of any group within society. In particular, we do not consider that they will have a differential impact on consumers in different parts of the UK or on consumers with low incomes.
- 2.35 We have not carried out separate equality impact assessments in relation to race or gender equality, or equality schemes under the Northern Ireland and Disability Equality Schemes. This is because we do not believe that the policies presented here, which primarily affect wholesale markets, would have a different impact in relation to people of different gender or ethnicity, or consumers in Northern Ireland or on disabled consumers compared to consumers in general.

⁹ www.ofcom.org.uk/consult/policy_making/guidelines.pdf

Section 3

Wholesale Transit Services : consultation responses

Consultation questions

- 3.1 Section 19 of the September consultation asked 14 questions relating to the finding of SMP in the transit market and the proposed remedies and three questions related to the proposed additional remedy in call termination. We received responses from BT, UKCTA, Cable & Wireless COLT and O2 and two confidential responses. O2 confined its comments to a statement of support for Ofcom's findings in relation to ST and the remedies proposed.
- 3.2 This Section lists each Question in turn and summarises the responses from stakeholders. We do not comment on what was said here but deal with the points raised in the following Sections 4, 5 and 6.

Question 19.1 *“Do you agree with Ofcom’s assessment that there are separate single transit and inter-tandem conveyance/transit markets in the UK excluding the Hull Area? If not, please explain why.”*

- 3.3 BT disagreed, arguing that our previous definition was correct and that there is a single market for conveyance and transit services at the tandem layer in the UK. It stated that CPs decisions will be based on volume of traffic and how to interconnect in the most economic way. For smaller operators ST will form only a small part of their interconnect and is unlikely to be a major factor in their decision making. Therefore, BT suggested that ST is just one element of the transit market.
- 3.4 Cable and Wireless agreed that the ST market is distinct from the ITC/ITT market in a number of ways. It indicated that CPs can make alternative arrangements to avoid ITC/ITT, by either aggregating traffic or by utilising the network of another CP. However, no CP can eradicate the need to purchase ST as even CPs who use alternative transit services will be indirectly reliant on BT's ST to reach a very large number of destinations. C&W also commented that ST is also unavoidable in number porting and NTS, where CPs have no alternative but to purchase from BT.
- 3.5 UKCTA made similar observations to C&W noting that ST is separate from the ITC/ITT market. It stated that there are instances where CPs are compelled to buy ST from BT either as a result of lack of interconnection (where it would not be cost effective to connect to every other CP) or through BT bundling ST into other services (NTS, Number Portability etc) and sections of the market which are not competitive (e.g. less competitive “thin” routes to smaller TCPs).
- 3.6 Another respondent also agreed with Ofcom's revised assessment of separate ST and ITC/ITT markets. It considered that the revised definition and structure corresponded to the existing market configuration and this is broadly representative of the supply and demand side characteristics that exist in practice.
- 3.7 COLT welcomed Ofcom's decision not to deregulate BT's ST service adding that the ST market in the UK is clearly defined and is separate from any conveyance or long distance services. It noted that BT was in a unique position in interconnecting with all

other CPs¹⁰ whereas no other CP had such ubiquity of interconnection. As a consequence the primary function of BT's ST service was to enable any CP to exchange traffic with any other CP.

Question 19.2: *“Do you agree with Ofcom’s assessment that BT has SMP in the single transit market? If not, please explain why.”*

- 3.8 BT strongly disagreed with Ofcom’s assessment that it has SMP in the ST market. It argued that 90% of traffic is delivered over “thick” routes that it stated that Ofcom accepted to be fully competitive. Therefore, BT contended that, in effect, Ofcom had proposed that BT has SMP over the whole market on the basis that only 10% is not competitive.
- 3.9 C&W agreed with Ofcom stating there is clear evidence that BT retains SMP in the ST market, with every other CP reliant on purchasing BT ST to some extent. C&W stated that, without regulation, BT could increase the costs of its competitors adding that the competition that BT experiences from direct interconnection on a minority of “thick” routes does not exist in the large tail of routes to smaller UK CPs, leaving other OCPs vulnerable to any BT ST price rises.
- 3.10 UKCTA added that the characteristics of the UK market are significantly different from other EU states. The UK narrowband market has a large number of very small providers and an SMP transit service is required to provide end to end connectivity.
- 3.11 Another respondent agreed saying that BT’s market share, lack of countervailing buyer power/constraint on BT and in many cases the lack of alternatives to BT combine to clearly demonstrate that BT holds SMP in this market. It argued that Ofcom should formalise its finding of BT SMP in the ST market and proceed with the application of the relevant remedies.
- 3.12 COLT agreed with Ofcom that BT has SMP in the ST market.

Question 19.3: *“Do you agree that Ofcom should impose a requirement to provide network access on reasonable request on BT in the market? If not, please explain why.”*

- 3.13 BT did not accept that a finding of SMP is justified, or agree with any of the proposed remedies. However, if it were found to have SMP, it considered that an obligation to provide network access on reasonable request would be a sensible minimum requirement, since BT has no intention of withdrawing supply in this market and would support this remedy.
- 3.14 C&W agreed adding that the provision of network access on reasonable request is essential if end users are to enjoy cost effective seamless services from their communication providers. Without this remedy in place, BT could refuse to provide access and this would mean other CPs would not be able to offer comprehensive services to their end users.
- 3.15 UKCTA agreed describing how BT remains the only provider that is interconnected to every UK CP (see footnote 10 above). The economics of interconnection mean that BT’s dominant position is unlikely to change during the life of the review¹¹. There are

¹⁰ BT does interconnect with most CPs but has stated it does not interconnect with all CPs; see paragraph 4.25

¹¹ The forward look period for this review is 4 years.

many bottlenecks in the market due to the scale of investment needed to connect directly to the many small providers that terminate UK number ranges (compared to the available cost savings from direct interconnection).

- 3.16 COLT agreed stating that access is a basic requirement and that if this obligation did not exist BT would be able to exclude competitors from markets in which BT operates.

Question 19.4: *“Do you agree that Ofcom should impose a requirement not to unduly discriminate on BT in the ST market? If not, please explain why.”*

- 3.17 BT disagreed saying that competition to interconnect with small CPs stops BT setting excessive prices. In the case of large CPs there is both sufficient traffic for direct interconnect and a competitive market for transit which exerts a considerable downward pressure on prices. Other transit operators are free to negotiate bespoke price, volume and term contracts.
- 3.18 BT argued that the segment of the market where such competition may not develop was very small. Further, it stated that these concerns could be addressed by the following two remedies: a requirement on BT to provide access on reasonable demand, and a price cap set at BT's rate of 30 September 2009, with price increases over the next 4 years limited to RPI-0.
- 3.19 C&W stated that it was vital BT should not be allowed to unduly discriminate asserting that otherwise BT could undermine competitors' commercial interests by charging more where no alternative routing options exist, resulting in leverage of market power into other market segments.
- 3.20 C&W also noted that Ofcom had stated that this remedy would not necessarily require the same price to be set for all CPs. They indicated that they needed clarification to understand where BT can charge differently for ST, and considered that BT's degree of freedom would be very restricted, as given the nature of the service BT has little scope for differential pricing on either the route or the purchaser. They stated that since there is unlikely to be a widespread variation in the cost to serve individual routes, BT would find it difficult to justify any decision to charge different ST prices.
- 3.21 UKCTA expressed the same views as C&W requesting guidance as to the circumstances where BT could charge different prices without falling foul of the undue discrimination condition.
- 3.22 COLT also agreed stating that it was essential BT was not able to discriminate and that it must offer similar rates to its internal¹² and external customers.
- 3.23 Another respondent stated that this remedy was necessary and also stressed the importance of the ability for the effectiveness of the remedy to be assessed against sufficiently transparent accounts.
- 3.24 Additionally, the European Commission commented on Ofcom's draft notification in relation to potential differential pricing. The Commission stated that Ofcom had put forward that BT could apply different prices on different routes and invited Ofcom to better substantiate why BT might have an interest to implement a policy of different rates per route.

¹² Whilst this is what COLT said, our understanding is that BT does not self-supply this product.

Question 19.5: *“Do you agree that Ofcom should impose a requirement that BT’s charges should be subject to a cost orientation obligation in the ST market? If not, please explain why.”*

- 3.25 BT said no, this obligation is unnecessary given the high degree of competition in the provision of transit services, including ST. BT suggested that any concerns would be addressed by the imposition of two remedies, network access and a RPI-0 safeguard cap on the provision of ST services. Thus, BT considered that a requirement for its ST charges to be cost-oriented would not be proportionate within the terms of either section 88(1) or section 47(2) of the Act. Furthermore, it stated that the imposition of a cost orientation obligation would unduly discriminate against them because it would not have the same pricing flexibility as its competitors.
- 3.26 C&W held that cost orientation is essential to ensure BT’s competitors are protected from discretionary price rises. It would not be in any way onerous as it merely continues the current arrangement. C&W stated that it would be particularly important to retain this obligation if BT were able to charge different ST rates to reach different CPs.
- 3.27 One respondent said that such ex ante remedy is necessary to promote efficient and sustainable competition at the wholesale level and reliance on competition law alone would not be sufficient in this instance. It would be incumbent upon BT to assess and show whether prices are compliant with this proposed obligation, but BT’s regulatory accounts render the assessment of non discrimination (and hence its proof/disproof) difficult in certain instances. Thus it is also necessary to ensure that those accounts are sufficiently transparent.
- 3.28 UKCTA said that BT’s competitors need to be protected from discretionary price rises and any damaging attempts to price below cost.
- 3.29 COLT agreed stating that BT’s strategy appeared to be one of retaining control of the transit marketplace.
- 3.30 Another respondent agreed with the proposed remedy stating that a cost orientation obligation would be more proportionate than an explicit charge control given the size of the market.

Question 19.6: *“Do you agree with Ofcom’s proposed interpretation of this condition as set out in Annex 14? If not, please explain why.”*

- 3.31 BT believed the imposition of a cost orientation obligation - even if more broadly interpreted - is disproportionate and unnecessary. Further the publication of the cost orientation guidance at Annex 14 has raised a number of general concerns beyond this specific issue of how to regulate ST.
- 3.32 C&W commented only on Section A14.5 as it relates to the case of ST, i.e. where a charge control would normally be seen as appropriate but given the scale of the market it would not seem proportionate. Ofcom’s approach of requiring BT to price ST at LRIC CCA plus a mark-up is reasonable.
- 3.33 One other respondent agreed adding that given the absence of specific charge controls, such a requirement is necessary in order to limit BT’s ability to set excessive charges and compliance must be able to be closely monitored, a key objective of the forthcoming ‘clean sheet’ review of BT’s regulatory financial reporting.

- 3.34 UKCTA agreed saying the appropriate benchmark for ST pricing should be set at the LRIC plus an equal proportionate contribution to common costs (or CCA fully allocated cost as a reasonable proxy).

Question 19.7: *“Do you agree that Ofcom should impose a requirement to publish a reference offer on BT in the single transit market? If not, please explain why.”*

- 3.35 BT disagreed adding that this remedy is disproportionate. It is unduly discriminatory against BT because BT would not have the same flexibility in pricing in competitive markets as its competitors. In particular, BT would be limited in its ability to offer bespoke pricing to customers and significantly disadvantaged in a bidding context.
- 3.36 C&W said that as ST is sold alongside other regulated services (such as NTS call origination) the imposition of this remedy is reasonable, placing no additional burden on BT to comply.
- 3.37 UKCTA simply said its members require advanced warning of any changes which may impact on their own services.
- 3.38 COLT stated it was important that BT is required to publish a reference offer.

Question 19.8: *“Do you agree that Ofcom should impose a requirement to notify technical information on BT in the single transit market? If not, please explain why.”*

- 3.39 BT said that this remedy is not required, but supports the current arrangements for publication of technical information and the agreement of standards via the NICC and other industry bodies.
- 3.40 C&W said that as ST is sold in conjunction with other conveyance services the requirement to notify technical information is neither onerous nor unreasonable.
- 3.41 COLT said that adequate notice of changes was important.
- 3.42 UKCTA agreed that BT should be required to notify technical information since it was important for their members to be given reasonable notice of changes that may impact their ability to use this essential service.

Question 19.9: *“Do you agree that Ofcom should impose a requirement to notify charges, terms and conditions on BT in the single transit market? If not, please explain why.”*

- 3.43 BT referred to its response to Question 19.10 below.
- 3.44 C&W and UKCTA stated that this requirement is essential, in providing transparency and helping to guard against anti-competitive behaviour. They stated that other CPs need advanced warning of any changes which may impact on their commercial offerings. The absence of such a remedy would leave the market without the necessary level of certainty thereby disadvantaging competing CPs.
- 3.45 COLT said that adequate notice of changes was important.

Question 19.10: *“Do you agree that Ofcom should impose a notification period of 90 days, or would 28 days be sufficient in this market?”*

- 3.46 BT disagreed with the proposed 90-day notification period, stating that in a fully competitive market there should be no requirement to notify charges, terms and conditions. However, it indicated that if its suggested requirement to publish a reference rate with a price cap, with corresponding terms and conditions that are available to all CPs was accepted, then it would be reasonable to notify 28 days in advance of any changes. BT also stated that in practice, notification periods are agreed through contract procedures, as Ofcom points out in relation to other CPs (see Question 19.16 below).
- 3.47 C&W agreed with the proposal saying that a 28 day notice period would be insufficient to accommodate the timeline required by both wholesale and retail customers to reflect changes in transit pricing within their commercial offerings due to the number of steps in the process to implement both wholesale and retail price changes. A period of 28 days would leave many CPs at a commercial disadvantage to BT (who do not purchase transit). In many cases (e.g. NTS). C&W also commented that CPs cannot avoid ST and need a notice period at least as long as that given for the other services bundled with ST.
- 3.48 UKCTA also agreed that the 90 day warning period should be retained. A shorter notice period would not allow the price change to be filtered through the various stages of the supply chain (from BT to CP to reseller to end user).
- 3.49 COLT remarked that 90 days was essential.

Question 19.11: *“Do you agree that Ofcom should impose an obligation on BT to comply with obligations governing cost accounting systems and processes as set out by Ofcom in the ST market? If not, please explain why.”*

- 3.50 BT held that this is disproportionate in the context of this market. It stated that wherever possible the administrative burden should be minimised and that the materiality of this market and their suggested price cap obligation would make a cost orientation obligation disproportionate.
- 3.51 C&W described how cost accounting obligations are needed for CPs to have confidence in the other proposed remedies, such as cost orientation, and to have a proper understanding of the costs BT faces when selling ST. It is not unduly onerous as BT currently complies with this obligation for other conveyance services and it is necessary to ensure compliance with BT's regulatory obligations.
- 3.52 UKCTA agreed adding that without cost accounting we would not have the necessary transparency needed to establish whether BT is complying with its obligations. The obligation itself is not unduly onerous as it would sit alongside similar obligations for call termination and call origination. UKCTA remain concerned that BT's regulatory accounts render the assessment of non discrimination (and hence its proof/disproof) difficult in certain instances.
- 3.53 COLT strongly agreed but gave their view that the cost accounting systems currently in place are not fit for purpose and need review. Without adequate reporting there can be no confidence in the remedies that Ofcom is imposing on BT. The cost accounting system used for ST should be similar to that used for call termination and origination.

Question 19.12: *“Do you agree that Ofcom should impose an obligation on BT to comply with obligations governing accounting separation as set out by Ofcom in the ST market? If not, please explain why.”*

- 3.54 BT argued that this is a disproportionate remedy in this market as per their answer to Question 19.11. It noted that Ofcom has recently removed a number of smaller markets from the requirement for accounting separation and in view of the small and shrinking size of the ST market it considered it unreasonable to impose this obligation here.
- 3.55 C&W believed the obligations proposed by Ofcom are appropriate for both the ST market and the current BT Regulatory Accounting reporting regime. It would look to Ofcom’s future review of Regulatory Accounting in 2010 to re-examine BT’s full regulatory accounting obligations (including those relating to ST).
- 3.56 COLT referred to their response to Question 19.11.
- 3.57 UKCTA supported Ofcom’s proposal as being necessary to support cost orientation.

Question 19.13: *“Do you agree that Ofcom should impose a requirement that BT’s charges should be subject to a cost orientation obligation for PPP related to the ST market? If not, please explain why.”*

- 3.58 BT stated that the market is competitive, so pricing is constrained by competitive forces and cost orientation is unnecessary.
- 3.59 Another respondent agreed with Ofcom’s proposal but added that, if Ofcom were to impose a charge control on the ST market then, in order to maintain consistency, the same remedy should be applied to the PPP charge.
- 3.60 C&W and UKCTA said that CPs have no option but to purchase PPP bundled with BT’s ST service. In practice BT should charge uniform PPP rates across all relevant SMP services.
- 3.61 COLT agreed with Ofcom’s proposal.

Question 19.14: *“Do you agree with Ofcom’s proposed interpretation of this condition as set out in Annex 14? If not, please explain why.”*

- 3.62 BT referred to its response to Question 19.16.
- 3.63 C&W also referred to Question 19.16 adding with UKCTA that obliging BT to price PPP for ST at LRIC + CCA is reasonable.

Question 19.15: *“Do you agree that Ofcom should impose a requirement for other CPs to notify their charges? If not, please explain why.”*

- 3.64 All but one respondent agreed with this proposal. BT commented that requiring other fixed geographic TCPs to publish charges would aid transparency, be appropriate and not disproportionate. It would also reinforce non-discrimination for anyone wishing to interconnect with CPs who are not interconnected with BT and whose rates do not appear in the BT CPL and would bring the UK closer into line with best practice in other European countries, as noted in the Commission’s letter to Ofcom of 16 October 2009.

- 3.65 BT noted that the list of CPs at Annex A to Schedule 2 in Annex 13 to the September consultation is not exhaustive and not reflective of all CPs on which this requirement should be placed. Given that the remedy will be in place for a number of years and that CPs will enter and exit the market during that period, BT suggested that it would be better to apply the condition to all terminators, rather than a list of named CPs. BT noted that the rate they pay for termination will be the rate agreed between them and the CP under the BT SIA.
- 3.66 C&W suggested that all CPs should be required to publish their termination rates. Ofcom must ensure that the definition of a CP is broad enough to include entities such as CNS, to prevent them from avoiding publishing their termination rates online. Also in cases involving third party hosting, details of the nominated points of interconnect where these charges apply (without the addition of transit charges) should be made available on request. Contact details should also be posted to assist CPs in pursuing interconnection.
- 3.67 Another respondent considered that the absence of a specific obligation on BT to publish charges in the LTC/LTT markets could result in the removal of the specific geographic termination rates that BT has agreed with other CPs from the BT Carrier price List. Such a situation would remove a primary element of transparency upon which the industry is critically reliant resulting in, amongst other consequences, the loss of a key facilitator to CP negotiations as regards direct interconnection.
- 3.68 UKCTA agreed with Ofcom's proposal.
- 3.69 COLT opposed Ofcom's proposal stating that the current "fair and reasonable" obligation has been effective and there is no need for more intrusive regulation.

Question 19.16: *"Do you agree that a notification period [for other CP termination rates] does not need to be set by Ofcom as commercial arrangements are sufficient? If not, please explain why."*

- 3.70 BT agreed, noting that the primary concern here is transparency of the rates applying at the point at which CPs take decisions on interconnect. It considered that a requirement for other CPs to publicly notify rates would seem unnecessary.
- 3.71 C&W, UKCTA and COLT all agreed with the proposal.

Question 19.17: *"Do you agree that Ofcom should not impose an obligation[on other TCPs] to publish a reference offer? If not, please explain why."*

- 3.72 BT agreed adding that an obligation on CPs to publish a reference offer would be onerous and unnecessary.
- 3.73 C&W also agreed saying how a full reference offer would be disproportionate, publishing interconnect rates should be sufficient. Multiple rates or specific conditions other than general obligations should be made available on request. CPs that use a third party to host their number ranges should also make available details of nominated interconnection points where no transit charges are applied.
- 3.74 Another respondent concurred but noted that in the interests of transparency, should CPs offer multiple rates or attach specific conditions other than general interconnection obligations in order to obtain a rate, then those rates should be made available to any CP requesting them.

- 3.75 UKCTA and COLT also agreed but offered no comment.
- 3.76 One respondent made a general observation that in imposing a price publication requirement on TCPs other than BT and KCom, Ofcom needs to be mindful that many smaller CPs will not have engaged with the market review process and will not be aware of the proposal. The respondent considered that a reasonable period of time needs to be allowed for CPs to initially establish a public website for their information.

Section 4

Wholesale Transit Services: market definitions and market analyses

Wholesale Transit Services

- 4.1 Wholesale transit services are used to carry traffic between two CPs that do not have direct interconnection in place. Transit services are wholesale services that constitute part of the end-to-end call path needed to meet the requirements for retail calls. Different transit service CPs may offer services in slightly different ways, depending on the type of call (terminating to fixed geographic numbers, fixed non-geographic numbers, mobile numbers, etc), the terminating CP, the point at which the originating CP connects to the transit service or a combination of these.
- 4.2 Where the transit provider takes into account the points at which the originating and terminating CP connect to its network, three specific transit services can be identified:
- a) Inter-tandem conveyance;
 - b) Inter-tandem transit; and
 - c) ST.

Summary of decisions

- 4.3 In relation to wholesale transit services, we have reached the following conclusions.
- 4.4 Two separate markets exist, the ST market for the UK excluding the Hull Area and the ITC/ITT market for the UK excluding the Hull Area.
- 4.5 In considering the ITC/ITT market we have decided, on the basis of our analysis in the March consultation and having carefully considered relevant responses to our March and September consultations, that the market would not satisfy the Commission's three criteria test as being a market susceptible to ex ante regulation. We have decided that this market is effectively competitive.
- 4.6 We have further decided that the ST market is not effectively competitive and BT holds SMP in this market.

Market Definition

Background

- 4.7 In 2003, the ST and, separately, the ITC/ITT markets were found not to be competitive, with BT having SMP in the markets. Appropriate SMP conditions were imposed on BT under the authority of those decisions.
- 4.8 In 2005, the ITC/ITT market was reviewed and it was found to be competitive, with all SMP conditions being revoked in accordance with section 84 of the Act.

- 4.9 In our March consultation we proposed a single market for Wholesale Transit covering both the ST and ITC/ITT markets primarily due to the increased level of interconnection between CPs and the fact that, in our assessment at the time, we considered that switching the supply of ITC/ITT to ST has become relatively easy. We therefore proposed that this Wholesale Transit market was effectively competitive.
- 4.10 Having carefully considered the responses we received to the March consultation, and in particular responses and additional information supplied by CPs in relation to the ability to substitute ST and ITC/ITT services, we reconsidered our proposals for a Wholesale Transit market and took the view that our market definition, and consequent market analysis should be revised. We proposed in the September consultation that there are two separate wholesale transit markets, ST and Inter-tandem Conveyance/Transit (ITC/ITT). These proposed market definitions correspond to the current market definitions as defined in 2003 (ST) and 2005 (ITC/ITT).
- 4.11 Having carefully considered the responses to the September consultation we are now implementing those proposals and conclude that there are two separate wholesale transit markets, ST and ITC/ITT.

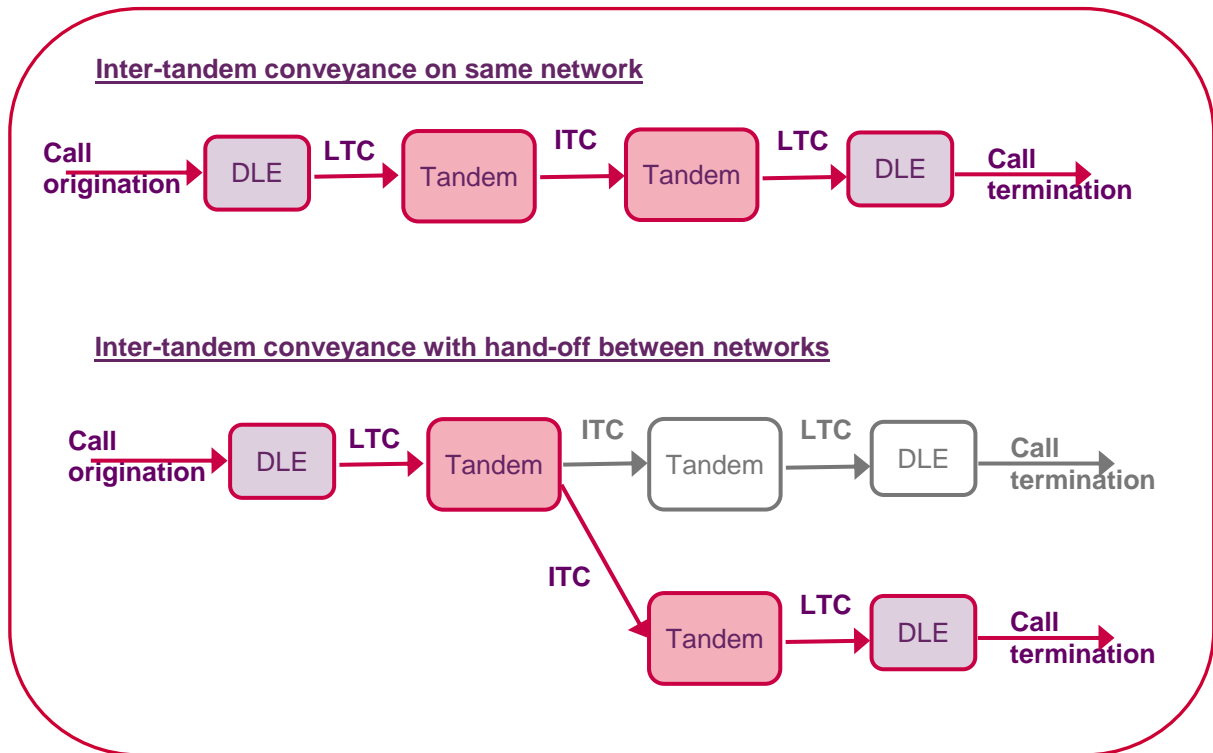
Service definitions

- 4.12 As said above, three specific transit services can be identified. We describe below each of those services.

Inter-tandem conveyance

- 4.13 Inter-tandem conveyance (ITC) is the service that an originating or terminating CP provides to carry traffic between two or more tandem exchanges in its network (Figure 4.1a);

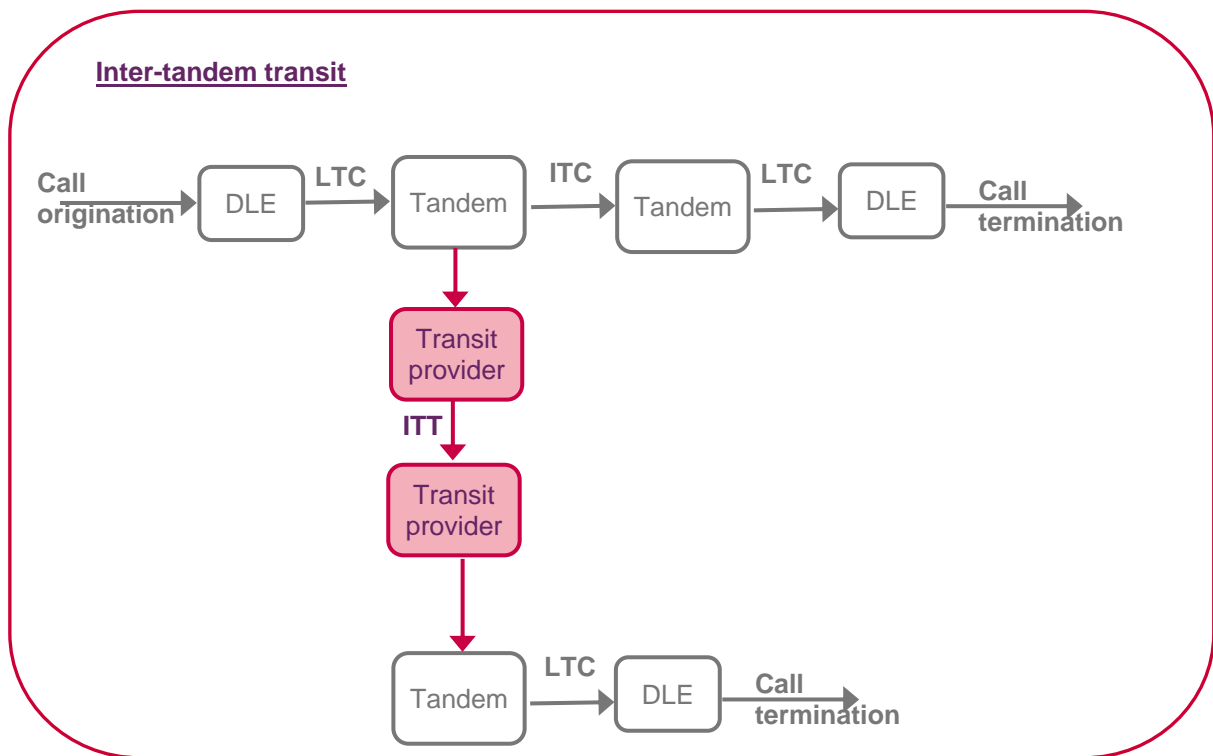
Figure 4.1a: ITC



Inter-tandem transit

4.14 Inter-tandem transit (ITT) is the service that a CP provides to carry traffic between its tandem exchanges in order to connect calls between two other CPs' networks (Figure 4.1b).

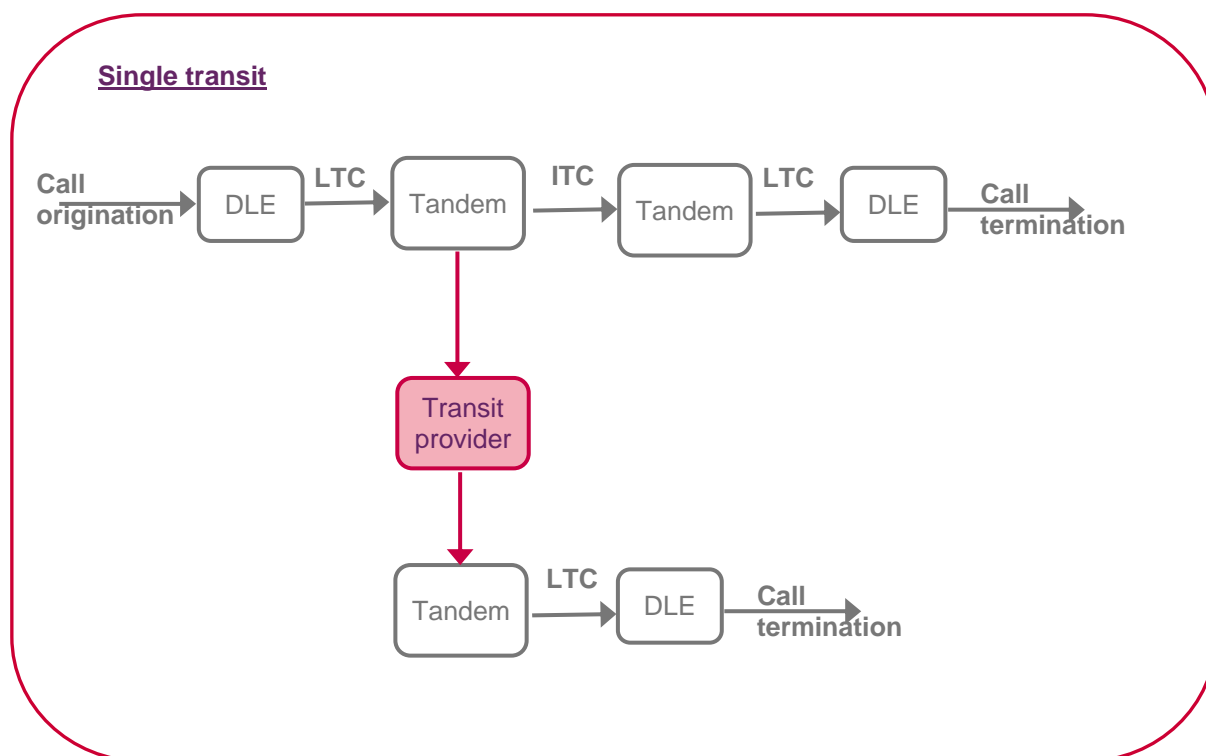
Figure 4.1b: ITT



Single transit

- 4.15 ST is the service that a CP provides to connect calls between two other CPs' networks, using only one of its tandem exchanges (Figure 4.1c).

Figure 4.1c: ST



- 4.16 BT currently provides separate ITC/ITT and ST services. Other transit providers tend to define their services in other ways. For example, a single rate may be offered for calls to all UK fixed geographic numbers, whilst a single rate per number range per terminating provider may be used for non-geographic traffic.

Market definition

- 4.17 The main criteria for defining the relevant market are set out in the SMP Guidelines. We have taken utmost account of the Guidelines. Having identified the three services relevant to this market, above, we consider whether and to what extent substitution exists between those services. We then consider the forward look period for this review and finally we consider the issue of geographic markets.
- 4.18 Having made proposals to define the markets that are outside of the Commission's Recommendation on product and services markets we also consider how the Commission's three criteria test applies to our proposed definitions.

Substitution between ITC and ITT

- 4.19 In both the March and September consultations, we considered that demand side substitution between ITT and ITC exists for the following reasons:

- a) A terminating (or originating) CP purchasing ITT¹³ would be able to switch to purchasing ITC from the originating (or terminating) CP or build out interconnect links and provide ITC itself (although establishing interconnect links is only justified at larger volumes of traffic).
 - b) A CP purchasing ITC could switch to purchasing ITT, if there was a transit provider present between the originating and terminating CP's switches. ITT involves the cost of an extra switching stage but this cost is less significant over larger volumes and longer distances.
- 4.20 We also considered in both consultations that there is supply-side substitution between ITT and ITC for the following reasons:
- a) A CP that provides ITC to several other CPs and has an extensive interconnected network would easily be able to offer ITT.
 - b) A CP offering ITT would be able to provide ITC for calls originating and terminating on its own network.
- 4.21 The competitive conditions in ITC and ITT are such that each service provides a competitive constraint on the pricing of the other. Therefore, ITT and ITC services are part of the same market. This is consistent with the conclusion that Ofcom reached in its review of the market in 2005¹⁴ in deregulating BT's supply of ITC and ITT.

Substitution between ITC/ITT and ST

- 4.22 We said in our March consultation that there is limited substitutability on the demand side between ST and ITC/ITT. Currently, ITC/ITT prices are about three times higher than ST prices. This implies that if a hypothetical monopolist implemented a SSNIP in ST, other CPs requiring ST would be unlikely to switch to ITC/ITT as a result of the SSNIP.
- 4.23 In theory, an OCP could, in the event of a SSNIP on ST services, switch to a CP that provides a bundle including both ST and ITC/ITT. This point has been made by BT in response to the September consultation to explain why it disagreed with our proposed market definition. Specifically, BT has made the point that "Single Tandem Transit is an integral part of the Transit market because CPs negotiate interconnect on the basis of their entire transit requirement and not Single Tandem Transit alone". However, as we explained in the September consultation, there are significant costs (and complexity on the supplier's side) involved with re-routeing traffic to a transit operator which may only be justified for large traffic volumes.
- 4.24 Therefore, given the characteristics of the ST market where a large number of routes are low-traffic routes, re-routeing traffic in response to a SSNIP on ST services on these routes is unlikely to be attractive. This implies that, on these routes, a SSNIP is likely to be profitable.
- 4.25 In its response to our September consultation, BT however contested this, arguing that "It is easier for CPs to switch than Ofcom suggest" and that "Of the 50+ [CPs] not interconnected to BT, 5 are known to have switched from BT." BT claims that "for these CPs, it is a matter of which operator offers the best deal for all their traffic. 40

¹³ OCPs purchase ITT for geographic calls whilst TCPs purchase ITT for certain NTS calls

¹⁴ *Review of BT's network charge controls*, 18 Aug 2005
<http://www.ofcom.org.uk/consult/condocs/charge/statement/>

go to 4 or less locations. Most of these are in major cities where the larger operators have a presence, and C&W have a presence at all of them.”

- 4.26 While, in BT’s view, 50+ CPs are not connected to it, BT is the only CP (in C&W’s view expressed in response to the March consultation) to be connected to 70 or more of the CPs in the UK. Further, Ofcom’s view is not that switching is difficult in the absolute, but that it is unlikely to be commercially justified for small traffic volumes which characterise those routes for which we have a particular competition concern (see below the Section on market power assessment). This is because of the costs and complexity of re-routeing traffic and aggregating ST traffic.
- 4.27 Furthermore, C&W has argued that while CPs can make alternative arrangements to avoid ITC/ITT, by either aggregating traffic or by utilising the network of another CP, this is more difficult for ST as even CPs who use alternative transit services will be indirectly reliant on BT’s ST to reach a very large number of destinations. C&W itself has the second largest number of interconnects after BT yet remains reliant on BT’s ST service for a very large number of routes. UKCTA also made similar comments.
- 4.28 OCPs may also, in the event of a SSNIP on ST services, consider direct interconnection and avoid incurring BT’s ST charge depending on the relative cost of each alternative. This option has been used in the past by several CPs (including mobile operators), which has led to BT reducing considerably ST prices to stop traffic moving away from its network.
- 4.29 As we explained in the September consultation¹⁵, after receiving additional evidence from CPs following the March consultation, BT’s current ST prices imply that on a number of routes a SSNIP is unlikely to make both re-routeing to a transit operator providing ST (either as a standalone or bundled service) and direct interconnection attractive options, therefore making the SSNIP likely to be profitable.
- 4.30 On the supply side, we initially held the view in our March consultation that, due to the increased level of interconnection between CPs and the fact that transit providers did not necessarily price ST and ITT services separately, switching the supply of ITC/ITT to ST has become relatively easier. We considered that, if a hypothetical monopolist was to increase its prices for ST by 5-10%, CPs that are not directly interconnected could switch to transit services provided by another CP to which they both connect.
- 4.31 In response to our March consultation, a number of CPs indicated that re-routeing traffic to take advantage of these substitution opportunities may not be profitable for a 5% to 10% increase in ST prices. In addition, alternative transit providers may not provide alternatives for all types of traffic to all other CPs. The main scenarios where this may arise are:
- a) Number Translation Service (NTS) traffic: NTS traffic constitutes approximately 25% of total ST volumes. Under the NTS regime, the terminating CP pays the transit fee for a number of non-geographic call types. However, the originating CP controls call routeing. Where the terminating CP sets the same termination rate to BT and to other CPs, there is no incentive on the originating CP to send

¹⁵ *Review of the fixed narrowband services wholesale markets 15Sept 2009*. In paragraph 19.24.....In order for a SSNIP on this price to be unprofitable, a CP would need to be able to re-route traffic via an existing route to a transit provider or via a direct interconnection.....and paragraph 19.25.... On the other hand, where a SSNIP is applied to the transit price across a number of different routes each with a smaller volume of traffic, the price increase is more likely to be profitable.

the traffic directly, since there is no cost saving. In fact, there is likely to be additional cost. Within the NTS regime, an approach of Near End Hand-Off is used. This means the originating CP will hand the call to BT as soon as it can. If it routes the traffic directly to the terminating CP or via a transit CP, the call may have to be routed further within the originating CP's network. In addition, if all traffic to a number range is sent to BT, data management associated with call routing on the network is simplified. Routing certain number blocks within the range differently from the rest will add cost and complexity. Therefore, very significant volumes are needed to justify the additional complexity, even if routes exist between the originating CP and the terminating or transit CP;

- b) Geographic traffic: in particular where traffic volumes are limited, options for direct interconnection or the use of an alternative transit provider to BT may be limited.
- 4.32 ST is a simple service. It is a switching only service and does not include transmission. As such, the ST price is low and the overall size of the market is limited with BT's revenues totalling less than £5m per annum. The current BT service is subject to a charge control, but BT has been pricing below the charge control ceiling since 1 April 2008. This pricing behaviour has therefore not been merely transitory and we consider the current price level to be a good indication that prices are driven by the more competitive segments of the market. Since, in the absence of competition, there would be no incentive on BT to price below the charge control level, we take the current price to be broadly reflective of the competitive level (with BT's pricing subject to a no undue discrimination obligation).
- 4.33 The price of ST is currently 0.0375 pence per minute peak, including the charge for PPP. In order for a SSNIP on this price on an individual route to be unprofitable, a CP would need to be able to re-route traffic via an existing route to a transit provider or via a direct interconnection. Furthermore, we also emphasised in the September consultation that even where there is already a route with available capacity, there would need to be a significant volume of traffic to be re-routed in order to make such re-routing viable if updating routing data is complex and the one-off costs of re-routing are substantial.
- 4.34 Therefore we believe that a SSNIP on individual routes may be only unprofitable if applied to very large traffic streams where CPs either have interconnection in place already or can use a transit provider to which they are both already connected, or can easily deploy interconnection. On the other hand, if a SSNIP was applied to the transit price on a route with a smaller volume of traffic, the price increase is more likely to be profitable. For these reasons, we consider that, in fact, supply side substitution between ST and ITC/ITT may not be feasible.

“Route-based” market definition

- 4.35 In response to our March consultation, some stakeholders proposed an alternative approach for defining transit markets. Under this suggested approach the ST market would be further sub-divided so that competitive segments of the market could be distinguished from uncompetitive segments. In the September consultation, we considered two broad ways of sub-dividing the market to assess whether such an approach would be appropriate. Each route could be defined as a separate market or, alternatively, the market could be split into a less competitive segment (“thin” routes) and a more competitive segment (“thick” routes). The “thick” routes would be competitive whereas the “thin” routes would not. From a market definition perspective, a separate market for each route or a separate “thin routes” market

would be based on an assessment of, pricing, traffic volumes and the level of interconnection of each CP in the market in order to ascertain the competitive constraints in place on a route by route basis.

- 4.36 In the September consultation, however, we expressed the view that it would not be practical or proportionate to analyse every route in the market and assess the competitive conditions that exist on each of them.
- 4.37 Firstly, responses to the March consultation and additional data gathered from CPs indicate that the ST market comprises a limited number of routes carrying a large amount of traffic and a large tail of routes each of which carries little traffic. Between these extremes there are varying conditions such that there is no clear dividing line between the routes with larger volumes where competition may be effective and the routes with smaller volumes where BT is the only supplier of ST¹⁶. Further, there are *a priori* no characteristics that differentiate these routes apart from the volume of traffic. For example, while “thick” routes are likely to be constituted of traffic between large CPs or from/to Mobile Network Operators, not all routes between or from/to these types of CPs are “thick” routes. In other words, the “thin” routes can equally carry traffic between large CPs or from/to Mobile Network Operators as well as traffic to small CPs. Competitive conditions on these routes may vary with alternatives to the BT service being available on some routes (e.g. direct interconnection) but not on other routes.
- 4.38 A further complexity arises when the specifics of how different traffic types are routed is considered. The approach for routing geographic traffic is one of Far End Handover. In this approach, a CP carries traffic on its network as far as it can. If it hands the call over – either to a transit provider or the TCP – close to the point of origination, it will pay the costs of conveyance incurred by the TCP or transit provider in conveying the call to the point of termination. Even if the OCP and the TCP are interconnected, it would not be efficient to use this interconnection point if it was in a different location because this would require more conveyance on both the OCP and the TCP networks.
- 4.39 Therefore, a route by route approach would need to take into account that, even if two CPs have, in total, sufficient traffic to justify interconnection, the spread of traffic between different services (geographic versus non-geographic) and the location of origination and termination may influence the extent to which alternative routing options exist.
- 4.40 This implies that a route by route approach is unlikely to be practical as it would require a thorough analysis of the characteristics of traffic routes on a case by case basis.
- 4.41 Secondly, the pricing of transit services may be complex. For example, some transit services provided by CPs other than BT may be offered as part of a bundle (e.g., fixed geographic traffic calls to 01 and 02 number ranges), at a single price. Since each CP has a different termination rate, this implies a different transit price is

¹⁶ For example, in response to the March Consultation, C&W commented that “the volume of small carriers co-existing with a few larger players makes the UK market different from most other EU member states” and that “it cannot put an accurate figure on the number of routes where [they] believe BT has a monopoly on the route (i.e. ignoring those providers who offer an A-Z transit service for convenience but are still dependent on BT) but [they] don’t believe that saying that over 70 such routes exist in the UK would be an exaggeration, accompanied by tens more that only have BT plus one or two others who don’t offer a productised transit offering (and who are unlikely to enter the market given the low return)”. Another large CP made similar comments.

charged for each call. However, transit providers are much less likely to provide the same approach for calls to mobile number ranges or to NTS numbers, because the variation in call termination rates between different services and different CPs is large. In these cases, it is more likely that a transit provider would provide a set transit fee for each type of traffic.

- 4.42 Further, it is also likely that a route-based market definition could lead to uncertainty in the market. The market analysis would need to be updated regularly to take account of changes in interconnection and traffic volumes and this would place a high administrative burden on CPs to retain traffic data and provide this data to Ofcom. It is not clear to Ofcom that a set of clear and practicable guidelines as to the process we would follow in order to assess whether any specific route was competitive or not could be established. This would also be unlikely to be proportionate given the limited size of the ST market (BT's revenue in this market is less than £5m).
- 4.43 In its response to the September consultation, BT stated that "90% of traffic is delivered over thick routes that Ofcom accepts are fully competitive". While we recognise that there are different competitive conditions on various routes with some routes being more competitive than others, we continue to believe that it would not be practical or proportionate to adopt a route based market definition. On this basis, we consider BT's categorisation of a 90% -10% split of thick and thin routes to be overly simplistic and we do not consider that it reflects the key characteristics of the ST market.
- 4.44 Therefore, given the overall lack of substitution between ST and ITC/ITT both on the demand and supply-side, we consider that ST and ITC/ITT are separate markets and that there is one ST market for all routes. With the exception of BT, all respondents have agreed with this proposal in response to our September consultation.

Geographic market definition

- 4.45 We have set out above that the location of points of interconnection, the type of traffic, the point of call origination and the point of call termination would make a route by route analysis more complex. However, the single transit service in itself is relatively simple as it includes only the cost of a single tandem exchange. The cost of interconnection circuits to the tandem exchange is not included. As we said in both the March and September consultations, we do not consider price differentiation on a geographic basis to be either practical, given that transit services are supplied at the tandem switch layer (which tend to be located in larger cities and cover wider areas), or attractive, given the costs that would be involved relatively to the small size of the market in terms of revenues.
- 4.46 The only network provider in the Hull Area is KCOM. The service market in the Hull Area is different from the rest of the UK and KCOM does not provide ST services. We therefore remain of the view that there is a single geographic market for ST in the UK excluding Hull.

Forward look

- 4.47 In carrying out this review, we are in accordance with the SMP Guidelines, undertaking a forward looking, structural evaluation of the relevant markets. We discuss below expected developments within the market, and consider that the appropriate period for our forward look remains one of four years taking into account the expected developments in the market in this period. We have, in the past, found it

beneficial to review the wholesale narrowband markets together. This allows us to provide a comprehensive analysis of narrowband wholesale markets and the interrelationship between the different services provided. A forward look period of four years is consistent with the approach that we have taken for the other wholesale narrowband services.

- 4.48 In particular, we consider that over the forward look period there may be some increase in competition, especially on the more competitive routes. However, developments in the less competitive areas of the market are unlikely to be significant during the period, based on the current technology deployed. We have outlined in Section 3 of the September consultation BT's current plans for 21CN and said that other CPs are also in the process of migrating to Next Generation Networks (NGNs). We emphasised that BT's deployment of NGN will be slower than we expected in our March consultation and therefore expect that a significant proportion of ST will be supplied on the current PSTN technology throughout the review period.
- 4.49 We consider that NGN technology will allow CPs greater flexibility in changing routing and that it may be the case that different transit services become more substitutable as the UK network progressively moves to an NGN environment. However, we do not consider that, during the next four years, sufficient change will have occurred to affect our conclusion on market definition.
- 4.50 One factor which may impact on the timing of the next review of the ST market is Ofcom's forthcoming review of NTS commencing early in 2010. This will look at a range of consumer and industry issues with the operation of NTS, including BT's position in NTS transit and the knock-on impact on other TCPs termination charges. We discuss NTS traffic within the ST market at paragraph 4.74 onwards. Under the present NTS regime, purchase of BT ST's service cannot be avoided. Any change to the NTS regime that introduced potential to avoid such a purchase may affect competitive conditions in the market. It is therefore possible that the outcome of the review may lead Ofcom to review BT's continued dominance in the ST market ahead of the next fixed narrowband wholesale market review cycle. However, until the outcome of the NTS review is known, a four year forward look period remains appropriate.
- 4.51 The Commission, in their comments¹⁷ on our proposals for wholesale transit markets, invited Ofcom to closely monitor developments within the market, in order that we would be able to re-assess market definitions and analysis as appropriate. We have taken utmost account of the Commission's comment and, in identifying NGN and specifically NTS as two key areas where developments may occur, we will be in a position to re-review this market before the currently planned date should developments impact on our current decisions.

Relationship between the wholesale market definition and the Commission's Recommendation on product and service markets.

- 4.52 In Section 2, we explain what we must do before identifying a market in light of national circumstances, and that Ofcom has taken utmost account of the Commission's Recommendation on relevant product and service markets when considering transit services in the UK.

¹⁷ http://circa.europa.eu/Public/irc/info/ecctf/library?l=/uk/registeredsnotifications/uk20090973/uk-2009-0973_actepdf/ EN 1.0 &a=d

- 4.53 The Commission has not included a market for transit services in the products and services markets identified in its Recommendation published in 2007, having previously defined “Transit services in the fixed public telephone network” as market 10 in the 2003 Recommendation.
- 4.54 The removal of this market from the list published in 2007 by the Commission indicates that the Commission no longer presumes that, in principle, wholesale transit markets are susceptible to *ex-ante* regulation. This does not mean, however, that NRAs are not in a position after an analysis of the relevant market and the finding of SMP to impose regulatory remedies in these markets, should the national circumstances justify such a step and whilst taking utmost account of the Commission’s SMP Guidelines and Recommendation.
- 4.55 Ofcom found the ITC / ITT market competitive in the 2005 review ‘*Review of BT’s Network Charge Controls*’, Taking into account the analysis undertaken for wholesale transit services in our March consultation, and having carefully considered both the responses to that consultation and to our second September consultation, we consider that this market remains effectively competitive and therefore do not consider that the three criteria test would be met.
- 4.56 In relation to the ST market, we confirmed in the 2005 review that BT continued to hold SMP, and found that it was necessary to regulate the ST market. In our September consultation, we proposed that BT held SMP in the ST market. In making that proposal, we carefully considered the Commission’s three criteria test in relation to our proposed market definition, in particular:
- Barriers to entry and to the development of competition;
 - Dynamic aspects – no tendency towards competition; and
 - Relative efficiency of competition law and complementary ex ante regulation.
- 4.57 We are mindful that the three criteria test is different from an SMP assessment. Specifically, the three criteria test focuses on the general characteristics of a market, whilst an SMP assessment is made in relation to a specific operator in a given market. However, certain issues are relevant to both the three criteria test and to a consideration of market power. In assessing whether the three criteria are met, below, we refer to some of the arguments set out in our subsequent discussion of SMP. We believe that such discussion is relevant and helpful to an assessment against the three criteria. However, for clarity, we have not repeated the arguments in both Sections.

Barriers to entry

- 4.58 We consider barriers to entry below at paragraphs 4.62 – 4.86, in relation to our assessment of SMP. We remain of the view that barriers to entry exist. The Recommendation identifies structural and legal barriers to entry. In particular, on certain routes it is not economically viable for CPs to establish interconnections. Since direct interconnection is a pre-requisite to providing a transit service for traffic to a terminating CP, this forms a structural barrier to entry. Whilst CPs may choose to interconnect to each other on a case-by-case basis, they are still likely to depend on BT to terminate traffic to a significant number of other CPs, this position reflects the different conditions that exist across the market.

Dynamic aspects

- 4.59 Dynamic aspects of a market can suggest that it may be tending towards competition. The UK ST market is currently characterised by a very large number of CPs. Currently, there are in excess of 140 CPs that terminate traffic in the UK on fixed geographic, non-geographic and mobile number ranges¹⁸. Evidence of a high degree of consolidation among these CPs could indicate a move towards a market with fewer, larger CPs in which a smaller number of larger routes would be needed to replicate or replace transit provided by BT. However, there is no evidence to suggest such a consolidation is likely to occur in the forward look period we are considering in this market review, and we consider that the complex route and CP structure that exists in the market will continue for the period of this review.
- 4.60 Second, deployment of new technology may provide opportunities that lead to greater competition. However, the key developments likely to occur in the forward look period revolve around NGN and NGA (Next Generation Access) deployments. NGN deployments may make competition more effective to the extent that they provide greater flexibility in call routing and greater economies of scale due to the ability to provide multiple services over a single interconnect link. However, this is unlikely to be the case for the majority of routes that constitute the ST market. Therefore, these developments are unlikely to address the main issue that providing infrastructure to connect two networks is currently uneconomic on many routes.
- 4.61 We do not believe NGA deployments will have a direct and significant impact on this market as they are focused at the connection to the end customer, not between networks. However, the nature of next generation wholesale products may have an indirect effect, by influencing the number and size of the network-based based CPs involved in the provision of narrowband services.
- 4.62 Finally, we have considered the wider regulatory regime as it impacts on this market. NTS calls are discussed in detail at paragraphs 4.74 - 4.78. They create certain dynamics that reinforce the barriers to entry for this market. Ofcom have committed to review the NTS regime as a whole and will commence this review in 2010. Whilst we are confident that the ST market as currently regulated will not tend towards competition during the forward look period, we will, if appropriate, reconsider this view if changes are made to the NTS regulatory regime that affect the functioning of this market.

Relative efficiency of competition law and complementary ex ante regulation

- 4.63 We have identified that some routes within the ST market are less competitive than other routes. These routes generally relate to the smaller and less well interconnected CPs, of which there are many. One of the characteristics of the ST market is its “long tail”. We have identified a risk that BT could abuse its dominant position in the market by treating such CPs differently. The complexity of the market is such that these routes and therefore the CPs that could be potentially affected are difficult to identify. We do not consider that competition law, on its own, would be sufficient to resolve this issue. We consider that ex ante regulation is required in order to provide legal certainty to CPs. This would ensure that they can obtain supply service from BT and be protected against unwarranted differences in treatment including pricing. Further, Ofcom would be able to intervene in a timely manner to deal with any competition concerns that did arise.

¹⁸ of which only around 80 terminate fixed geographic traffic

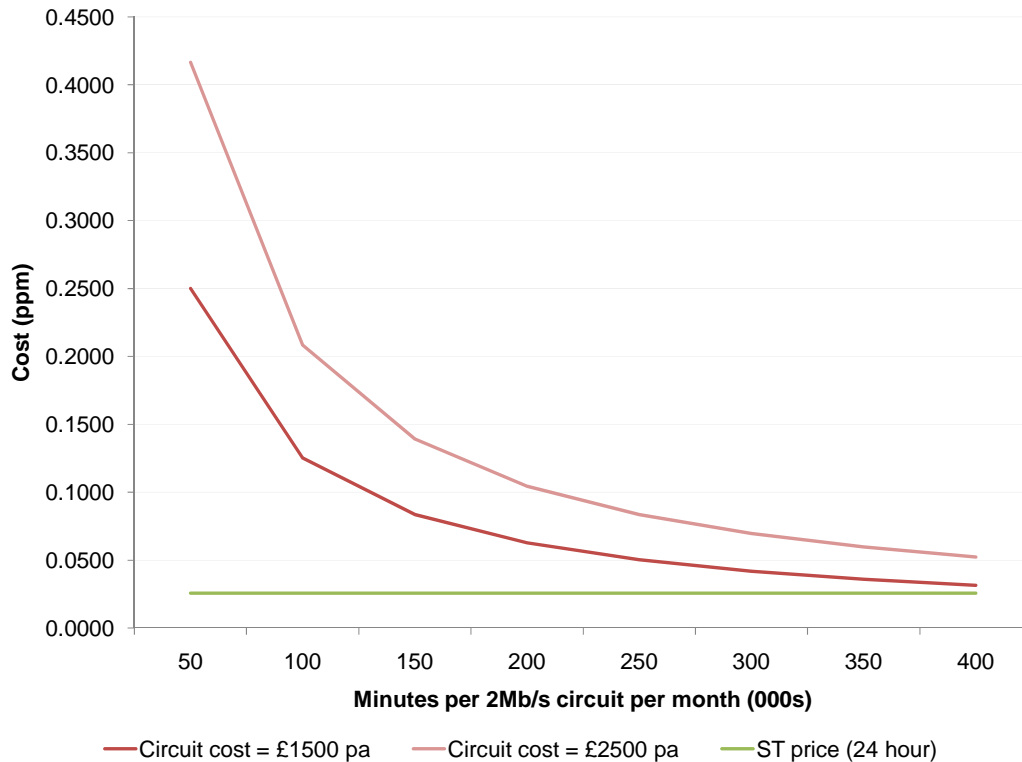
- 4.64 Therefore, we believe ex ante regulation is required to address BT's SMP in the ST market.

SMP Analysis

- 4.65 As set out in paragraph 75 of the SMP Guidelines market shares are often used as a proxy for market power. As BT is the only CP that explicitly provides a ST service, it could be argued that BT has a 100% market share. However, this does not fully capture the ST market. CPs that provide transit services do not necessarily provide differentiated ST and ITC/ITT services and the total market volume is dependent on the degree to which CPs implement direct interconnection. Therefore, in the context of a thorough and overall analysis of market power, it is important to consider other (more comprehensive) transit services that are offered by CPs that include ST and fulfil the same role as BT's ST service. In particular, we have looked at both structural and regulatory barriers to entry, the size of BT in being the only universally connected CP and the absence of competition in some areas of the market (e.g. NTS). It is also important to analyse services that are outside the ST market but have a major effect on the competitive conditions in this market, in particular Interconnection.
- 4.66 We said in the March consultation document (at paragraph 9.37) that the largest CPs are interconnected between themselves at a common set of BT's tandem exchanges. In their responses to our March consultation, CPs said that they face two challenges in avoiding routeing traffic via BT (in general, these are supported by further data collected by Ofcom between the March and September consultations).
- a) Deploying direct interconnection is not cost effective for some routes. Without such interconnection, a CP is unable to route its traffic directly or offer a transit service. C&W argued that it believes BT is the only CP with direct interconnection to 70 or more of the CPs in the UK. Another confidential respondent said that whilst it may have a relatively large number of interconnects in total, the number available for use for UK geographic and NTS traffic is significantly lower, with the rest being for international or traffic to MNOs only. Four other respondents agreed with these points.
 - b) Avoiding transit charges is difficult for some traffic types (such as NTS) since the terminating CP pays the transit fee. Re-routeing NTS traffic may be complex and may require significant changes to network routeing data, which may not be justifiable as the benefits do not flow to the CP re-routeing the traffic through reduced transit charges. For example, C&W estimated in its response that BT routes 2 billion minutes of NTS transit traffic per annum for which no alternative route exists. Three other respondents agreed with this general point, although they did not estimate the traffic volumes involved.
- 4.67 A CP that generates significant levels of its own traffic may interconnect to a large number of other CPs in order to terminate this traffic and these routes could be used to provide a ST service. A CP is less likely to provide direct routes where the traffic volumes are low and, while the ability to use these routes for both its own traffic and transit traffic may help support the business case for the route, CPs are in many cases unlikely to build a direct route where their own traffic does not justify the business case. BT is interconnected to the vast majority of CPs operating in the UK and BT's own retail activities generate traffic to these CPs, which is significantly higher than that generated by other CPs' retail activities as illustrated in Table 19.2 of the September consultation.

- 4.68 In its response to the September consultation, BT stated that “90% of traffic is delivered over thick routes that Ofcom accepts are fully competitive.” We do not agree with BT’s assertion that we have accepted that a proportion of routes are fully competitive. While we recognise that there are different competitive conditions on various routes, we believe that BT’s picture of the market is too simplistic and does not reflect the key characteristics of the ST market. As we have discussed above, we do not consider that it would be practical or appropriate to attempt to adopt a route based market definition and therefore any attempt to quantify the numbers or proportions of thick and thin routes is not useful.
- 4.69 In any case, we have explained above the complexity of the ST market in that whilst the BT service can be defined relatively easily, the same cannot be said of the OCP service. Further, the competitive constraints to this service differ based on traffic type and on both the originating and terminating CP. In particular, in the September consultation, we identified five broad groupings of traffic types. These were mobile operator to mobile operator (non-ported traffic); mobile operator to mobile operator (ported traffic); fixed operator to mobile operator; fixed or mobile operator to fixed operator for geographic traffic; and fixed or mobile operator to fixed operator for NTS traffic. We presented BT’s data on these various ST traffic streams at Figure 19.3 of the September consultation.
- 4.70 BT faces competitive pressures on routes that carry large amount of traffic. Some routes to and from Mobile Network Operators (MNOs) are among these more competitive routes. Due to the large amount of traffic on these routes, several fixed network operators have deployed interconnection to the MNOs. BT has presented evidence that indicates that the MNOs have found alternate ways to route traffic to each other so that the volume of traffic between MNOs carried on the BT network has not grown at the rate expected given the increasing volumes in MNO traffic. However, BT continues to carry a very substantial volume of MNO traffic on its network.
- 4.71 In relation to transit traffic on routes between larger CPs we explained that whilst prices may be constrained by the possibility of direct interconnection, this would need to be considered on a case-by-case basis to take account of the architecture of the networks. This is because not all routes between the larger CPs carry traffic in sufficiently large volumes that, faced with a significant price increase in BT’s ST service, it would be profitable to re-route traffic or set up direct interconnection¹⁹.
- 4.72 In the September consultation, we presented CPs’ responses both to our March consultation and the subsequent information request emphasising the challenges they face in avoiding routeing traffic via BT. The point was made that deploying direct interconnection is not cost effective for some routes since BT reduced its prices for ST by 66% in April 2008. We presented evidence based on CPs data on the costs that would be involved for direct interconnection and the levels of traffic that would be required to make these investments profitable. This evidence was summarised in Figure 19.4 of the September consultation and is repeated below in Figure 4.2.

¹⁹ See paragraph 9.22 and 9.23 of the September consultation

Figure 4.2: Cost of direct interconnection

Source: Ofcom, CP data, BT carrier price list

- 4.73 Whilst larger CPs may be able to avoid ST on some routes, we continue to be of the view that, on a case by case basis, direct interconnection might not always be justified, especially where traffic volumes are low.
- 4.74 Finally, responses to the March consultation and data subsequently gathered by Ofcom suggested that some traffic types (such as NTS) cannot avoid incurring the ST charge. For example, as noted above, C&W estimated in its response that BT routes 2 billion minutes of NTS transit traffic per annum for which no alternative route exists.
- 4.75 BT has argued that, in relation to NTS, “the top 10 [terminating operators] accounted for 95% of the spend and that most traffic to the top 10 NTS Terminating Operators originates from the other major operators and therefore in most if not all cases there would be sufficient traffic of all types to justify direct interconnect between them, again suggesting that as in the case of originating operator pays, over 90% of the traffic goes over fully competitive thick routes where BT does not have SMP.”
- 4.76 Re-routing NTS traffic in a profitable way is not just a matter of volume of traffic. As explained above, it may be complex and may require significant changes to network routing data, which may not be justifiable as the benefits do not flow to the CP re-routing the traffic through reduced transit charges as we explain below.
- 4.77 The issue in NTS is that because of the way the regime operates the originating CP has little financial incentive to re-route traffic and avoid the terminating CP incurring the transit fee unless the terminating CP provides a rate to the originating CP that is sufficiently attractive. That is, an originating CP would only be incentivised to route

traffic directly if the terminating CP passes some or all of the saving it makes through not paying the transit fee to the originating CP. For this approach to be economically attractive, the lower termination rate available to the originating CP would need to more than compensate for any increase in costs. However, BT controls all the relevant costs used to establish the NTS rates as well as controlling the transit fee and, as such, the ability of the terminating CP to create an attractive offer to an originating CP compared to BT's rates is to a large extent under the control of BT. More details on the NTS regime are provided in the September consultation (paragraphs 19.76 to 19.78).

- 4.78 As we set out in paragraph 4.50 Ofcom will shortly commence a review of the NTS regime.
- 4.79 The revenue available to BT from the transit market is low compared to, for example, call origination, call termination and LTC. The revenues, costs and mean capital employed disclosed by BT are very small compared to other markets that utilise the same core network asset and cost base. (BT has reiterated this point in its response to the September consultation, stating that its ST revenues totalled only £4.75m in 2008/09). For these very small markets it is not unusual to see high variability in returns as a result of the sensitivities in the cost attribution process and roundings in the reported numbers. BT reduced its (uniform) prices by 66% in April 2008, resulting in an approximate 50% reduction in turnover. Whilst volumes have stayed relatively flat, revenues have fallen from £16m to £5m.
- 4.80 If BT was deregulated, it would have the ability to price discriminate. For instance, it would not be unreasonable to assume that BT would significantly raise its prices on less competitive routes (in particular since BT implemented a 66% uniform price cut in April 2008).
- 4.81 The Commission, in its comments on the September consultation, invited Ofcom to consider the issue of BT's incentive to price discriminate²⁰. In the September consultation, we explained that we do not believe it would be practical or profitable for BT to price discriminate on a route basis because BT's billing systems were developed on the basis of the regulated market structure that has existed for some time in the UK. As such, they are not the same as those developed by CPs that may allow a higher degree of pricing flexibility for carrier offers. Developing new system to support sophisticated route-by-route pricing is likely to be time consuming and expensive, compared to the returns available. This point was also reiterated by BT in its response to the consultation.
- 4.82 However, we believe that it may be possible for BT to increase the price of all transit traffic and manually discount the rates to a few specific customers, an approach that has been taken on inter-tandem conveyance and transit traffic since it was deregulated in 2005. BT's response to the September consultation (in relation to the imposition of a "no undue discrimination" condition and a requirement to publish a reference offer) clearly indicates that BT would seek to price discriminate if it was allowed to. Therefore, having considered the issue, we believe that BT would have the ability and incentive to price discriminate in the absence of any remedies.
- 4.83 Finally, BT benefits in the transit market from a number of effects. Because its own retail operations generate significant traffic streams which require termination, BT is well placed to implement direct interconnection. BT also benefits from its position as

²⁰ http://circa.europa.eu/Public/irc/info/ecctf/library?l=uk/registerednotifications/uk20090973/uk-2009-0973_actepdf/ EN 1.0 &a=d

the largest provider of telephony in the UK which explains the tendency amongst new entrants in the market towards a presumption that an interconnection to BT is required in order to be able to support a full service. Although there are other significant CPs in the UK (both fixed and mobile operators) that may be in a similar position, at least in relation to larger traffic routes, C&W, as the second most interconnected CP in the UK, has less than half the number of other CPs connected to it compared to BT.

- 4.84 We have set out above the complex nature of the ST market. In theory every route for each type of traffic may be subject to different competitive constraints. In practice, ascertaining the precise level of competition on a route by route basis (whether these are defined as separate markets or as being part of the same market) would be a complex task and would not necessarily be instructive in concluding whether a route was effectively competitive or not. In addition, the burden placed on CPs to provide data to assess competitive conditions would appear to be disproportionate based on the limited size of the ST market (BT's revenue is less than £5m revenue in 2008/9).
- 4.85 We therefore consider that, despite the fact that a large part of the ST traffic is concentrated on a few routes on which BT's prices are effectively constrained (mainly routes to and from MNOs), there are substantial barriers to entry on a large tail of small routes and therefore all CPs are reliant on BT's ST service to some extent. BT has reacted to the levels of competition experienced on some routes by strongly reducing its prices. Its obligations have resulted in this price reduction also applying to routes with different competitive conditions. However, as explained above, BT would have the ability and incentives to raise, substantially and profitably, ST prices if it was deregulated and manually discount the rates to a few customers on routes where its prices are effectively constrained.
- 4.86 BT suggested, in its response to the September consultation, that it only held SMP in a "residual part" of the "thin routes" segment for which the originating customer pays. This is, according to BT, where a CP (CP A) interconnects via only one other CP (CP B). It further suggested that whoever CP B is, it has SMP and argues that Ofcom has not addressed the issue where CP B is not BT. We do not consider that that BT's SMP is so limited. This is because we have assessed the market as a whole to determine whether BT holds SMP for that market. Whilst we acknowledge that there is a variety of competitive conditions within the market, and that some routes are more competitive than others, our conclusion is that BT holds SMP in the market, and it is not correct to assert that BT only has SMP in some parts of the market or over some routes. We do not see how any other CP can hold SMP knowing that BT will be an alternative supplier for any OCP purchasing ST from that CP. Equally, in determining that only BT holds SMP for this market it is not appropriate for any SMP conditions to be applied to any other operator.
- 4.87 Conclusions
- 4.88 We therefore conclude that BT has SMP in the ST market in the UK excluding Hull. We have identified the following potential market failures:
- 4.89 BT could refuse to supply the ST service to its competitors on routes where they are reliant on BT, therefore distorting competition either by weakening rivals or forcing them out of the ST market. (Even the second largest competitor after BT is reliant on the BT ST service in order to offer a ST service to other CPs);

- 4.90 BT would have the ability and incentive to set different prices to different CPs by e.g., setting one price for all and manually discounting them (bespoke pricing) to a few CPs;
- 4.91 BT could therefore charge excessive prices on the routes where it does not face effective constraints. This would result in higher prices to its customers (and to end consumers) and may distort competition both at the retail and wholesale levels as BT could raise its rivals' costs on routes where they rely on its ST service.

Section 5

Single Transit: remedies

- 5.1 In order to address the SMP held by BT in the ST market discussed above, we have decided to impose the following remedies:
- a) Requirement to provide network access on reasonable request;
 - b) Requirement not to unduly discriminate;
 - c) Requirement to publish a reference offer;
 - d) Requirement to notify technical information;
 - e) Requirement to notify charges, terms and conditions; and
 - f) Accounting separation.
- 5.2 We have decided not to impose additional regulation on the Product management, Policy and Planning (PPP) charge associated with this service.
- 5.3 We have amended (from the consultation) the numbering of the SMP conditions to ensure that they are consistent in form with the conditions imposed in other wholesale narrowband markets by applying a “AAA” prefix, to denote a second round review of wholesale conditions applied to BT.
- 5.4 We set out below why we have concluded, following our consultation, that these remedies are appropriate in addressing our competition concerns in this specific market.

Remedies imposed on the Single Transit Market

- 5.5 Ofcom last reviewed the ST market in 2005. At that time we found that BT had SMP and imposed the following remedies:
- a) Requirement to provide network access on reasonable request;
 - b) Requirement not to unduly discriminate;
 - c) Basis of charges;
 - d) Charge control;
 - e) Requirement to publish a reference offer;
 - f) Requirement to notify charges, terms and conditions;
 - g) Requirement to notify technical information;
 - h) Transparency as to quality of service;
 - i) Cost accounting; and

j) Accounting separation.

- 5.6 We have set out in our market definition and SMP analysis in Section 4 above that there are differing levels of competition existing in the ST market. Overall we consider that BT holds a position of SMP, but we believe BT's pricing is constrained on some routes by the competitive conditions that apply to those specific routes. We continue to believe it would be inappropriate to define separate sub markets (say, on a route by route basis) within the ST market due to the difficulty and complexity of managing these multiple markets.
- 5.7 In defining one overall ST market, we must consider the type of remedies needed in order to overcome the identified market failures.
- 5.8 In Section 4 we discussed our updated market analysis, and the key market failures we identified. We consider that BT has a general ability to act independently on the less competitive routes. This gives rise to a concern that it could treat some CPs less favourably than others by, for example, refusing to deal with them or offering different terms and conditions. In particular, we consider that BT retains an ability to price excessively on these routes. We further consider that it would have the incentive to raise prices on those routes
- 5.9 Finally, we have reviewed our analysis of the effects of uniform pricing within the market. In our September consultation we considered that should a uniform price apply across the entire market, competition on less competitive routes may not develop as the ability of other CPs to compete with the BT price may be limited. We set out below that, whilst this remains a concern, its relative importance is significantly less than the concern that BT may treat some CPs less favourably in both price and non price terms, if it is allowed to de-average prices in an unconstrained manner.
- 5.10 In order to address these concerns we are required to impose appropriate remedies that are based upon the underlying competition problem. We summarised the legal framework in Section 2 and in this Section, we set out how each of the remedies, listed at paragraph 5.1 above, is appropriate to deal with the identified market failures and is consistent with those various legal tests.

Requirement to provide network access on reasonable request

- 5.11 We have decided to retain a remedy requiring BT to meet reasonable requests for network access in the ST market.
- 5.12 Section 87(3) of the Act authorises Ofcom to set SMP services conditions requiring the dominant provider to provide network access as it may, from time to time, direct. These conditions may, pursuant to section 87(5), include provision for securing fairness and reasonableness in the way in which requests for network access are made and responded to, and that conditions are complied with within the periods and at the times required.
- 5.13 When considering the imposition of such conditions, Ofcom must have regard to the six factors set out in section 87(4) of the Act, including, inter alia, the technical and economic viability of installing other competing facilities and the feasibility of the proposed network access.

Aim of regulation

- 5.14 This remedy is designed to promote competition by requiring providers with SMP to provide wholesale access to their network facilities. As discussed above, BT's SMP arises from the scale of its network and the level of interconnection it has to other CPs. The level of investment required by a third party to avoid using BT's facilities in order to route traffic directly to reach all other CPs in the UK would be prohibitive. This represents a significant barrier to entry. Ofcom considers that in the absence of such a requirement, BT would have an incentive not to provide access in order to confer advantage on its own retail operations by limiting the ability of other CPs to provide an end-to-end connectivity service at competitive prices. The ability of competing CPs to gain wholesale access will therefore facilitate the development of competition in retail markets.

Consultation responses

- 5.15 As we have set out in Section 3, all CPs aside from BT supported the imposition of this remedy as being appropriate. We consider that the comments made by C&W and UKCTA that a network access requirement was essential to ensure end users can receive cost effective seamless services from their CPs support our own analysis that this is an appropriate remedy. BT suggested that it did not have SMP in the market, and therefore, any remedy was inappropriate. However it did accept that, in the event of an SMP finding, such a remedy would be a "sensible minimum requirement", and that it had no intention of withdrawing supply in any event.

Condition

- 5.16 The condition, as set out in the Notification at Annex 1 to this document, will require requests made to BT for network access to be 'reasonable' requests. The condition will also require BT to provide network access in response to such a reasonable request and that access should be provided on fair and reasonable terms, conditions and charges.

Legal tests

- 5.17 Ofcom has considered its duties under section 3 of the Act. We consider that the condition would further the interests of citizens and furthers the interests of consumers in relevant markets by the promotion of competition, specifically facilitating the development of competition at the retail level.
- 5.18 Ofcom has considered the Community requirements as set out in section 4 of the Act. In our view the obligation would promote competition in relation to the provision of electronic communications networks and encourage the provision of network access for the purpose of securing efficient and sustainable competition in markets for electronic communications networks and services.
- 5.19 We consider that the condition meets the criteria set out in section 47(2) of the Act. We believe the condition is:
- a) objectively justifiable as its intention is to promote competition. The condition will achieve this by ensuring all CPs can connect to all other CPs in the UK for the purposes of providing a full narrowband service to its end customers, and that this will be achieved on reasonable terms. This requirement further addresses the identified market failure that BT has the ability to refuse to deal with certain CPs, as discussed in paragraph 5.14;

- b) not unduly discriminatory as it is only imposed on BT, which is the only provider which has been found to have SMP;
- c) proportionate, since without such an obligation BT could refuse to provide access and this would mean other CPs would not be able to effectively compete in markets where BT holds SMP or in markets downstream of this. It does not require BT to provide access where it is not technically feasible or reasonable. Thus we consider this obligation is required to pursue our policy objectives and duties in addressing BT's SMP. The means employed to achieve those aims appear both necessary and the least burdensome to address effectively the concerns that we have set out. In addition, BT, itself noted that it did not intend to withdraw supply, indicating that the imposition of the remedy would not be intrusive; and
- d) transparent as it is clear from the condition that the intention and its effect is to ensure that BT provides access to its networks in order to facilitate competition. The text of the condition is the same as the SMP condition AAA1(a) set for other wholesale narrowband markets under the September 2009 statement.

Requirement not to unduly discriminate

- 5.20 We have decided to impose a remedy requiring BT not to unduly discriminate in the ST market.
- 5.21 Section 87(6) of the Act authorises Ofcom to set SMP services conditions requiring the dominant provider not to discriminate unduly against particular persons, or against a particular description of persons, in relation to matters connected with network access to the relevant network or with the availability of the relevant facilities.
- 5.22 Section 87(6) transposes Article 10 of the Access Directive, which enables national regulatory authorities to impose obligations of non-discrimination, in relation to interconnection and/or access. Its Article 10(2) makes clear that such obligations shall ensure, in particular, that the SMP operator applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services.

Aim of regulation

- 5.23 In applying this obligation to BT, we are seeking to ensure that BT does not distort competition by exercising its SMP in the ST market to the detriment of customers and ultimately consumers. In broad terms, concerns about undue discrimination are particularly likely to arise where an SMP provider does not reflect relevant differences between (or does not reflect relevant similarities in) the circumstances of customers in the transaction conditions it offers, and where such behaviour could harm competition. Ofcom's general approach to potential contraventions of the requirement not to unduly discriminate is set out in our guidelines on undue discrimination by SMP providers of 15 November 2005 (the "Undue Discrimination Guidelines").²¹
- 5.24 The ST service offered by BT is a somewhat unusual service offering, when compared to many other wholesale telecommunications services, in that it provides a very simple switching service with little variation in how it operates between different customers. These characteristics mean that the application of this obligation can

²¹ <http://www.ofcom.org.uk/consult/condocs/undsmtp/contraventions/contraventions4.pdf>

reasonably be expected to have more restrictive effects in this market as compared to other cases for which a similar obligation applies. In particular, we anticipate that there will be less opportunity for BT to establish relevant differences between ST customers, and therefore less opportunity to offer different conditions of service.

- 5.25 Accordingly, we consider that this remedy will normally prevent BT from setting more favourable terms for some CPs over others which could have the effect of restricting or distorting competition in the downstream market. This is one of the market failures identified in our market analysis, as explained in Section 4.
- 5.26 We considered in our September consultation whether the imposition of this obligation would affect BT's ability to price their ST service. On the basis of our analysis at that time, we considered that the imposition of this obligation would not necessarily require BT to set the same price for all customers, noting that uniform pricing within the market may, in itself, give rise to competition concerns.
- 5.27 We have reviewed our analysis on this issue in the light of both the consultation responses from stakeholders and the comments from the European Commission and by taking into account the nature of the ST service provided by BT.

Consultation Responses

- 5.28 BT suggests that the imposition of this remedy is not necessary as our identified competition concern is unfounded. BT believes that competition within the market provides sufficient constraint to render the obligation disproportionate. Further, BT suggests that Ofcom has assumed that the current state of competition will prevail over the next four years.
- 5.29 In relation to those points, we refer to our market analysis as set out in Section 4. We maintain that BT has an ability and incentive to discriminate in this market. Indeed, it would appear from its consultation response that BT would, if it was not subject to regulation, seek to make bespoke deals with some CPs, offering them more favourable terms than generally offered to the market. We also refer to Section 4 for our views on how we expect the market to develop over the forward looking period for this review.
- 5.30 Other respondents to the September consultation raised the issue of the degree of BT's freedom to set differential prices. C&W stated that in its view this would be very restricted given the nature of the service (conveyance over a single switching stage) and there would be little scope to differentiate on the basis of either the route or purchaser. C&W suggested that there would not be a wide spread of costs, and requested that Ofcom clarify the circumstances in open to BT to charge differently for ST. UKCTA also suggested that BT's "cost to serve" would not vary much between CPs and requested that Ofcom provide guidance as to the circumstances where BT could differentially price without falling foul of the condition. Colt stated that, in relation to this remedy, it was essential that BT is not able to discriminate and must offer similar rates to its internal and external customers. Additionally, the Commission invited Ofcom to better substantiate why BT might have an interest to implement a policy of different rates per rout, referencing their current approach of uniformly pricing in the market.
- 5.31 We consider that the nature of the ST service offered by BT means that there is unlikely to be a variation in cost of provision. The ST service provides switching across one tandem exchange in the BT network. There are unlikely to be cost differences between the costs of these exchanges based on geographic location or

scale of the exchange because of the role tandem exchanges play within the BT network architecture. The tandem exchanges support multiple traffic streams – they are not dedicated to ST – and perform the same basic switching function for all traffic. As such, there is no scope for additional innovative features to be added to the service that could lead to differences in costs of supply or drive differential pricing. There is unlikely to be any economy of scale on a per-ST route basis, because each component of the underlying network is shared between multiple traffic types and ST routes.

- 5.32 We have therefore revised our view and agree with the comments that, given the somewhat unusual service offering and nature of the ST service, it may be difficult for BT to objectively justify differential conditions (including pricing) related to the service itself. As we have noted in paragraph 5.24 above we expect that the specific characteristics of this service will mean that a no undue discrimination condition may have a more restrictive effect in this market as compared to other cases for which a similar obligation applies. This effect is further considered in relation to pricing, when we discuss our decision not to impose a specific price control remedy on this market at paragraphs 5.64 - 5.76 below. As regards respondents' requests for additional guidance on the application of this remedy, we consider that our Undue Discrimination Guidelines remain appropriate and relevant to this market. We have considered the requests and need for additional guidance, but at present, we do not consider that it would be helpful to issue such guidance on this issue, additionally to our assessment of this remedy and our analysis above of how we anticipate it would apply to this particular (ST) service. In this regard, it should also be noted that the responsibility under this obligation remains upon BT if it chooses to discriminate to show how such behaviour complies with its obligations under this obligation, including to demonstrate whether any objective justification exists for the differential treatment.
- 5.33 As a consequence of revising our analysis, as set out above, we need to consider the effect of BT choosing to continue to apply a uniform price within the market. In our September consultation we identified that the imposition of this condition may, in itself give rise to competition concerns. In particular, we considered that should a "no undue discrimination" result in BT pricing uniformly, the low price that this would imply on the less competitive routes may provide little incentive for entry and for competition to develop on these routes.
- 5.34 On the basis of our analysis and the responses to our consultation, we consider that the identified potential failure in this market relating to BT's ability to set excessive pricing on thin routes is more concerning than uniform pricing (which reflects BT's current practice). While the prospect for competition to develop on these routes is more than hypothetical given the simple nature of the ST service, the lack of economies of scale on a per-ST route basis and of potential innovation, and the declining traffic levels, the risk for excessive pricing is real. Therefore, we consider that the imposition of a "no undue discrimination" condition is appropriate to protect customers and ultimately consumers from the identified market failure, while the potential adverse effect on competition from a lack of competitive entry may well be limited given that the nature of the market suggests that many thin routes remain enduring competitive bottlenecks that would be unlikely to be addressed by hypothetical entry spurred by higher prices.
- 5.35 We have also considered whether allegations or evidence of discriminatory behaviour could be adequately addressed through competition law. However, Ofcom considers that in order to meet our objective to promote efficient and sustainable competition at the wholesale level, a no undue discrimination condition is necessary.

This condition ensures, in particular, that all parties are treated on an equivalent basis in equivalent circumstances, thereby creating the right environment for competition to develop. Our view is that this *ex ante* obligation is therefore needed to create legal certainty and to ensure that Ofcom could intervene in a timely manner to deal with these competition concerns.

Legal tests

- 5.36 Ofcom has considered its duties under section 3 of the Act. We consider that the condition would further the interests of citizens as well as further the interests of consumers in relevant markets by the promotion of competition.
- 5.37 Ofcom has considered the Community requirements as set out in section 4 of the Act. The condition encourages the provision of network access and service interoperability for the purpose of securing efficient and sustainable competition in the downstream markets for access and calls, by ensuring BT does not unfairly favour some CPs over others to distort competition.
- 5.38 We consider that the condition is appropriate as based on the nature of the competition problems identified in our market analysis and furthermore meets the criteria set out in section 47(2) of the Act. We are satisfied that the condition is:
- a) objectively justifiable, as it provides a safeguard to prevent BT discriminating against certain CPs which had been identified as a key market failure in our analysis;
 - b) not unduly discriminatory as it is only imposed on BT as the only provider found to have SMP in the ST market;
 - c) proportionate since it only prevents discriminatory behaviour that is undue and is an obligation necessary to create legal certainty and timely intervention as discussed above; and
 - d) transparent, as it is clear that its intention is to prevent undue discrimination. The text of the condition is the same as the SMP condition AAA2 set for other wholesale narrowband markets under the September 2009 statement, and its aims and effects are also aided by our explanations above, including by the guidance given in the Undue Discrimination Guidelines.

Requirement to publish a reference offer

- 5.39 Ofcom requires BT to publish a reference offer (RO) for services offered in the ST market in which it holds SMP. The RO will include:
- a) a clear description of the services on offer;
 - b) terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable providers to make technical and commercial judgements such that there is no material adverse effect on competition;
 - c) information relating to technical interfaces and points of interconnection. Such information should ensure that providers are able to make full and effective use of all the services provided;

- d) conditions relating to maintenance and quality (service level agreements and guarantees). The inclusion of service levels, as part of the contractual terms of the RO, that provides for a minimum acceptable level of service, will ensure that services are provided in a fair, reasonable, timely and non-discriminatory fashion;
- e) the amount applied to network components; and
- f) terms and conditions that are fair and reasonable. This will ensure that services are offered on terms and conditions as they would in a competitive market and that they are sensible, practical, and do not impose a margin squeeze on competitors.

Aim of regulation

- 5.40 The main reasons for requiring the publication of a RO are to assist with transparency in monitoring for potential anti-competitive behaviour and to give visibility to the terms and conditions on which other providers would be able to purchase wholesale access services. The publication of a RO would therefore help to ensure stability in markets and that incentives to invest would not be undermined.
- 5.41 The publication of a RO would allow for speedier negotiations and might avoid possible disputes. Together with a non-discrimination requirement, the publication of a RO would give confidence to those purchasing wholesale services that they were being provided on non-discriminatory terms.

Consultation responses

- 5.42 BT suggested that this remedy was disproportionate in that it discriminated against BT, depriving it of the same pricing flexibility as its competitors and limiting its ability to offer bespoke deals. We consider that, having identified in our market analysis the concern that BT could treat different CPs in similar circumstances less favourably than others (in both pricing and non pricing matters), that it is important that this issue is fully addressed. We consider that a RO is an important complement to the no undue discrimination condition, in that it provides transparency to CPs to enable them to see if any discrimination occurs. We also consider that given our further analysis of the ST service and our reliance on the no undue discrimination obligation to constrain pricing, the transparency afforded by this condition is especially important.
- 5.43 Other CPs responding to the September consultation concurred with Ofcom's approach and rationale for this remedy.

Legal tests

- 5.44 Ofcom has considered its duties under section 3 of the Act. We consider that the condition furthers the interests of citizens and furthers the interests of consumers in relevant markets by the promotion of competition.
- 5.45 Ofcom considers that the condition meets the Community requirements set out in section 4 of the Act. In particular, the condition promotes competition and encourages the provision of Network Access and service interoperability for the purpose of securing efficient and sustainable competition for the maximum benefit for consumers. The publication of a RO would mean that other communications providers would have the necessary information readily available to allow them to make informed decisions about entry into the market.

- 5.46 We consider that the condition meets the criteria set out in section 47(2) of the Act. The obligation is:
- a) objectively justifiable in that it requires that terms and conditions are published allowing competing providers the ability to ensure they are receiving offers that do not unduly discriminate in favour of the dominant provider's own retail operations or other CPs, therefore encouraging competition to the benefit of consumers;
 - b) not unduly discriminatory as it is applied only to those operators who hold SMP and all providers are subject to the same obligation;
 - c) proportionate in that only information that is necessary to ensure that there is no material adverse effect on competition is required to be provided; and
 - d) transparent as it is clear the obligation is designed to ensure that potential competitors have sufficient information to make investment decisions about entry into this market. The text of the proposed condition is the same as the SMP condition AAA5 set for other wholesale narrowband markets under the September 2009 statement.

Requirement to notify technical information

- 5.47 Ofcom considers it is appropriate to impose a requirement on BT to notify technical information a minimum of 90 days in advance of providing new wholesale services or amending existing technical terms and conditions.

Aim of regulation

- 5.48 The aim of an obligation to provide advance notification of technical characteristics is to ensure that competing providers have sufficient time to respond to changes that may affect them. For example, a competing provider may need to introduce new equipment or modify existing equipment or systems to support a new or changed technical interface.
- 5.49 Technical information includes new or amended technical characteristics, including information on network configuration, locations of the points of network access and technical standards (including any usage restrictions and other security issues). Relevant information about network configuration is likely to include information about the function and connectivity of points of access, for example, the connectivity of exchanges to end users and other exchanges.
- 5.50 The condition requires the notification of new technical information 90 days in advance of providing new wholesale services or amending existing technical terms and conditions. Ofcom continues to believe that 90 days is the minimum time that competing providers would need to make modifications to their network to support changes.
- 5.51 This condition for 90 days notice relates to changes to technical information related to SMP services. All CPs are required to comply with General Condition 2²², which obliges them to apply compulsory standards, or in the absence of these, voluntary standards. Such changes should be agreed through NICC. Therefore, agreement of

²² The General Authorisation regime (http://www.ofcom.org.uk/telecoms/ioi/g_a_regime/)

such standards should normally have been agreed at NICC prior to this 90 day period.

Major changes and NGN

5.52 For major changes to the existing network and migration to NGNs, Ofcom considers that industry consultation (including through NICC) continues to be an appropriate way to progress modifications. This consultation and agreement phase would not fall within the notice period; therefore the formal 90 day notification period would follow the industry process. That is, the notification should be made only following the conclusion of the consultation process.

Legal tests

- 5.53 Ofcom has considered its duties under section 3 of the Act. We consider that the condition furthers the interests of citizens and furthers the interests of consumers in relevant markets by the promotion of competition, ensuring that providers have sufficient notification of technical changes to the dominant provider's network to enable them to compete.
- 5.54 Ofcom considers that the condition meets the Community requirements set out in section 4 of the Act. In particular, the condition promotes competition and secures efficient and sustainable competition for the maximum benefits of consumers by ensuring that providers have sufficient notification of technical changes to the dominant provider's network to enable them to compete.
- 5.55 We consider that the condition meets the criteria set out in section 47(2) of the Act. It is:
- a) objectively justifiable as it enables competing operators to make full and effective use of network access. The period allows CPs time to react to proposed changes without imposing an unnecessarily long notification period on BT that may restrict their ability to develop and deploy new features or services;
 - b) not unduly discriminatory as it is only imposed on those providers who have SMP and all providers are subject to the same obligation;
 - c) proportionate in that 90 days is considered the minimum period necessary to allow competing providers to modify their networks; and
 - d) transparent in that it is clear in its intention that BT notify technical information. The text of the proposed condition is the same as the SMP condition AAA6(b) set for other wholesale narrowband markets under the September 2009 statement.

Requirement to notify charges

- 5.56 Ofcom considers it is appropriate to impose a requirement on BT to publish any planned changes to charges 90 days in advance of those changes taking place. We consider that the notice should include:
- a) a description of the access service;
 - b) the location of terms and conditions in the RO;
 - c) the effective date or period from which the changes will have effect;

- d) the current and proposed charge and the relevant usage factors applied to each network component;
- e) other charges for services that would be directly affected by the proposed change; and
- f) the network tariff gradient.

Aim of regulation

- 5.57 Notification of changes to services at the wholesale level can further assist competition, as it means other CPs would have the opportunity to consider whether these changes require amendments to their own wholesale and retail offerings.
- 5.58 The notification of charges obligation at the wholesale level has the purpose to assist transparency for the monitoring of potential anti-competitive behaviour. It also provides advanced warning of charge changes to competing providers who purchase wholesale access services. The latter purpose ensures that competing providers have sufficient time to plan for such changes. Notification of changes therefore helps to ensure stability in markets.
- 5.59 In 2005, we set the notification period for the ST market to 90 days. At the same time, we reduced the notification periods in the LTC market to 28 days due to our view that the market was prospectively competitive. We have set out that the ST market has various levels of competition on different routes. Whilst it may therefore be appropriate to consider that on some routes shorter periods may be sufficient due to the level of competition evident on those routes, there exist a substantial number of routes where BT does not face competition. We therefore consider that a notification period of 90 days is appropriate, since, for a large number of routes, CPs will be reliant on BT, and for the reasons set out above, we are not able to accurately sub-define the market into competitive and uncompetitive routes.

Consultation responses

- 5.60 BT suggested that in a competitive market notification would not be appropriate, but where it proposed a price cap it agreed that a 28 day period would be appropriate. We consider that this obligation is required to ensure transparency so that BT can demonstrate to CPs that it is not unduly discriminating in its pricing behaviour. CPs, in their responses to the September consultation, indicated that a 90 day period is still required in order to accommodate any consequential renegotiation of contracts to enable them to pass through to downstream customers. We are of the view that it is important to ensure that there is an adequate time for planning and pass through and therefore consider that a 90 day period is appropriate in this market.

Legal tests

- 5.61 Ofcom has considered its duties under section 3 of the Act. We consider that the condition furthers the interests of citizens and furthers the interests of consumers in the relevant markets by the promotion of competition by ensuring that providers have the necessary information to allow them to make informed decisions about competing in the relevant market.
- 5.62 Ofcom considers that the condition meets the Community requirements set out in section 4 of the Act. In particular, the condition promotes competition and secures efficient and sustainable competition for the maximum benefits of consumers by

ensuring that providers have the necessary information to allow them to make informed decisions about competing in the relevant market.

- 5.63 We consider that the condition meets the criteria set out in section 47(2) of the Act. It is:
- a) objectively justifiable, because general and reliable visibility of a dominant operator's prices is needed to enable competitors to set prices for their services that are based on purchasing the regulated inputs. It also allows Ofcom and other CPs to monitor BT prices for possible anti-competitive behaviour.
 - b) not unduly discriminatory as it is only imposed on those providers who have SMP and all providers are subject to the same obligation.
 - c) proportionate, in that only information that other network providers would need to know in order to adjust for any changes would have to be notified. Periods are proposed to be the minimum required to allow changes to be reflected in retail offers; and
 - d) transparent as it is clear the intention is to ensure that BT notifies those who purchase wholesale access of changes to charges, terms and conditions. The text of the proposed condition is the same as the SMP condition AAA6(a) set for other wholesale narrowband markets under the September 2009 statement.

Financial Reporting Obligations

Accounting Separation

- 5.64 Ofcom considers that it is appropriate to impose an accounting separation obligation on BT.
- 5.65 Section 87(7) of the Act enables Ofcom to set conditions requiring a dominant provider to maintain a separation for accounting purposes relating to network access, the use of the network and the availability of relevant facilities.
- 5.66 Section 87(8) confirms that such conditions, imposed under s87(7), may impose requirements as to the accounting methods to be applied.
- 5.67 Accounting separation is currently imposed on BT in this market through the imposition of SMP conditions OA1 to OA28 and OA 32 to OA33 as set out in the Regulatory financial reporting obligations statement²³. We have therefore decided it is appropriate to impose these obligations to the ST market, but only to the extent that BT will be obligated to report accounting separation data. It is therefore important to set out how the SMP conditions operate so that we can be clear as to the extent of BT's obligation.
- 5.68 The SMP conditions OA1 to OA34 create the framework for financial reporting and apply to both accounting separate and cost accounting obligations imposed on BT (depending on the market to which they are applied). The conditions are imposed on each market where BT has been assessed to hold SMP and it is considered that financial reporting obligations are an appropriate in that market.

²³ 'The regulatory financial reporting obligations on BT and Kingston Communications, Final Statement and notification: Accounting separation and cost accounting', 22 July 2004, http://www.ofcom.org.uk/consult/condocs/fin_reporting/fin_report_statement/

- 5.69 The exact detail of the financial information required to be provided for each market will vary depending upon the nature of the market and the other SMP obligations imposed. BT is required under conditions OA5 and OA6 to produce and publish in the four months following the end of a financial year, 'the reporting period', their Regulated Financial Statements ('RFS'), which provides comprehensive data for all markets to which the OA SMP conditions apply.
- 5.70 As noted in the financial reporting obligations statement²⁴, the processes of regulatory financial reporting are complex and cover many areas such as accounting standards and methodologies, audit, transparency, disaggregation, reconciliation and publication of information. We stated that these practical matters were distinct from the questions such as the level of regulation in a market and the types of remedies to be employed. However these practical processes should be consistent across all markets to ensure that there is certainty for the regulator, dominant provider and other players.
- 5.71 The exact data streams required for each market and, as appropriate, individual services within each market, are set out in a direction (Direction 3) made under SMP condition OA2. The financial reporting obligations (including Direction 3) are the subject of our review on an annual basis in order to ensure that any decisions made, in market reviews or other relevant policy projects, during the financial year are accurately reflected in the data requirements set out in the direction.
- 5.72 In our review of the ST market we have identified that no undue discrimination is an appropriate SMP to be applied to the market. Reporting of accounting separation data is required to ensure that BT complies with its obligations under the no undue discrimination condition.

Aim of regulation

- 5.73 Accounting separation, when generally applied, will require a dominant provider to differentiate between its internal and external sales. In imposing this regulation on the ST market we recognise that as BT does not self supply this service there will be, in theory, no "internal" sales. The publication of relevant data will allow Ofcom and third party CPs to continue to monitor the activities and profitability of BT in this area.

Consultation responses

- 5.74 In its responses to Question 19.12 on accounting separation BT argued that in the context of the small and shrinking ST market such an obligation represented a disproportionate regulatory burden and noted that Ofcom had recently removed a number of smaller markets from the requirement for accounting separation.
- 5.75 UKCTA, COLT and C&W and a further respondent all supported Ofcom's proposal referring to Ofcom's forthcoming 'clean sheet' review of Regulatory Accounting to address any further concerns with the current reporting process.
- 5.76 We do not agree with BT that accounting separation for the ST service is disproportionate and burdensome. BT already provides this information, and therefore the reporting framework to provide the required data is already in place and well established. Further, we believe that this level of reporting is required in order to ensure that BT's compliance with other remedies imposed in this market can be effectively monitored. In regard to the removal of other markets from this

²⁴ Paragraph 2.8

requirement Ofcom will consider each market or set of products within a market on an individual basis. BT's reference to other instances relate to where we have removed the reporting requirements from certain products within markets, rather than removing a market as a whole from the requirement. As we have set out above, we consider that the requirement is justified to ensure that we can monitor BT's compliance with the appropriate set of remedies imposed on this market.

Legal tests

- 5.77 Ofcom has considered its duties under section 3 of the Act. We consider that the financial reporting conditions further the interests of citizens and furthers the interests of consumers in relevant markets by the promotion of competition, in that accounting separation requirements provide an important check to ensure that other obligations imposed on the market are being complied with.
- 5.78 Ofcom has considered the Community requirements set out in section 4 of the Act and believes that the proposed conditions meet the requirements. Specifically, section 4(8), where the obligation has the purpose of securing efficient and sustainable competition in the markets for electronic communications networks and services, by ensuring dominant providers do not disadvantage third party CPs in order to favour their own downstream businesses.
- 5.79 Ofcom considers the proposed conditions meet the criteria set out in section 47(2) of the Act. The conditions are:
- a) objectively justifiable as they provide a clear check on whether BT is complying with other obligations imposed on the market. Without this remedy those other obligations may be less effective;
 - b) non-discriminatory as BT is the only provider to hold SMP in the relevant markets;
 - c) proportionate as they provide a necessary mechanism to allow Ofcom and third parties to monitor for discriminatory behaviour by dominant providers. The requirement is based on current reporting obligations which are already well established and therefore will not require new systems to be created by BT; and
 - d) transparent as it is clear the intention is to monitor compliance with specific remedies. The financial reporting framework applied to BT is well established with an annual review project to ensure that at the time BT is required to submit its RFS the exact data that is required for any market is clearly set out.
- 5.80 The accounting separation conditions would apply to BT in the ST market.

Cost Accounting

- 5.81 In our September consultation we proposed that it would be appropriate to impose a cost accounting obligation on BT. The rationale behind the requirement was that we had proposed that BT would be subject to an ongoing cost orientation obligation. We have now reviewed our analysis of the market and concluded that it would not be appropriate, given the somewhat unusual nature of the ST service, to impose a cost orientation obligation on BT. Accordingly we have reviewed our analysis of whether a cost accounting obligation would remain appropriate.

- 5.82 Reporting of cost accounting data, as described at paragraph 5.67 above, currently imposed on BT through the imposition of SMP conditions OA1 to OA28 and OA 32 to OA33 as set out in the Regulatory financial reporting obligations statement. This reflects the fact that, at the time of the last market review, when cost accounting was imposed, a charge control and cost orientation were also imposed.
- 5.83 We consider that accounting separation provides a sufficient check on BT in relation to its compliance with the remedies imposed as a result of this market review, in particular the requirement not to unduly discriminate. We therefore do not consider that it would be proportionate to require BT to report additional cost accounting data for this market in relation to these remedies.

Practical effect

- 5.84 It is important to recognise that any financial reporting obligation imposed upon BT requires them to report data in the designated reporting period at the end of a financial year. Although we are revoking SMP conditions applied to the ST market under the 2003 review, it remains the case that during the current financial year (1 April 2009 to 31 March 2010) BT has been subject to both a charge control (SMP Condition AA4(b), effective until 30 September 2009) and a cost orientation obligation (SMP condition AA3, effective until its revocation today).
- 5.85 The reports required under the OA SMP conditions applied to the market in 2004 required BT to provide cost accounting data in order that their compliance with those conditions could be measured. We consider that, although we are not imposing a requirement to report cost accounting data on BT in this review, BT will still be required to produce cost accounting data to demonstrate their compliance with conditions AA4(b) and AA3 during the relevant periods of the current financial year. Such an approach is consistent to our deregulation of the LTC/LTT market when we revoked the financial reporting obligations effective from 31 July 2010, i.e. at the end of the reporting period for the current financial year. It is also relevant to note that SMP condition OA25 requires BT to ensure that it is able to provide RFS for part year periods.
- 5.86 In summary, therefore, BT will be required to produce cost accounting (and accounting separation) data as part of their financial reporting obligations at the end of the current financial year.

Consultation responses

- 5.87 BT suggested that in the context of the market, this obligation would be disproportionate, noting that, wherever possible, the administrative burden should be minimised.
- 5.88 C&W, COLT, UKCTA and another respondent all agreed with the proposal to impose the obligation. C&W noted that such an obligation was necessary to provide confidence in other remedies such as the cost orientation obligation. Additionally, the respondents suggested that the required transparency needed for this market would be assisted by a review, by Ofcom, of the way in which BT was required to report.
- 5.89 We consider that it would be disproportionate to impose a cost accounting obligation going forward. However, it remains important to ensure that BT's obligations for the current financial year, including the period that preceded this review are maintained until the end of the current reporting period. In deciding that the cost accounting obligation is not appropriate for future financial years we have reduced the reporting

burden on BT to the level required to ensure the effective operation of other SMP conditions.

- 5.90 Whilst other respondents agreed with the proposal to impose cost accounting going forward, we consider that it is important to assess their comments in light of the overall suite of remedies that we have decided to impose, and specifically our decision not to impose cost orientation. C&W, in their comments noted that cost orientation was a remedy that was specifically supported by a cost accounting remedy.

Conclusion on financial reporting obligations

- 5.91 We are imposing accounting separation on BT in the ST market, in order to ensure that we appropriately address the competition problems identified during this review.
- 5.92 We are not imposing cost accounting on BT in the ST market as we do not consider that it would be appropriate to address any identified competition concern.
- 5.93 However, BT will still be required to report both cost accounting and accounting separation data, in accordance with SMP conditions OA1 to OA28 and OA 32 to OA33, as applied to the market in 2004, for the financial year 2009/2010.
- 5.94 BT, being subject only to an accounting separation obligation going forward, will be required to report on data streams relevant to that obligation for the financial year 2010/2011 and beyond.
- 5.95 Ofcom reviews the mechanics of the financial reporting obligation on an annual basis. Any changes required to the production of this year's RFS will be made in the review that will commence imminently. The changes that result from the decision described in paragraph 5.94 above, will be addressed in the review that is conducted prior to the end of the financial year 2010/2011.

Proposed Basis of Charges not imposed

- 5.96 In our September consultation we consulted on the imposition of a basis of charges (cost orientation) obligation, in order to address the identified market failure of BT's ability to excessively price on less competitive routes.
- 5.97 We now consider that the imposition of such a remedy would not be appropriate, given our further examination and analysis of the market.
- 5.98 Our market analysis has identified a potential market failure in the form of excessive prices on the less competitive routes. While BT faces effective constraints when setting its prices on some (thick) routes, it could set excessively high prices on a large number of thin routes. In the September consultation, we proposed that the imposition of a no undue discrimination requirement would only partly address this market failure. We considered that such an obligation would not necessarily mean uniform pricing and that, where differences in conditions justify it, BT would be allowed to set different prices. We therefore proposed a basis of charge condition and asked stakeholders whether they agreed with the imposition of such a condition.
- 5.99 We have set out above the consultation responses we received in relation to our proposal to impose a no undue discrimination obligation. We have, in considering those responses, revised our analysis of how we expect that this obligation will normally operate in this specific market.

5.100 Based upon our revised analysis of how the no undue discrimination obligation will operate on the ST market, we have also reconsidered our proposal to impose a basis of charges obligation. We have done so to ensure that the most appropriate remedy is applied based on the nature and extent of the competition problems actually identified in our market analysis, proportionate and justified particularly in light of the objective to promote competition.

Consultation Responses

- 5.101 All respondents, except BT, agreed with our proposal to impose a cost orientation obligation. However, given the relationship of this obligation with the operation of the other remedies as described above, it is important to consider these responses in light of the comments made in relation to the proposal for a no undue discrimination condition.
- 5.102 BT stated that the imposition of a cost orientation remedy would be unnecessary and would not be proportionate within the terms of either section 88(1) or 47(2) of the Act, especially given the proposed interpretation of the obligation under Annex 14 to the September statement. BT also suggested that the imposition of this remedy would be unduly discriminatory as BT would not have the same pricing flexibility as its competitors.
- 5.103 We now consider that the imposition of this remedy would be disproportionate because the identified market failures can be addressed by less burdensome remedies. We should note, however, that our reasons for reaching that view are different to those given by BT, in that we still have concerns about BT's ability to differentially price in the market, absent regulation. We further consider that, in the light of that finding, we are required to impose appropriate remedies to ensure that BT does not set excessive prices, and therefore BT will inevitably have less pricing flexibility than a CP not subject to those SMP conditions. We consider that the promotion of competition in this market is sufficiently addressed by the imposition of a no undue discrimination obligation as discussed at paragraph 5.25 above.
- 5.104 We also asked whether stakeholders agreed with our proposal to interpret the basis of charges obligation in accordance with guidance set out at Annex 14 of the September statement. Since our September consultation, we have withdrawn the guidance at Annex 14²⁵ on 16 November 2009, and in view of our decision not to impose a basis of charges obligation, this issue (in relation to ST) is no longer relevant.
- 5.105 As noted above, any remedies applied to a market need to be proportionate and be applied to address the identified market failures. For any given problem, we should give consideration to alternative remedies where possible, so that the least burdensome effective set of remedies can be selected.
- 5.106 In this case, we have concluded that, given the somewhat unusual circumstances of the ST service offered by BT, the combination of the requirement to provide access on reasonable terms, the obligation not to unduly discriminate and the obligation to publish prices will act to sufficiently constrain BT's ability to set materially different prices on less competitive routes than it sets on more competitive routes. This means that the risk of prices being sustained at an excessive level to some CPs is adequately addressed without the need to impose a more burdensome price control under section 87(9) of the Act.

²⁵ http://www.ofcom.org.uk/consult/condocs/wnmr_statement_consultation/Annex_14.pdf

- 5.107 CPs also suggested that cost orientation would protect against charges being below cost. We do not consider this to be a potential market failure as we do not consider that BT would have an incentive to price below cost.
- 5.108 We have said at paragraph 5.24 above, that because of the lack of volume effects in the cost of providing ST services, the imposition of a “no undue discrimination” condition may have a more restrictive effect upon BT in this market as compared to other case for which a similar obligation applies. This implies that any decrease in the price of ST services by BT is likely to benefit all BT customers, including BT’s competitors that rely on the BT ST service, which would indicate that BT would have little incentive to price ST services below cost.
- 5.109 Our analysis supports the conclusion that the identified market failure can be adequately addressed by the other SMP remedies. Therefore, we have concluded that cost orientation is not appropriate and, as such, we have decided not to impose this specific remedy as one appropriate to national circumstances.

Conclusion

- 5.110 Having given careful consideration to all of the consultation responses and taken utmost account of the comments from the Commission, we have concluded that the six SMP remedies described above are appropriate to address the identified competition concerns. Therefore, as it would not be appropriate to impose any additional regulation, we have decided, in accordance with section 48(5) of the Act, to give effect to our September proposals with the modification that we will not impose remedies of cost orientation and cost accounting.

Product Management, Policy and Planning (PPP) for ST

- 5.111 BT makes a Product Management, Policy and Planning (PPP) surcharge to cover its administrative costs in dealing with interconnection relationships in narrowband markets. The charge covers BT’s internal costs in managing such relationships over and above the charges that it incurs for actually conveying and switching calls across its network.
- 5.112 PPP is not part of the particular narrowband markets (such as ST, call origination and call termination) but is so closely related to the provision of regulated services that SMP conditions may need to be imposed on this charge to ensure that the SMP conditions applied to the substantive markets are effective.
- 5.113 Any competing provider purchasing services from BT is required to pay the PPP surcharge on a once per minute per call basis. In markets in which BT has SMP, the surcharge therefore covers one part of BT’s costs (i.e. its administrative costs) in handling such calls, in the same way as the ST charge covers BT’s costs in switching the call. Therefore, purchasers of ST have little alternative but to pay BT not only for the transit service but also to pay BT’s PPP. In competitive markets, competing providers could choose to purchase conveyance services from alternative providers and a portion of the charge they would pay would directly or indirectly be attributable to a function of a similar nature to BT’s PPP activity.
- 5.114 We therefore need to consider whether PPP should be regulated in the ST market. For other regulated markets (call origination and call termination), where PPP applies we have charge controlled both the service and PPP.

- 5.115 In our September consultation, we considered that it would be appropriate to safeguard the level of PPP charge that BT could levy in the ST market by imposing a cost orientation obligation on that charge. This reflected the same approach we proposed in relation to controlling potentially excessive pricing in the substantive market.
- 5.116 We have now decided that it would not be appropriate to impose cost orientation in the ST market and therefore we have reconsidered our approach to the PPP charge.
- 5.117 We explain above that we have identified a competition concern that BT could price excessively on “thin” routes. For the same reasons that an ST customer could not avoid paying an excessive price (if BT chose to raise their prices), that customer would not be able to avoid paying the PPP charge.
- 5.118 In order to consider whether BT could raise its PPP charge on these routes we need to examine the nature of the charge itself. As we have set out above, PPP is the charge made by BT in respect of the administrative costs incurred as a result of providing narrowband interconnection services. It therefore sits across the wholesale narrowband markets, rather than in each of the markets separately. In assessing the appropriate level of control set under the Review of BT’s Network Charge Controls²⁶ (‘NCC’) we took into account how the charge was applied in relation to the origination and termination markets where we had concluded that BT held SMP.
- 5.119 As set out above, BT’s pricing for ST services will be constrained by the competition on the thick routes. This will include the PPP charge, as the purchasing CP will only be concerned with the total charge that it pays, not the individual price components. As PPP is an averaged charge for providing the regulated service, there is no opportunity for differential PPP rates within a market and, as such, we would expect there to be a single PPP rate within the ST market.
- 5.120 Further, we consider that use of the PPP charge to manipulate prices within the ST market (e.g. by charging a higher PPP when there is no justification to do so, or by offering a discount by removing the PPP charge) in a manner that could be seen as affecting the pricing of the ST service could be a breach of conditions applied to that market. In the ST market BT is subject to an obligation to provide access on fair and reasonable terms (including pricing) and no undue discrimination.
- 5.121 Therefore, in the circumstances we do not consider it would be appropriate to impose any additional, separate regulation on PPP in respect of the ST market.

²⁶ http://www.ofcom.org.uk/consult/condocs/review_bt_ncc/statement/nccstatement.pdf

Section 6

Call Termination: requirement to publish charges

Summary

6.1 In this Section, we set out our conclusion to impose an obligation to publish call termination rates on all CPs other than BT and KCOM.

Requirement for obligation

6.2 In our September consultation we concluded that each CP has SMP in the provision of fixed geographic call termination on its own network. As a result of this conclusion, we imposed an obligation on all CPs that provide fixed geographic call termination to provide network access and to do so on fair and reasonable terms.

6.3 BT's Carrier Price List (CPL) has played a role in providing a reference of the rates paid to each CP by BT to meet this specific obligation. BT's obligations in other markets (such as the ST market) led to the BT CPL providing transparent access for CPs to each other's termination rates. Whilst each CP was not explicitly required to provide the same price to all CPs under its network access obligation, the price paid by BT has acted as a basis for commercial negotiations by other CPs looking to establish direct interconnection.

6.4 In our review of the other wholesale narrowband markets, we have concluded that:

- a) BT no longer has SMP in the LTC/LTT market (see Section 8 of the September consultation²⁷); and
- b) BT has SMP in the ST market, but a change to the remedies previously imposed is appropriate. This is discussed in detail in Section 4 of this document.

6.5 The effect of changes in regulation in these markets may ultimately result in the transparency previously afforded by the CPL becoming reduced. This is not to say that BT is required, or has indicated, that it will change the way it manages the CPL, only that certain regulatory remedies which have underpinned the structure of the CPL have been amended. We were concerned that this, in turn, could reduce transparency and impact the ability of CPs to negotiate effectively.

6.6 To address this, we considered whether to impose an obligation to publish rates on all providers. In the March consultation we stated that it may not be proportionate to impose this regulation on all other CPs.

Responses to the March consultation

6.7 Stakeholder responses to the March consultation were mixed in relation to the question of whether it was proportionate to impose an obligation to notify charges on all CPs. Some respondents agreed that it would be disproportionate to require all other providers of fixed geographic call termination to notify charges, while some other respondents disagreed. One respondent stated that it anticipated that the SMP

²⁷ http://www.ofcom.org.uk/consult/condocs/wnmr_statement_consultation/

finding for all other CPs would lead to some formal requirement to notify geographic call termination charges.

- 6.8 One respondent argued that it would be disproportionate to impose this regulation and it is likely that call termination charges are expected to be dealt with under an updated reciprocity agreement. Another stated that the 'fair and reasonable' terms obligation has been effective to date and there is no need for more intrusive regulation. Further, it argued that the 'theoretic market power of other CPs has not increased since the last review and so there is no need for an increase in regulation'.
- 6.9 In its disagreement with our proposal, BT argued that the requirement to publish in itself is not onerous. For example, it is easy to publish rates on a website, and this would aid in transparency. C&W stated that BT's Carrier Price List (CPL) 'carries out an important function ensuring transparency and hence constraint to other operators' termination rates. If Ofcom proceeds to deregulate ST then it is essential that an alternative is put in place and an obligation to publish charges would be an effective way to achieve that'.

The Updated Proposal

- 6.10 Three main arguments were presented by stakeholders as to why a condition requiring CPs to publish their rates was not needed. First, the obligation to set rates on a fair and reasonable basis has been effective. Second, CPs' market power has not increased since the last review. Third, the Reciprocity Agreement provides a mechanism for setting rates on a fair and reasonable basis.
- 6.11 However, the requirement for the condition arises because of changes to regulation of BT that may impact transparency, not because the requirement to set fair and reasonable rates has been ineffective or that CPs' market power has increased since the last review. The mechanism for setting termination rates in the previous Reciprocity Agreement required knowledge of a CP's traffic patterns and of the configuration of its interconnection with BT in order to work out the termination rate it received from BT, and so did not provide transparency. That agreement has now expired and the industry is currently negotiating a new agreement.
- 6.12 We consider that transparency of CPs' rates is important to enable efficient negotiation for interconnection, transit and termination, which in turn will assist in the promotion of effective competition. Therefore, based on the comments that such an obligation would be required given deregulation of BT in other markets and that it would not be disproportionate or onerous on CPs, we proposed an obligation for CPs to publish their rates in our September document. Without published rates, CPs may not have transparency as to the rates provided by the terminating CP and this may limit the ability of originating CPs to freely negotiate.
- 6.13 The condition is an additional SMP condition BC2, inserted into the Notification made under the wholesale review that set SMP condition BC1 requiring terminating CPs to set fair and reasonable rates. In order for that condition to be applied to a particular person specified in the condition, as required under section 46 of the Act, we listed all identified terminating providers in an Annex. Therefore the new condition BC2, set under this statement, will apply to those same CPs. The list of CPs is replicated at Annex A of Schedule 2 to Annex 1 of this document for ease of reference.
- 6.14 Our specific concern relates to the availability of data that can be used to facilitate negotiation of interconnection. It was our view that this would occur based on a view of current rates. Once interconnection was established, the contract would set

notification periods. As such, we did not consider it necessary to require advance notification of rates within the condition.

- 6.15 In general, a notification of charges obligation requires the CP to also publish a reference offer setting out the terms and conditions upon which the charges are set. However, we did not propose to impose this condition at this time on CPs other than BT and KCOM as notification of rates would be sufficient. However, should CPs publish multiple rates or attach specific conditions other than general interconnection obligations in order to obtain a rate, we would expect these would be made available to any CP requesting them.
- 6.16 Therefore, the proposed condition, as consulted on in the September consultation required CPs to publish their fixed geographic call termination rates on a publicly available website on or before the day they come into effect.

Questions asked in the September consultation

- 6.17 We asked:

Question 19.15: *Do you agree that Ofcom should impose a requirement for other CPs to notify their charges? If not, please explain why.*

Question 19.16: *Do you agree that a notification period does not need to be set by Ofcom as commercial arrangements are sufficient? If not, please explain why.*

Question 19.17: *Do you agree that Ofcom should not impose an obligation to impose an obligation to publish a reference offer? If not, please explain why.*

Commission response to the September consultation

- 6.18 On 15 September we separately notified the proposed additional transparency obligation September consultation to the European Commission as a draft measure under the Article 7 process.
- 6.19 In its response of 16 October, the Commission commented that, in light of the notification and the additional information provided to the Commission, that there was a need to impose an ex ante price control and non-discrimination obligation.
- 6.20 In particular, the Commission underlined that alternative CPs are also monopolists for the termination of calls on their respective networks and normally have the ability and incentive to raise termination rates above costs and/or to set differentiated charges thereby placing (certain) competitors at a competitive disadvantage. The Commission stated that commercial agreements cannot normally address this potential market failure in termination markets. The Commission noted that national regulatory authorities of other Member States generally impose a non-discrimination obligation also on alternative providers to ensure that they apply equivalent conditions in equivalent circumstances concerning other undertakings and/or their own services. In addition, the Commission referred to Recital 7 of Commission Recommendation 2009/396/EC, which states that the imposition of cost orientation is considered the most appropriate intervention to address these competition problems over the medium term.
- 6.21 The Commission acknowledged that the imposition of a cost-orientation obligation requiring smaller CPs to implement a regulatory cost model might be considered

unduly burdensome. However, the Commission noted that cost orientation can also be ensured by alternative approaches, such as benchmarking or mandating reciprocal rates, which would equally result in termination rates that serve to promote efficiency, competition and maximise consumer benefits.

- 6.22 The Commission also emphasised that dispute resolution procedures may not be sufficient to remedy a potential market failure in a timely, efficient and transparent way. The Commission was concerned that dispute resolution could remedy the situation only once Ofcom has learned of a possibly abusive pricing behaviour, would be binding only for the undertakings in litigation and customers would already have suffered a loss in the form of higher off-net retail call charges.
- 6.23 The Commission also stated that termination rates should be set at the level of costs incurred by an efficient operator and therefore should normally be symmetric, with any deviation being based on an objective cost differences outside the control of the operators concerned. The Commission noted that Ofcom considers BT's costs as an appropriate proxy for the cost of an efficient operator, but that it was unclear to what extent these factors relating to network architecture, technology, geographic conditions and / or density of traffic fall outside the control of the CPs concerned.
- 6.24 Therefore, the Commission invited Ofcom to impose an adequate *ex ante* price control and a non-discrimination obligation on all CPs regarding their fixed termination rates. In particular, the Commission invited Ofcom to implement cost orientation in an efficient manner, by way of a measure which does not impose an undue procedural burden on alternative CPs, but sets efficient cost based termination rates for all operators to the benefit of competition and ultimately consumers.

Response to the Commission

- 6.25 We support the Commission with regard to their objectives for regulation of the fixed geographic call termination market. We agree that appropriate *ex ante* regulation needs to be imposed on terminating CPs with regard to appropriate provision of service including termination rates²⁸. Furthermore, we agree that termination rates charged by CPs should be consistent with the costs of an efficient operator. We also agree with the Commission that a cost orientation obligation requiring CPs to implement a regulatory cost model would be unduly burdensome, and that reliance on dispute resolution as a way of making policy is inappropriate.
- 6.26 In summary, we consider that the *ex ante* obligation we have imposed on all CPs that provide fixed geographic call termination meets these objectives and address the concerns raised by the Commission. This condition requires that all such CPs (other than BT and KCOM) provide network access on fair and reasonable terms.
- 6.27 In the March consultation, the September statement and in earlier documents on this subject, we have provided clear and consistent guidance that termination rates that are not reciprocal to BT's termination rates (whose costs are taken as a proxy for an efficient network and whose termination rates are subject to cost orientation and a charge control) are unlikely to be fair and reasonable. That is, it is our policy that rates for fixed termination must be set on a reciprocal basis save in exceptional circumstances with explicit objective justification.
- 6.28 We consider this *ex ante* SMP condition places a clear obligation on other CPs to charge termination rates that are reciprocal to BT's termination rates. We also

²⁸ See paragraph 12.80 March Consultation

consider that this approach is proportionate, in that this is the least burdensome remedy that is effective in addressing the identified competition problem. In addition, this approach has a long and successful track record. Therefore, as we consider that the above approach is meeting the objectives of controlling fixed termination rates, we remain of the view that it is not appropriate to impose an additional price control remedy specifically requiring rates to be reciprocal to or benchmarked with BTs rates. If we thought that our approach was no longer effective in meeting these objectives, we would have to implement more stringent remedies.

- 6.29 To date, industry has complied with the obligation to levy “fair and reasonable” (i.e. reciprocal) charges via a Reciprocity Agreement to implement the contractual details of Ofcom’s policy on a multilateral basis. It is important to stress that it is not the industry’s Reciprocity Agreement that sets what is ‘fair and reasonable’ but the SMP condition, and therefore the obligation is independent of any industry agreement which establishes the practical mechanism enabling CPs to comply with their regulatory obligation.
- 6.30 The industry is currently in the process of updating this agreement. This is primarily a consequence of amendments being required as a result of deregulation of BT in the transit / conveyance markets and new technology such as NGNs. We fully expect to see something equivalent in place.
- 6.31 As to the Commission’s invitation to impose a no undue discrimination obligation on other CPs in this market, we stress that our concern in relation to other terminating CPs is different to the concerns we had in relation to BT and KCOM, on which we have imposed such an obligation. In particular, we consider that BT and KCOM have an incentive to favour their downstream businesses, potentially through preferential pricing. We do not consider the ability for other CPs to favour their own vertically integrated retail businesses is significant to the extent that it would cause competitive distortions. Whilst we stated in our March consultation that, without regulation, CPs could offer call termination on unreasonable terms and that this might lead to high prices, we considered that this concern was appropriately addressed by the imposition of a fair and reasonable obligation. That is, we consider it is unlikely that terms of service that were unduly discriminatory could be “fair and reasonable”.
- 6.32 We agree with the Commission’s view that it would be inappropriate to rely on our dispute resolution powers in order to remedy the identified market failure. This is not our intention. Dispute resolution has a useful part to play in enforcing our SMP remedies but does not form part of the remedies themselves. In the event that any CP attempts to charge other CPs prices that are set contrary to our clearly stated policy of reciprocity, dispute resolution provides a rapid method of correcting the error and providing redress to those who have been overcharged.
- 6.33 Since 2003, although the number of CPs with SMP in fixed call termination has grown from 54 to 81, Ofcom has had to determine only three disputes between operators relating to fixed termination rates. In each of these, Ofcom found that non-reciprocal charges proposed by one party were not fair and reasonable and that reciprocal charges proposed by the other party were fair and reasonable. In each case the proposed non-reciprocal charges had not been implemented so there was no need to consider redress. Additionally, Ofcom completed each of these disputes within the four month timetable and none were appealed.²⁹

²⁹ Dispute from BT Wholesale against Telewest about reciprocal arrangements for call termination rates, closed 16 April 2004

- 6.34 With regard to our proposal in the September consultation to require price publication of termination rates by all terminating CPs, we agree with the Commission that transparency of termination rates is important to ensure that there is an appropriate constraint in pricing and to support the working of the reciprocity agreement. However, it is important to understand that the primary obligation to ensure that pricing is appropriately constrained is the fair and reasonable obligation, which is then supported by appropriate transparency of pricing within the market. Similarly, the Reciprocity Agreement does not, in itself, contribute to the transparency of pricing.
- 6.35 We identified the need for this additional transparency obligation because, where BT has been required by regulation to publish its transit prices, it has in practice chosen to publish composite prices in its CPL. This not only provided the required transparency of, for example, the pricing for BT's regulated Single Transit charge, but also for the termination rate applied to each individual CP. This reality has to date allowed other CPs to be aware of not only BT's rates, but also the rates that BT paid other CPs. That transparency has therefore acted as a base for commercial negotiations between CPs.
- 6.36 However, as discussed in the previous chapters, the transit markets continue to evolve. Therefore, we considered that the provision of pricing transparency in the call termination market should not rely on regulation in the evolving transit markets, or simply a view by BT as to how it chooses to meet obligations in those markets. This is why the September consultation proposed an additional price publication obligation in order to take account of the potential effect on transparency of pricing (should BT decide to change the way it publishes the CPL), having regard to our decisions and further proposals in the transit markets. Other stakeholders' responses to the September consultation.

Other stakeholders' responses to the September consultation

- 6.37 We received six responses on this issue, two of which were confidential. The non-confidential responses were from: BT, C&W, UKCTA and COLT.
- 6.38 There was general agreement with our proposals. Only COLT disagreed with the imposition of the additional condition, stating that the obligation to set fair and reasonable rate has been effective to date and remains sufficient. COLT also said that the "theoretical market power of other CPs has not increased".
- 6.39 BT raised a concern that the list of CPs with SMP in call termination set out at Annex A to Schedule 3 to Annex 7 of the September consultation is not exhaustive and that market entry and exit will occur such that the list of terminating CPs changes. BT suggests the obligation should be a general obligation, rather than naming specific CPs.
- 6.40 C&W and UKCTA flagged a concern that the definition of CPs should be wide enough to ensure it captures all CPs. For example, a specific concern exists around

(http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ccases/closed_all/cw_710/); Dispute about geographic call termination reciprocity agreement between BT and Telewest, closed 16 June 2006 (http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ccases/closed_all/cw_890/); Dispute between Opal Telecom and BT about Opal's Fixed Geographic Termination Rates, closed 23 October 2009 (http://www.ofcom.org.uk/bulletins/comp_bull_index/comp_bull_ccases/closed_all/cw_01027/).

CNS³⁰. In addition, C&W indicated that information on points of interconnection that avoid the payment of transit fees in the case where third party hosting occurs must be included in the published information. C&W also said we should include obligation to include a contact name.

- 6.41 All respondents agreed that it would be disproportionate to include a notification period in the obligation.
- 6.42 In addition, all respondents agreed it would be disproportionate to require CPs to publish a reference offer, although several indicated that where a CP has multiple rates, the conditions associated with these different rates should be made available.
- 6.43 COLT responded with several arguments in relation to deficiencies in the Reciprocity Agreement which expired on 30 September and some more general points around the use of reciprocity to set termination rates.
- 6.44 One respondent indicated that whilst it agreed with the proposals, a reasonable implementation timeframe should be allowed.

Response to other stakeholders

- 6.45 In response to COLT's point that the obligation is not required, we have addressed these points above, since we considered them in response to our March consultation, by stressing that the need for this additional regulation is driven by changes to regulation of BT in other markets, which may lead to reduced transparency of other CPs' pricing.
- 6.46 In response to BT's concern on specific CPs, our analysis intended that all terminating CPs should be assumed to hold SMP in providing call termination on its own network given the strong presumption of dominance that arises from a 100% market share. It would remain open to a CP to argue that it does not have SMP, by providing strong evidence to rebut this presumption. In setting any SMP condition, Section 46 of the Act requires that the person to whom the condition applies must be specified in the condition itself. Therefore we are obliged to adequately identify each individual CP when applying condition BC2. We recognise that in a dynamic market where the CPs that supply call termination may vary in the period between market reviews, Ofcom does not consider it to be unduly burdensome to consider those changes on a case by case basis where issues arise. We also consider that as each of the companies listed includes any subsidiary or holding companies under its control, this means that consolidation of companies by acquisitions should not affect the list, nor should the setting up of subsidiary companies by existing terminating providers.
- 6.47 In relation to C&W and UKCTA's point about CNS, Ofcom understands this is a subsidiary of BT Group and as such is subject to obligations imposed on BT. This includes obligations to publish termination rates. In our September consultation, we set out our views on CNS³¹. We said that as CNS is a division of BT, it is subject to regulation imposed on the BT Group. This regulation must be reasonable and, in the particular case of CNS, developing direct interconnection to the CNS network may not be cost effective. If a CP believes that BT is not complying with its regulatory

³⁰ CNS (Communications Networking Services) is the division of BT that was formerly Concert Network Services and provides legacy services including Private Lines and Virtual Network Services (VNS) to existing customers only.

³¹ See Section 8, pages 78 - 79

obligations in the case of providing termination to number ranges hosted on the CNS network and negotiations do not lead to agreement between the parties, it has the option of raising a complaint or dispute to Ofcom.

- 6.48 In relation to third party hosting arrangements, these agreements may be established in a number of different ways. However, an originating CP should be in a position to purchase termination on fair and reasonable terms. If the terminating CP's number ranges are, in fact, hosted on another network, so that the originating CP must interconnect with the hosting network, it is unlikely that a termination rate for these hosted numbers would be fair and reasonable if it was higher than the rate paid for termination to the numbers owned by the terminating network provider (e.g. the hosting network).
- 6.49 Ofcom considers that the point raised by several respondents about multiple rates is a valid concern. Whilst Ofcom proposed, and all respondents agreed, that a reference offer is not required, Ofcom expects that where a CP has multiple rates for termination to its number ranges, the terms and conditions applying to these different rates will be made available to other parties.
- 6.50 Ofcom notes COLT's comments on the reciprocity agreement. However, this consultation is not addressing reciprocity or the industry agreed Reciprocity Agreement. In our September document³² we set out our view that "charges that were not based on BT's were unlikely to be fair and reasonable". We also indicated that we continued to be of the view that an industry agreed Reciprocity Agreement was the best way to establish a mechanism for setting individual rates rather than the imposition of a regulatory requirement. This remains our view.
- 6.51 Finally, Ofcom agrees that a reasonable timeframe for implementation is required. We do not believe this task is onerous but accept that it may not be practical for all CPs to update their websites immediately with this information. As such, we propose to modify the effect of our proposed condition to the extent that the condition will now take effect on 1 April 2010, allowing reasonable period for terminating CPs to make appropriate publication arrangements in order to comply with this condition.

Legal tests

- 6.52 Ofcom has considered its duties under Section 3 of the Act. We consider that the condition furthers the interests of citizens and furthers the interests of consumers in relevant markets by the promotion of competition by ensuring that termination rates are transparent, which facilitates providers being able to negotiate interconnection in good faith in the interests of securing a positive outcome for consumers.
- 6.53 Ofcom considers that the condition meets the Community requirements set out in Section 4 of the Act. In particular, the proposed condition promotes competition and secures efficient and sustainable competition for the maximum benefits of consumers by ensuring that providers are able to effectively negotiate direct interconnection.
- 6.54 We consider that the proposed condition meets the criteria set out in Section 47(2) of the Act. It is:
- 6.55 objectively justifiable, as there is a need to ensure that there is sufficient pricing transparency to enable appropriate negotiation between CPs in setting their rates on a fair and reasonable basis that will help promote competition.

³² See Section 12, pg 126, 127

- 6.56 not unduly discriminatory, as this condition would be imposed on all CPs other than BT and KCOM. BT and KCOM are subject to similar regulation in relation to publishing call termination rates;
- 6.57 proportionate, in that only fixed geographic call termination charges would be required to be notified and we consider that we are implementing this in the least onerous way possible for CPs; and
- 6.58 transparent, as it is clear the intention is to ensure that all CPs provide visibility of their fixed geographic call termination prices to aid with interconnection negotiations.

Conclusion

- 6.59 Based on the above analysis and taking account of the responses to consultation, we have decided to impose an obligation on those CPs listed in Annex A to Schedule 3 of the Notification to the final statement *Review of the fixed narrowband services wholesale markets* dated 15 September 2009 requiring each of them to publish their fixed geographic call termination rates on or before the day such rates take effect. Publication of rates on a publicly available website will be sufficient to meet this obligation. This condition will take effect on 1 April 2010.

Annex 1

Legal Instrument

NOTIFICATION UNDER SECTIONS 48(1) AND 79(4) OF THE COMMUNICATIONS ACT 2003

Identifying markets, making market power determinations and the setting of SMP services conditions in relation to BT, KCOM and specified Communication Providers providing termination services under section 45 of the Communications Act 2003

Background

1. On 28 November 2003, the Director General of Telecommunications ('The Director') published a *Review of the fixed narrowband line, call origination, conveyance and transit markets*³³ ('the 2003 Statement'), and a *Review of fixed geographic call termination markets* ('the 2003 termination statement')³⁴.
2. On 29 December 2003, Ofcom took over the functions and responsibilities under the Communications Act 2003 relating to the EC Communications directives from The Director.
3. On 22 July 2004, Ofcom published its statement entitled *The regulatory financial reporting obligations on BT and Kingston Communications, Final Statement and notification: Accounting separation and cost accounting*³⁵ ('the financial reporting statement') which imposed SMP conditions on BT and KCOM in relation to financial reporting obligations.
4. On 18 August 2005, Ofcom published a *Review of BT's Network Charge Controls*³⁶ which reviewed the markets for local-tandem conveyance / transit and inter-tandem conveyance / transit ('ITC/T'). The review found the ITC/T market to be competitive; determined that BT no longer had SMP in this market and SMP conditions relating to that market were revoked.
5. On 19 March 2009, Ofcom published a *Review of the wholesale fixed narrowband markets*³⁷ consultation ('the March consultation') on proposals reviewing market definitions, market analyses and, where appropriate, the setting of SMP service conditions. The March consultation proposed a single Wholesale Transit market combining the markets separately defined in 2003 as single transit ('ST') and ITC/T. On 4 June 2009, the consultation period for the March consultation closed. Ofcom gave careful consideration to every representation about the proposal that has been made.

³³ *Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets*, 28 Nov 2003 (http://www.ofcom.org.uk/consult/condocs/narrowband_mkt_rvw/nwe/)

³⁴ *Review of fixed geographic call termination markets*, 28 Nov 2003, (http://www.ofcom.org.uk/consult/condocs/narrowband_mkt_rvw/Eureviewfinala1.pdf)

³⁵ *The regulatory financial reporting obligations on BT and Kingston Communications, Final Statement and notification: Accounting separation and cost accounting*, 22 July 2004, http://www.ofcom.org.uk/consult/condocs/fin_reporting/fin_report_statement/

³⁶ *Review of BT's Network Charge Controls*, 18 Aug 2005 (<http://www.ofcom.org.uk/consult/condocs/charge/statement/>)

³⁷ http://www.ofcom.org.uk/consult/condocs/review_wholesale/fnwm.pdf

6. On 15 September 2009, Ofcom published a statement and further consultation entitled *Review of the wholesale fixed narrowband markets* ('the 2009 statement'). In the 2009 statement, Ofcom set out its decisions on market definitions, market analyses and the setting of appropriate SMP conditions for the majority of markets under review. However, Ofcom considered it appropriate to further consult on wholesale transit services, in particular whether:

- (a) separate ST and ITC/T markets existed;
- (b) no person held SMP in the ITC/T market;
- (c) BT held SMP in the ST market; and
- (d) appropriate SMP conditions should be imposed on BT in that market.

7. In the 2009 statement, Ofcom concluded that each terminating operator had SMP on its own network for wholesale fixed geographic call termination. We imposed SMP conditions on BT, KCOM and other terminating operators and made a further proposal to apply an additional SMP remedy to those operators other than BT or KCOM.

8. On 16 October 2009, the consultation period for the further consultation under the 2009 statement closed. Ofcom received seven responses to the consultation from communication providers and comments from the European Commission. Ofcom has carefully considered all the responses received.

Decisions

Decisions relating to market definition and market power analysis

9. Ofcom hereby makes, in accordance with sections 48(1) and 79 of the Act, the following decisions for identifying markets and making market power determinations.

10. Ofcom identifies the following markets for the purpose of making market power determinations:

- (a) Single Transit on fixed public narrowband networks; and
- (b) Inter-tandem conveyance and transit on fixed public narrowband networks;

in the geographic market of the United Kingdom, except the Hull Area.

11. Ofcom makes a market power determination that BT has significant market power in relation to the market set out in paragraph 10(a) above.

12. Ofcom finds that the market set out in paragraph 10(b) above remains effectively competitive and, therefore, that no person holds significant market power in relation to that market.

13. The effect of, and Ofcom's reasons for, making the decisions to identify markets and making market power determinations as set out in paragraphs 10 to 12, above, are contained in Section 4 of the document accompanying this Notification.

Decisions to set SMP service conditions : Single Transit Market

14. Ofcom sets, in relation to the service market identified at paragraph 10(a) of this Notification, the following SMP conditions:

- (a) those conditions set out in Schedule 1 to this Notification; and

- (b) SMP conditions OA1 – OA28 and OA32 to OA33, as set out in the financial reporting statement, but only to the extent and in so far as BT is required under those conditions to record and report information for the purpose of securing transparency in relation to its obligations under SMP condition AAA(ST)2 (see Schedule 1 hereto), including accounting separation.

Decisions to withdraw existing SMP service conditions : Single Transit Market

15. Subject to paragraph 16, Ofcom revokes the SMP Conditions (as modified)³⁸ set out at Annex A of the Notification to the 2003 statement applied to the market for ST on fixed public narrowband networks.

16. BT's obligations under SMP Conditions OA1-OA28 and OA32 to OA33 in relation to reporting data relevant to obligations under SMP conditions AA2³⁹, AA3³⁸ and AA4(b)⁴⁰ apply until to the end of the Current Reporting Period.

Decision to set SMP services conditions : Call Termination Market

17. In relation to the services markets identified at paragraph 12(c)(i) of the Notification at Annex 7 to the 2009 statement, Ofcom has decided to set SMP conditions as set out in Schedule 2 to this Notification.

Effect and reasons of decisions to set SMP conditions

18. The effect of, and Ofcom's reasons for making the decisions to set the SMP conditions set out in Schedules 1 and 2 to this Notification, and those conditions referred to at paragraph 14(b), above are contained in Sections 5 and 6 of the document accompanying this Notification.

Ofcom's duties and legal tests

19. In identifying and analysing the markets referred to in paragraph 10 above, Ofcom has, in accordance with section 79 of the Act, taken due account of all applicable guidelines and recommendations which have been issued or made by the European Commission in pursuance of a Community instrument, and relate to market identification and analysis or the determination of what constitutes significant market power.

20. Ofcom consider that the SMP services conditions referred to in paragraphs 14 and 17 of this Notification comply with the requirements of sections 45 to 47 and 87 of the Act as appropriate and relevant to each of those SMP services conditions.

21. In making all of the decisions referred to in paragraphs 10 to 17 of this Notification, Ofcom has considered and acted in accordance with its general duties set out in section 3 of the Act and the six Community requirements in section 4 of the Act.

22. Copies of this Notification and the accompanying explanatory statement have been sent to the Secretary of State for Business, Innovation and Skills in accordance with section 50(1)(a) and 81(1) of the Act, as well as the European Commission and to the regulatory

³⁸ The SMP conditions set in the 2003 Statement, have been amended from time to time. The revocation of the substantive conditions includes any amendment that has subsequently been made to those conditions.

³⁹ As set under the 2003 statement, and revoked by paragraph 15 of this Notification.

⁴⁰ As set in the *Review of BT's Network Charge Controls* dated 18 Aug 2005.

authorities of every other member State in accordance with section 50(2) and 81(2) of the Act.

Interpretation

23. Save for the purposes of paragraph 10 of this Notification and except as otherwise defined in paragraph 24 of this Notification, words or expressions used shall have the same meaning as they have been ascribed in the Act.

24. In this Notification:

(a) “**Act**” means the Communications Act 2003 (c. 21)

(b) “**BT**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by 1159 of the Companies Act 2006;

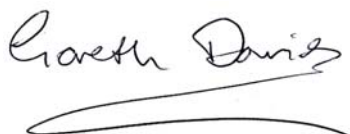
(c) “**Hull Area**” means the area defined as the 'Licensed Area' in the licence granted on 30 November 1987 by the Secretary of State under section 7 of the Telecommunications Act 1984 to Kingston upon Hull City Council and Kingston Communication (Hull) plc.

(d) “**KCOM**” means KCOM Group plc, whose registered company number is 2150618, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.

(e) “**Current Reporting Period**” means the period from 1 April 2010 to 31 July 2010 during which BT are required to publish their Regulated Financial Statements under SMP conditions OA5(d) and OA6(b).

25. The Schedules to this Notification shall form part of this Notification.

26. Unless otherwise stated in the Schedules, the decisions set out in this Notification shall take effect on the publication of this Notification.



Gareth Davies
Competition Policy Director

A person duly authorised in accordance with paragraph 18 of the Schedule to the Office of Communications Act 2002

5 February 2010

SCHEDULE 1

Setting of SMP services conditions as a result of the market power determination made by Ofcom in the final statement entitled *Review of the fixed narrowband services wholesale markets: Further statement on wholesale transit markets and remedies in the wholesale call termination market* dated 5 February 2010 in respect of the services market for single transit services on fixed public narrowband networks in the United Kingdom but excluding the Hull Area in which it has been decided that BT is a person having significant market power.

Part 1: Application, definitions and interpretation relating to the SMP conditions in Part 2

1. The SMP conditions in Part 2 of this Schedule 1 shall, except insofar as it is otherwise stated therein, apply to the market set out in paragraph 10(a) of this Notification.
2. In this Schedule 1:
 - (a) “**Act**” means the Communications Act 2003 (c. 21);
 - (b) “**Access Charge Change Notice**” has the meaning given to it in Condition AAA(ST)6(a).2;
 - (c) “**Access Contract**” means:
 - (i) a contract for the provision by the Dominant Provider to another person of Network Access to the Dominant Provider’s Electronic Communications Network; and/or
 - (ii) a contract under which Associated Facilities in relation to the Dominant Provider’s Public Electronic Communications Network are made available by the Dominant Provider to another person;
 - (d) “**CSI**” means customer sited Interconnection;
 - (e) “**Dominant Provider**” means British Telecommunications plc, whose registered company number is 1800000, and any of its subsidiaries or holding companies, or any subsidiary of such holding companies, all as defined by section 1159 of the Companies Act 2006.
 - (f) “**IEC**” means Interconnection extension circuits;
 - (g) “**ISI**” means in-span Interconnection links;
 - (h) “**Network Component**” means, to the extent they are used in the Services Market, the network components specified in any direction given by Ofcom from time to time for the purpose of these SMP conditions.
 - (i) “**Network Termination and Testing Apparatus**” means an item of Apparatus comprised in an Electronic Communications Network installed in a fixed position on Served Premises which enables:
 - (a) Approved Apparatus to be readily connected to, and disconnected from, the network;
 - (b) the conveyance of Signals between such Approved Apparatus and the Network;
 - (c) the due functioning of the Network to be tested,

but the only other functions of which if any are:

- (i) to supply energy between such Approved Apparatus and the Network;
- (ii) to protect the safety or security of the operation of the Network;
- (iii) to enable other operations exclusively related to the running of the network to be performed or the due functioning of any system to which the network is or is to be connected to be tested (separately or together with the network).

(j) “**Network Termination Point**” means the physical point at which a Relevant Subscriber is provided with access to a Public Electronic Communications Network and, where it concerns Electronic Communications Networks involving switching or routing, that physical point is identified by means of a specific network address, which may be linked to the Telephone Number or name of a Relevant Subscriber. Where a Network Termination Point is provided at a fixed position on Served Premises, it shall be within an item of Network Termination and Testing Apparatus;

(k) “**NTS**” means number translation services;

(l) “**NTS Calls**” means a call to a number identified in the Numbering Plan for the United Kingdom as a Special Services number or a Special Services at a Premium Rate number, or a Sexual Entertainment Services at a Premium Rate including calls to 0500 Freephone numbers and numbers identified as Special Services numbers in table 5 of the Annex to General Condition 17, but excluding calls to 0844 04 numbers for Surftime Internet access services and calls to 0808 99 numbers for FRIACO;

(m) “**Numbering Plan**” means the National Telephone Numbering Plan published from time to time by the Director pursuant to sections 56 and 60 of the Act;

(n) “**Point of Connection**” means a point at which the Dominant Provider’s Electronic Communications Network and another person’s Electronic Communications Network are connected;

(o) “**PPP**” means the surcharge made by BT for its Product Management, Policy and Planning activities.

(p) “**Premium Rate Service**” means a service as defined in the Numbering Plan for the United Kingdom as a Special Service at a Premium Rate;

(q) “**Public Telephone Network**” means an Electronic Communications Network which is used to provide Publicly Available Telephone Services; it supports the transfer between Network Termination Points of speech communications, and also other forms of communication, such as facsimile and data;

(r) “**Publicly Available Telephone Services**” means a service available to the public for originating and receiving national and international calls and access to Emergency Organisations through a number or numbers in a national or international telephone numbering plan, and in addition may, where relevant, include one or more of the following services: the provision of operator assistance services, Directory Enquiry Facilities, Directories, provision of Public Pay Telephones, provision of service under special terms, provision of specific facilities for End-users with disabilities or with special social needs and/or the provision of non-geographic services;

(s) “**Reference Offer**” means the terms and conditions on which the Dominant Provider is willing to enter into an Access Contract;

(t) “**Services Market**” means the market set out in paragraph 10(a) of the Notification;

(u) “**Tandem Exchange**” means a telephone exchange whose primary function is not to support the provision of Exchange Lines but to switch traffic between other telephone exchanges in a Public Electronic Communications Network;

(v) “**Third Party**” means either:

- (i) a person providing a Public Electronic Communications Network; or
- (ii) a person providing a Public Electronic Communications Service;

(w) “**Transfer Charge**” means the charge or price that is applied, or deemed to be applied, by the Dominant Provider to itself for the use or provision of an activity or group of activities. For the avoidance of doubt, such activities or group of activities include, amongst other things, products and services provided from, to or within the Services Market and the use of Network Components in that Services Market;

(x) “**Usage Factor**” means the average usage by any Communications Provider (including the Dominant Provider itself) of each Network Component in using or providing a particular product or service or carrying out a particular activity;

3. For the purpose of interpreting the SMP conditions in Part 2:

(a) except in so far as the context otherwise requires, words or expressions shall have the meaning assigned to them in paragraph 2 of this Part above and otherwise any word or expression shall have the same meaning as it has in the Act;

(b) the Interpretation Act 1978 (c. 30) shall apply as if each of the SMP conditions in Part 2 were an Act of Parliament; and

(c) headings and titles shall be disregarded.

Part 2: The SMP conditions

Condition AAA(ST)1(a) - Requirement to provide Network Access on reasonable request

AAA(ST)1(a).1 Where a Third Party reasonably requests in writing Network Access, the Dominant Provider shall provide that Network Access. The Dominant Provider shall also provide such Network Access as Ofcom may from time to time direct.

AAA(ST)1(a).2 The provision of Network Access in accordance with paragraph AAA(ST)1(a).1 above shall occur as soon as it is reasonably practicable and shall be provided on fair and reasonable terms, conditions and charges and on such terms, conditions and charges as Ofcom may from time to time direct.

AAA(ST)1(a).3 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition AAA(ST)1(a).

Condition AAA(ST)1(b) - Requests for new Network Access

AAA(ST)1(b).1 The Dominant Provider shall, for the purposes of transparency, publish reasonable guidelines, in relation to requests for new Network Access made to it. Such guidelines shall detail:

- (a) the form in which such a request should be made;
- (b) the information that the Dominant Provider requires in order to consider a request for new Network Access; and
- (c) the time-scales in which such requests will be handled by the Dominant Provider.

AAA(ST)1(b).2 These guidelines shall meet the following principles:

- (a) the process should be documented end-to-end;
- (b) the timescales for each stage of the process shall be reasonable;
- (c) the criteria by which requests will be assessed shall be clearly identified; and
- (e) any changes to the guidelines be agreed between BT and industry.

AAA(ST)1(b).3 The Dominant Provider shall, upon a reasonable request from a Third Party considering making a request for new Network Access, provide that Third Party with information so as to enable that Third Party to make a request for new Network Access. Such information shall be provided within a reasonable period.

AAA(ST)1(b).4 On receipt of a written request for new Network Access, the Dominant Provider shall deal with the request in accordance with the guidelines described at paragraph AAA(ST)1(b).1 above. A modification of a request for new Network Access which has previously been submitted to the Dominant Provider, and rejected by the Dominant Provider, shall be considered as a new request.

AAA(ST)1(b).5 The Dominant Provider is required to provide Ofcom with a description of the processes it has put in place to ensure compliance with this Condition AAA(ST)1(b). The Dominant Provider shall keep those processes under review to ensure that they remain adequate for that purpose. Where changes to the process are agreed with industry, BT should notify Ofcom of those changes.

Condition AAA(ST)2 - Requirement not to unduly discriminate

AAA(ST)2.1 The Dominant Provider shall not unduly discriminate against particular persons or against a particular description of persons in relation to matters connected with Network Access.

AAA(ST)2.2 In this Condition, the Dominant Provider may be deemed to have shown undue discrimination if it unfairly favours to a material extent an activity carried on by it so as to place at a competitive disadvantage persons competing with the Dominant Provider.

Condition AAA(ST)5 - Requirement to publish a Reference Offer

AAA(ST)5.1 Except in so far as Ofcom may otherwise consent in writing, the Dominant Provider shall publish a Reference Offer and act in the manner set out below.

AAA(ST)5.2 Subject to paragraph AAA(ST)5.8 below, the Dominant Provider shall ensure that a Reference Offer in relation to the provision of Network Access includes at least the following:

- (a) a description of the Network Access to be provided, including technical characteristics (which shall include information on network configuration where necessary to make effective use of the Network Access);
- (b) the locations of the points of Network Access;
- (c) the technical standards for Network Access (including any usage restrictions and other security issues);
- (d) the conditions for access to ancillary, supplementary and advanced services (including operational support systems, information systems or databases for pre-ordering, provisioning, ordering, maintenance and repair requests and billing);
- (e) any ordering and provisioning procedures;
- (f) relevant charges, terms of payment and billing procedures;
- (g) details of interoperability tests;
- (h) details of traffic and network management;
- (i) details of maintenance and quality as follows:
 - (i) specific time scales for the acceptance or refusal of a request for supply and for completion, testing and hand-over or delivery of services and facilities, for provision of support services (such as fault handling and repair);

- (ii) service level commitments, namely the quality standards that each party must meet when performing its contractual obligations;
 - (iii) the amount of compensation payable by one party to another for failure to perform contractual commitments;
 - (iv) a definition and limitation of liability and indemnity; and
 - (v) procedures in the event of alterations being proposed to the service offerings, for example, launch of new services, changes to existing services or change to prices;
- (j) details of measures to ensure compliance with requirements for network integrity;
 - (k) details of any relevant intellectual property rights;
 - (l) a dispute resolution procedure to be used between the parties;
 - (m) details of duration and renegotiation of agreements;
 - (n) provisions regarding confidentiality of non-public parts of the agreements;
 - (o) rules of allocation between the parties when supply is limited (for example, for the purpose of co-location or location of masts);
 - (p) the standard terms and conditions for the provision of Network Access;
 - (q) the amount applied to:
 - (i) each Network Component used in providing Network Access with the relevant Usage Factors; and
 - (ii) the Transfer Charge for each Network Component or combination of Network Components described above,

reconciled in each case to the charge payable by a Communications Provider other than the Dominant Provider.

AAA(ST)5.3 The Dominant Provider shall update and publish the Reference Offer in relation to any amendments or in relation to any further Network Access provided after the date this Condition AAA(ST)5 enters into force.

AAA(ST)5.4 Publication referred to above shall be effected by:

- (a) placing a copy of the Reference Offer on any relevant website operated or controlled by the Dominant Provider; and
- (b) sending a copy of the Reference Offer to Ofcom.

AAA(ST)5.5 The Dominant Provider shall send a copy of the current version of the Reference Offer to any person at that person's written request (or such parts which have been requested).

AAA(ST)5.6 The Dominant Provider shall make such modifications to the Reference Offer as Ofcom may direct from time to time.

AAA(ST)5.7 The Dominant Provider shall provide Network Access at the charges, terms and conditions in the relevant Reference Offer and shall not depart therefrom either directly or indirectly.

AAA(ST)5.8 The Dominant Provider shall comply with any direction Ofcom may make from time to time under this Condition AAA(ST)5.

Condition AAA(ST)6(a) - Requirement to notify charges

AAA(ST)6(a).1 Except in so far as Ofcom may otherwise consent in writing, the Dominant Provider shall publish charges and act in the manner set out below.

AAA(ST)6(a).2 Except where new or amended charges are directed or determined by Ofcom or where such charges are required by a notification or an enforcement notification given by Ofcom under sections 94 or 95 of the Act, the Dominant Provider shall send to Ofcom and to every Third Party with which it has entered into an Access Contract covered by Condition AAA(ST)1(a) a written notice of any amendment to the charges on which it provides Network Access or in relation to any charges for new Network Access (an "Access Charge Change Notice") not less than 90 days before any such amendment comes into effect.

AAA(ST)6(a).3 The Dominant Provider shall ensure that an Access Charge Change Notice includes:

- (a) a description of the Network Access in question;
- (b) a reference to the location in the Dominant Provider's current Reference Offer of the terms and conditions associated with the provision of that Network Access;
- (c) the date on which or the period for which any amendments to charges will take effect (the "effective date");
- (d) the current and proposed new charge and the relevant Usage Factors applied to each Network Component comprised in that Network Access, reconciled in each case with the current or proposed new charge;
- (e) the information specified in sub-paragraph (d) above with respect to that Network Access to which that paragraph applies; and
- (f) the relevant network tariff gradient.

AAA(ST)6(a).4 The Dominant Provider shall not apply any new charge identified in an Access Charge Change Notice before the effective date.

Condition AAA(ST)6(b) - Requirement to notify technical information

AAA(ST)6(b).1 Save where the Director consents otherwise, where the Dominant Provider:

- (a) proposes to provide Network Access covered by Condition AAA(ST)1(a), the terms and conditions for which comprise new:
 - (i) technical characteristics (including information on network configuration where necessary to make effective use of the Network Access);

- (ii) locations of the points of Network Access; or
- (iii) technical standards (including any usage restrictions and other security issues), or

(b) proposes to amend an existing Access Contract covered by Condition AAA(ST)1(a) by modifying the terms and conditions listed in paragraph AAA(ST)6(b).1(a)(i) to (iii) above on which the Network Access is provided,

the Dominant Provider shall publish a written notice (the “Notice”) of the new or amended terms and conditions not less than 90 days before either the Dominant Provider enters into an Access Contract to provide the new Network Access or the amended terms and conditions of the existing Access Contract come into effect. This obligation for prior notification shall not apply where new or amended terms and conditions are directed or determined by the Ofcom or are required by a notification or an enforcement notification given by Ofcom under sections 94 or 95 of the Act.

AAA(ST)6(b).2 The Dominant Provider shall ensure that the Notice includes:

- (a) a description of the Network Access in question;
- (b) a reference to the location in the Dominant Provider’s Reference Offer of the relevant terms and conditions;
- (c) the date on which or the period for which the Dominant Provider may enter into an Access Contract to provide the new Network Access or any amendments to the relevant terms and conditions will take effect (the “effective date”).

AAA(ST)6(b).3 The Dominant Provider shall not enter into an Access Contract containing the terms and conditions identified in the Notice or apply any new relevant terms and conditions identified in the Notice before the effective date.

AAA(ST)6(b).4 Publication referred to in paragraph AAA(ST)6(b).1 shall be effected by:

- (a) placing a copy of the Notice on any relevant website operated or controlled by the Dominant Provider;
- (b) sending a copy of the Notice to Ofcom; and
- (c) sending a copy of the Notice to any person at that person’s written request, and where the Notice identifies a modification to existing relevant terms and conditions, to every Third Party with which the Dominant Provider has entered into an Access Contract covered by Condition AAA(ST)1(a). The provision of such a copy of the Notice may be subject to a reasonable charge.

SCHEDULE 2

Setting of SMP services condition BC2 as a result of the market power determination by Ofcom in the final statement entitled *Review of the fixed narrowband services wholesale markets: Further statement on wholesale transit markets and remedies in the wholesale call termination market* dated 5 February 2010 in respect of the services market for Wholesale fixed geographic call termination in which it has been found that specified Communication Providers are person having significant market power.

1. In Schedule 3 to Annex 7 of the final statement *Review of the fixed narrowband services wholesale markets* dated 15 September 2009, there shall be set the following SMP services condition BC2, inserting it after Condition BC1.
2. The SMP condition BC2 shall only apply to those persons listed at Annex A to Schedule 3 of the Notification to the final statement *Review of the fixed narrowband services wholesale markets* dated 15 September 2009, being persons found to have significant market power in the wholesale fixed geographic call termination market. For ease of reference, Annex A has been reproduced below.
3. This Condition BC2 shall come into force on 1 April 2010.

Condition BC2 – Requirement to notify charges

BC2.1 Except in so far as Ofcom may otherwise consent in writing, the Dominant Provider shall publish charges in the manner set out below for the provision of Network Access under Condition BC1.

BC2.2 Charges shall be published on or before the day on which the charges come into effect.

BC2.3 If charges are published before they come into effect, the Dominant Provider shall also publish the date that the charges are due to come into effect.

BC2.4 Publication of charges on a publicly accessible website operated by the Dominant Provider shall be sufficient to comply with Condition BC2.1 above.

Annex A (List of Dominant Providers for the purpose of Schedule 2)

1. 118 Limited whose registered company number is 03951948, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
2. 24 Seven Communications Limited whose registered company number is 04468566, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
3. 4D Interactive Ltd whose registered company number is 02676756, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
4. Aggregated Telecom Ltd whose registered company number is 03882936, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
5. Atlas Interactive Group Ltd whose registered company number is 03249486, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
6. BSKYB whose registered company number is 05349163, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
7. C3 Europe Ltd whose registered company number is 04188942, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
8. Cable & Wireless UK whose registered company number is 01541957, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
9. Callagenix Ltd whose registered company number is 03963819, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
10. Carphone Warehouse Group plc whose registered company number is 03253714, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.
11. Collouquium Limited whose registered company number is SC142248, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding

company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

12. COLT Telecommunications whose registered company number is 02452736, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

13. Connect Telecom Ltd whose registered company number is 06298460, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

14. Daisy Group plc whose registered company number is 03974683, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

15. Digitech Solutions whose registered company number is 04546657, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

16. Edge Telecom Ltd whose registered company number is 03101247, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

17. Eircom (UK) Limited whose registered company number is 03478971, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

18. Elephant Talk Communications PRS UK Limited whose registered company number is 05890632, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

19. ETC Telecom Ltd whose registered company number is 06295193, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

20. Evoxus Limited whose registered company number is 03798888, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

21. Flextel Limited whose registered company number is 02772380, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

22. Gamma Telecom Ltd whose registered company number is 04340834, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding

company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

23. Global Crossing (UK) Telecommunications Limited whose registered company number is 02495998, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

24. Global One Communications Holding Limited whose registered company number is 02082327, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

25. I Communicate Services whose registered company number is 06212287, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

26. IDT Global Ltd whose registered company number is 03322447, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

27. Inclarity plc whose registered company number is 02673204, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

28. "Intouch Communication" Services Limited whose registered company number is 03606467, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

29. IV Response Ltd whose registered company number is 04318927, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

30. KDDI Europe Limited whose registered company number is 02407242, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

31. KCOM Group plc whose registered company number is 02150618, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

32. Magrathea Telecommunications Limited whose registered company number is 04260485, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

33. Mars Telecom Ltd whose registered company number is 04713626, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company,

all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

34. Medius Networks Limited whose registered company number is 04157875, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

35. Net Solutions Europe Limited whose registered company number is 03203624, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

36. Nexus Telecommunications Ltd whose registered company number is 03895766, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

37. NPLUSONE Limited whose registered company number is SC236129, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

38. N T L Glasgow registered company number is SC075177, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

39. O-Bit Telecom Limited whose registered company number is 04365519, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

40. Optics Telecom Limited whose registered company number is 04874092, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

41. Orange Limited whose registered company number is 03110666, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

42. Oxygen8 Communications UK Limited whose registered company number is 03383285, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

43. PNC Telecom plc whose registered company number is 02709891, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

44. Premier Voicemail Limited whose registered company number is 03172426, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding

company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

45. Primus Telecom Ltd whose registered company number is 02937312, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

46. QICOMM Limited whose registered company number is 05422551, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

47. QX Telecom Limited whose registered company number is 03820728, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

48. Ringmaster Ltd whose registered company number is 03450577, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

49. Sala Trading Ltd whose registered company number is 03617973, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

50. SingTel (Europe) Ltd whose registered company number is 03426947, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

51. Skycom Limited whose registered company number is 04101655, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

52. Skytel Limited whose registered company number is 04227994, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

53. Spacetel whose registered company number is 06184554, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

54. Spitfire Network Services whose registered company number is 02657590, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

55. Starcomm Ltd whose registered company number is 02830288, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all

as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

56. Stardex (UK) Limited whose registered company number is SC192625, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

57. Subhan Universal Limited whose registered company number is 05642502, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

58. Swiftnet Ltd whose registered company number is 02469394, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

59. Switch Services Limited whose registered company number is 04968578, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

60. Syntec Limited whose registered company number is 03529985, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

61. Teamphone.com whose registered company number is 01403177, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

62. Telco Global Networks Limited whose registered company number is 04214792, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

63. Teledesign plc whose registered company number is 03254784, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

64. Telephony Services Ltd whose registered company number is 05134355, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

65. Telsis Systems Limited whose registered company number is 02312314, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

66. Telstra Ltd whose registered company number is 03830643, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all

as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

67. Telswitch Ltd whose registered company number is 06127089, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

68. Telxl Limited whose registered company number is 04249562, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

69. T-Mobile whose registered company number is 02382161, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

70. Tweedwind (Two) Limited whose registered company number is 04392360, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

71. United Connect Ltd whose registered company number is 03204967, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

72. Vectone Network Limited whose registered company number is 05445235, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

73. Verizon UK Limited whose registered company number is 02776038, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

74. Virgin Media Limited whose registered company number is 02591237, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

75. Virtual Universe Ltd whose registered company number is 03064568, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

76. Vital Phone Limited whose registered company number is 04203630, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

77. Vodafone Ltd whose registered company number is 01471587, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all

as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

78. VTL (UK) Ltd whose registered company number is 04287100, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

79. Wavecrest (UK) Ltd whose registered company number is 03042254, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

78. Wire9 Telecom plc whose registered company number is 04210403, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.

81. XTEC Communications Limited whose registered company number is 03673661, and any subsidiary or holding company of it, or any subsidiary of it, or any subsidiary of that holding company, all as defined by section 736 of the Companies Act 1985 as amended by the Companies Act 1989.