

Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets

Identification and analysis of markets, determination of market power and setting of SMP conditions

Explanatory Statement and Notification

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EXPLANATORY STATEMENT

Summary

A new regulatory regime

- S.1 A new regulatory framework for electronic communications networks and services entered into force in the UK on 25 July 2003. The basis for the new framework is five new EU Communications Directives that are designed to create harmonised regulation across Europe. Four of these Directives have been implemented in the UK via the new Communications Act 2003 ("the Act"). The fifth was implemented on 31 October 2003.
- S.2 The Act provides for functions, powers and duties to be carried out by Ofcom which include, inter alia, functions, powers and duties flowing from the four EC Communications Directives referred to above. Certain existing functions are also transferred to Ofcom. However, Ofcom is not expected to assume full functions under the Act until later this year. Accordingly, transitional arrangements are in place as described below.
- S.3 The new Directives require National Regulatory Authorities ("NRAs"), inter alia, to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions. For a limited period, while those reviews are conducted and until the new SMP conditions are imposed, some of the regulatory regime which existed before 25 July 2003 continues in force by virtue of Continuation Notices which have been made by the Director. These continuation notices can be found on Oftel's website at http://www.oftel.gov.uk/publications/eu_directives/cont_notices/index.htm.

Previous consultation

S.4 On 11 April 2003, the Director published a national consultation document entitled "Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets". That document invited comments on his proposals for defining markets, on his conclusions about the state of competition in those markets, and on the remedies which might be applied. The period of consultation closed on 20 June 2003.

The present document

S.5 Having considered responses to the consultation document, the Director is setting out in the present document his draft decisions; the Notification under section 48(2) of the Act recording his proposals is at Annex D. Stakeholders may make representations within the period ending on 6 February 2004. Arrangements for making representations are explained in Chapter 11.

S.6 As required by Article 7 of Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services ("the Framework Directive") (as implemented by sections 50 and 81 of the Act), the draft decisions are also being sent to the European Commission and to other NRAs as, in the Director's opinion, the proposals may affect trade between member states.

Summary of proposals

Identification of markets

- S.7 The products and services under consideration in this document fall within the general categories of retail leased lines, wholesale symmetric broadband origination and wholesale trunk segments. Within these categories the Director proposes to identify the following economic markets in accordance with competition law principles, for the purpose of ensuring that regulatory obligations are proportionate and objectively justifiable.
- S.8 In the UK excluding Kingston upon Hull (except the market for wholesale trunk segments, which includes Kingston upon Hull):
 - retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s);
 - wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
 - wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s);
 - wholesale very high bandwidth traditional interface symmetric broadband origination (above 155Mbit/s);
 - wholesale alternative interface symmetric broadband origination at all bandwidths; and
 - wholesale trunk segments at all bandwidths (including Kingston upon Hull).

S.9 In the Kingston upon Hull area:

- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s):
- wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s); and
- wholesale alternative interface symmetric broadband origination at all bandwidths.

S.10 The technical areas considered are:

 interconnection services, being In Span Handover ("ISH") and Customer Sited Handover ("CSH");

- ISH extension circuits; and
- Synchronous Transfer Mode ("STM") ISH and CSH handover. These are discussed in more detail in Chapter 6.
- S.11 These proposed markets differ from those proposed in the 11 April consultation document, in that both the retail leased lines and the upstream wholesale symmetric broadband origination markets have been segmented between those supplied with a traditional interface and those supplied with an alternative (typically Ethernet) interface. The reasons for identifying these additional markets are set out in Chapter 2 and Annex A.
- S.12 Chapter 2 and Annex A also contain detailed definitions of all markets, and the approach taken by the Director when identifying these markets, and they explain the differences between the market definitions identified by the Director and those included in the European Commission's Recommendation on relevant markets ("Recommendation").

Assessment of market power

- S.13 Having analysed the operation of these markets, and taken due account of the Commission's "Guidelines on market analysis and the assessment of SMP" ("SMP Guidelines"), the Director proposes that Significant Market Power ("SMP") is held in the following markets:
- S.14 By British Telecommunications plc ("BT") in the following markets in the UK excluding the Hull Area:
 - retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s);
 - wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
 - wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s);
 - wholesale alternative interface symmetric broadband origination at all bandwidths; and
 - wholesale trunk segments at all bandwidths (including Kingston upon Hull).
- S.15 By Kingston Communications plc ("Kingston") in the following markets in the Hull Area:
 - retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s);
 - wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
 - wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s); and
 - wholesale alternative interface symmetric broadband origination at all bandwidths.

S.16 These proposed conclusions differ from those proposed in the 11 April consultation document, in that BT and Kingston have been identified as having SMP in their respective newly identified wholesale alternative interface symmetric broadband origination markets. Full details of the Director's draft decision and reasoning are contained in Chapter 3 and Annex B of this document.

Regulatory remedies

S.17 Given the positions of dominance enjoyed by BT, i.e. its ability to behave to an appreciable extent independently of competitors, customers and ultimately consumers in the markets listed below, the Director proposes to impose the following obligations on BT.

Low bandwidth retail leased lines (minimum set of retail leased lines up to 2Mbit/s identified by the Commission, and 8Mbit/s retail leased lines) – discussed in Chapter 5

S.18 Conditions

- obligation to supply on reasonable request the minimum set of retail leased lines and to continue to supply existing 8Mbit/s retail traditional interface leased lines being provided on the date the conditions enter into force;
- requirement not to unduly discriminate;
- in respect of analogue and 8Mbit/s retail traditional interface leased lines, cost orientation and a cost accounting system to take effect only if BT breaches its voluntary undertaking not to raise the combined prices of a basket of these services by more than RPI before June 2006 or the implementation of the next market review, whichever is the earlier;
- for all leased lines in this market, a requirement to publish a reference offer (obligation to publish current prices, terms and conditions; and same day price notification); and
- requirement to publish information concerning delivery and repair times.

S.19 The Director is not proposing to apply any regulation to the retail high (above 8Mbit/s up to and including 155Mbit/s) bandwidth or very high (above 155Mbit/s) bandwidth traditional interface markets or the retail alternative interface market (where new products are only available at 10Mbit/s or above).

Low and high bandwidth traditional interface wholesale symmetric broadband origination services (up to and including 8Mbit/s, and above 8Mbit/s up to and including 155Mbit/s, respectively) – discussed in Chapter 6 and Wholesale trunk segments (note that this market extends to the whole of the UK including Kingston upon Hull, for the reasons set out in Chapter 2) – discussed in Chapter 8 and

The technical areas identified above – discussed in Chapters 6 and 8

S.20 **Conditions**

- a general obligation to provide access on reasonable request;
- requirement not to unduly discriminate;
- basis of charges obligations (cost orientation and a cost accounting system);
- price control (not for trunk market);
- accounting separation obligations;
- requirement to publish a reference offer;
- an obligation to give 90 days' notice of changes to prices, terms and conditions for existing traditional interface symmetric broadband origination services;
- an obligation to give 28 days' notice of the introduction of prices, terms and conditions for new traditional interface symmetric broadband origination services;
- same day notification of changes to prices, terms and conditions of wholesale trunk segment products;
- requirement to provide quality of service information;
- requirement to notify technical information with 90 days' notice; and
- obligations relating to requests for new network access.

S.21 Directions

- a Direction under the general access condition to provide Partial Private Circuits (PPCs) at a range of bandwidths, Radio Base Station (RBS) backhaul link products, and Local Loop Unbundling (LLU) backhaul products, subject to specific terms and conditions;
- a Direction under the cost orientation condition covering pricing matters relating to PPCs and LLU backhaul; and
- a Direction under the quality of service condition to require specific information in respect of PPCs.

S.22 The Director is not proposing any regulation for the very high bandwidth traditional interface symmetric broadband origination market where he is of the view that BT does not have SMP.

Wholesale alternative interface symmetric broadband origination services – discussed in Chapter 7

S.23 Conditions

- a general obligation to provide access on reasonable request;
- requirement not to unduly discriminate;
- basis of charges obligations (cost orientation and a cost accounting system);
- accounting separation obligations;
- requirement to publish a reference offer;

- an obligation to give 90 days' notice of changes to prices, terms and conditions for existing alternative interface symmetric broadband origination services;
- an obligation to give 28 days' notice of the introduction of prices, terms and conditions for new alternative interface symmetric broadband origination services:
- requirement to provide quality of service information;
- requirement to notify technical information with 90 days' notice; and
- obligations relating to requests for new network access.

S.24 Directions

- a Direction under the general access condition to provide LES-based LLU backhaul products, subject to specific terms and conditions; and
- a Direction under the cost orientation condition covering pricing matters relating to LES-based LLU backhaul.
- S.25 These proposed conclusions differ from those proposed in the 11 April consultation document, in that the Director has proposed regulation for BT in the newly identified wholesale alternative interface symmetric broadband origination market.
- S.26 Given the positions of dominance enjoyed by Kingston, i.e. its ability to behave to an appreciable extent independently of competitors, customers and ultimately consumers, the Director proposes to impose the following obligations.

Low bandwidth retail leased lines ('minimum set' of retail leased lines up to 2Mbit/s identified by the Commission – there are no 8Mbit/s retail leased lines) – discussed in Chapter 9

S.27 Conditions

- obligation to supply on reasonable request the minimum set of retail leased lines;
- requirement not to unduly discriminate;
- basis of charges obligations (cost orientation and cost accounting); and
- requirement to publish a reference offer (obligation to publish current prices, terms and conditions); and
- requirement to publish information concerning delivery and repair times.

S.28 The Director is not proposing to apply any regulation to the retail high (above 8Mbit/s up to and including 155Mbit/s) bandwidth or very high (above 155Mbit/s) bandwidth traditional interface markets or the retail alternative interface market.

Low and high bandwidth wholesale traditional interface symmetric broadband origination services (up to and including 8Mbit/s, and above 8Mbit/s up to and including 155Mbit/s, respectively) – discussed in Chapter 9

S.29 Conditions

- a general obligation to provide access on reasonable request;
- requirement not to unduly discriminate;
- basis of charges obligations (cost orientation);
- requirement to publish a reference offer; and
- requirement to notify technical information.

Wholesale alternative interface symmetric broadband origination services – discussed in Chapter 9

S.30 Conditions

- a general obligation to provide access on reasonable request;
- requirement not to unduly discriminate;
- basis of charges obligations (cost orientation);
- requirement to publish a reference offer; and
- requirement to notify technical information.
- S.31 These proposed conclusions differ from those proposed in the 11 April consultation document, in that the Director has proposed regulation for Kingston in the newly identified wholesale alternative interface symmetric broadband origination market.
- S.32 The Director considers that, taken as a whole, the proposals in this review represent a proportionate response to the market analysis carried out. The proposed regulation follows from the proposed finding that BT and Kingston have dominance in these markets. The retail regulatory measures proposed will protect consumers in the absence of effective competition. The wholesale regulatory measures proposed will promote competition in the retail markets, by allowing competitors to purchase the necessary inputs. This will bring benefits to consumers in terms of lower prices and greater choice in the retail markets which depend on those inputs.
- S.33 In the Hull Area, Kingston has a similar position of dominance to BT in the markets considered. The Director therefore proposes that it be subject to a similar regulatory regime, but that this should reflect matters of proportionality, recognising the smaller size of the potential market.
- S.34 Full details of these new remedies, including their effect and the reasons for proposing to set these conditions, are contained in the chapters outlined above.

Final steps

S.35 When the Director has considered any representations made within the period to 6 February 2004, including any made by the Commission, he may give

effect to the proposals, with or without modifications, by identifying markets, making market power determinations and setting conditions. He will do this by publishing a further Notification/s accompanied by a further and final Explanatory Statement. The Director will, at that time, also give consideration to the discontinuation of current regulation contained in continuation notices as referred to at paragraph S.3 above.

Chapter 1

Introduction

- 1.1 A new regulatory framework for electronic communications networks and services entered into force on 25 July 2003. The framework is designed to create harmonised regulation across Europe and is aimed at reducing entry barriers and fostering prospects for effective competition to the benefit of consumers. The basis for the new regulatory framework is five new EU Communications Directives:
 - Directive 2002/21/EC on a common regulatory framework for electronic communications networks and services (the "Framework Directive");
 - Directive 2002/19/EC on access to, and interconnection of, electronic communications networks and associated facilities (the "Access Directive");
 - Directive 2002/20/EC on the authorisation of electronic communications networks and services (the "Authorisation Directive");
 - Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services, (the "Universal Service Directive"); and
 - Directive 2002/58/EC concerning the processing of personal data and the protection of privacy in the electronic communications sector (the "Privacy Directive").
- 1.2 The Framework Directive provides the overall structure for the new regulatory regime and sets out fundamental rules and objectives which read across all the new Directives. Article 8 of the Framework Directive sets out three key policy objectives which have been taken into account in the preparation of this explanatory statement, namely promotion of competition, development of the internal market and the promotion of the interests of the citizens of the European Union. The Authorisation Directive establishes a new system whereby any person will be generally authorised to provide electronic communications services and/or networks without prior approval. The general authorisation replaces the existing licensing regime. The Universal Service Directive defines a basic set of services that must be provided to end-users. The Access Directive sets out the terms on which providers may access each others' networks and services with a view to providing publicly available electronic communications services. These four Directives were implemented in the UK on 25 July 2003. This was achieved via the Communications Act 2003. The fifth Directive on Privacy establishes users' rights with regard to the privacy of their communications. This Directive was adopted slightly later than the other four Directives and was implemented on 31 October 2003.

Implementation

- 1.3 The Act provides for functions, powers and duties to be carried out by Ofcom which include, inter alia, functions, powers and duties flowing from the four EU Communications Directives referred to above. Certain existing functions are also transferred to Ofcom. However, Ofcom will not assume full functions under the Act until later this year. Accordingly, transitional arrangements are in place as described below.
- 1.4 The Communications Act 2003 (Commencement Order No. 1) Order 2003 has been made under sections 411 and 408 of the Act. This order commences certain provisions of the Act for the purpose of enabling the networks and services functions under those provisions to be carried out by the Director of Telecommunications (the "Director") until such time as those functions are transferred back to Ofcom later in the year. Accordingly, references in those provisions of the Act to Ofcom are, for the present time, to be read as references to the Director.

Market reviews

- 1.5 The new Directives require NRAs, such as Oftel, to carry out reviews of competition in communications markets to ensure that regulation remains proportionate in the light of changing market conditions. Oftel already carries out market reviews as part of its long term strategy, focusing on effective competition as the best means to deliver a good deal for consumers.
- 1.6 Each market review has three stages:
 - · definition of the relevant market or markets;
 - assessment of competition in each market, in particular whether any undertakings have SMP in a given market; and
 - assessment of the options for regulation and proposal of appropriate regulatory obligations where there has been a finding of SMP.
- 1.7 More detailed requirements and guidance concerning the conduct of market reviews are provided in the EU Communications Directives, the Act and in additional documents issued by the European Commission and Oftel. As required by the new regime, in conducting this review, the Director has taken the utmost account of the two European Commission documents discussed below.
- 1.8 On 11 April 2003, the Director published a national consultation document, Review of the retail leased lines, symmetric broadband origination and wholesale trunk segments markets (referred to throughout this document as the "previous consultation"). That document invited comments on proposed market definitions, assessments of SMP and appropriate remedies. The consultation closed on 20 June 2003. Having considered responses to the previous consultation, the Director is setting out in the present document his refined proposals in the form

of a draft decision; the Notification is at Annex D. Stakeholders may make representations within the period ending on 6 February 2004. Arrangements for making representations are explained in Chapter 11.

Recommendation on relevant product and service markets

1.9 The European Commission has identified in its *Recommendation on relevant product and service markets*, adopted on 11 February 2003 (the "Recommendation"), a set of product and service markets within the electronic communications sector, in which ex ante regulation may be warranted. The Recommendation seeks to promote harmonisation across the European Community by ensuring that the same markets are subject to a market analysis in all member states. However, NRAs are able to regulate markets that differ from those identified in the Recommendation where this is justified by national circumstances and where the Commission does not raise any objections. Accordingly, NRAs are to define relevant markets appropriate to national circumstances, provided that the utmost account is taken of the markets listed in the Recommendation.

Guidelines on market analysis and the assessment of SMP

1.10 The European Commission has also issued guidelines on market analysis and the assessment of SMP (the "SMP Guidelines"). The Director is also required to take these guidelines into account when identifying a services market and when considering whether to make a market power determination under section 79 of the Act. Oftel has produced additional guidelines on the criteria to assess effective competition, which can be found at http://www.oftel.gov.uk/publications/about_oftel/2002/smpg0802.htm. These supplement the SMP Guidelines and replace Oftel's effective competition guidelines issued in August 2000.

Obligation to inform the Commission and other NRAs

1.11 As required by Article 7 of the Framework Directive and sections 50 and 81 of the Act, draft decisions contained in this explanatory statement are also being sent to the European Commission and to other NRAs as, in the Director's opinion, the proposals may affect trade between member states. The Commission and other NRAs may make comments within the one month consultation period. If the Commission believes that one of the market definitions, or proposals to designate a communications provider with SMP or proposals to designate no communications provider with SMP, would create a barrier to the single market or if the Commission has serious doubts as to its compatibility with Community law, and issues a notice under Article 7(4) of the Framework Directive, the Director is required by section 82 of the Act to delay adoption of these draft measures for a further period of 2 months while the Commission considers its position.

Regulation pending the completion of market reviews

1.12 The new Directives also allow Member States to carry forward some existing regulation until the market reviews have been completed and new conditions are put in place. Continuation notices have therefore been issued to relevant communications providers to maintain the effect of certain provisions contained in licence conditions that existed under the Telecommunications Act 1984 prior to 25 July 2003 until, inter alia, the market review process is finished. Further details on this continuation regime can be found at: http://www.oftel.gov.uk/publications/eu_directives/cont_notices/index.htm.

Final steps

1.13 When the Director has considered any representations made in response to the present document within the period to 6 February 2004, including any made by the Commission, he may give effect to the proposals, with or without modifications, by making market power determinations and setting conditions. He will do this by publishing a further Notification accompanied by a further and final explanatory statement. The Director will, at that time, also give consideration to the discontinuation of current regulation contained in Continuation Notices as referred to above. Thereafter, the markets and the new regulatory remedies which have been imposed will be reviewed at appropriate intervals.

Scope of this review and the extent of existing regulation

1.14 This review examines the markets relating to the provision of symmetric broadband services in the United Kingdom, including national leased lines. Asymmetric broadband services are considered in another review (see www.oftel.gov.uk/publications/eu_directives/2003/eu_wholesale_broadband/inde x.htm).

Retail services

1.15 This review will affect a wide range of retail services. It is helpful to distinguish between those retail services for which the Director believes it is necessary to consider retail regulation, and those retail services which will be affected by the wholesale regulation considered in this review.

Leased Lines

- 1.16 In relation to the first category, the only retail service for which retail regulation is being considered is retail leased lines. These are fixed permanent telecommunications connections providing capacity between two points. At the retail level, the main distinguishing features of leased lines is that they are:
- dedicated to the user's exclusive use: and

- enable the user to send voice and data messages from one site to another.
- 1.17 For example, a bookseller might wish to connect all of its retail outlets to its central warehouse, to facilitate ordering, accounting etc. It can do this using a network of leased lines which can be provided by a communications provider. The lines are 'always on', so that there is no need for one site to dial up the other site before transmission of the data.
- 1.18 In this document the term "retail leased lines" refers to electronic communications services provided to end users, the provision of which consists of the reservation of a fixed amount of transmission capacity between fixed points on the same or different electronic communications networks.
- 1.19 Retail services may be either analogue or digital. Analogue leased lines allow the transmission of analogue signals typically in the frequency range 300 Hz to 3.4 kHz, although there are some, such as baseband circuits, that can be used to support a much wider range of frequencies.
- 1.20 Digital leased lines allow the transmission of digital signals and are provided in a range of bandwidths referring to the maximum data rate that can be transmitted. Digital leased lines are typically offered at bandwidths ranging from 64kbit/s to 622Mbit/s.
- 1.21 Under Article 18 of the Universal Service Directive, NRAs are required to consider the extent of competition in the provision of the minimum set of retail leased lines. That set has been defined in the Official Journal of the European Commission as analogue leased lines, and digital leased lines from 64 kbit/s up to and including 2Mbit/s, and a full list from the Commission Decision 2003/548/EC of 24 July 2003 is set out in Annex G of this document. If it is found that the provision of such leased lines is not competitive, then NRAs are required to impose certain obligations on SMP provider(s). Accordingly, the Director has conducted an SMP analysis of these services (See Chapter 3 and Annex B).
- 1.22 The Commission has suggested in its Recommendation that retail leased lines of bandwidths above 2Mbit/s do not need to be subject to regulation, and has therefore not identified a market covering such leased lines. In the United Kingdom however, the Director has identified, for the reasons set out in Chapter 2 and Annex A, the appropriate upper boundary for the low bandwidth retail leased lines market as being 8Mbit/s rather than 2Mbit/s. Accordingly, in addition to considering the regulation to be imposed on the minimum set, the Director is setting out the options for regulation of 8Mbit/s retail leased lines.
- 1.23 The Director does, however, agree with the Commission's suggestion that for retail leased lines above 8Mbit/s there is no need to consider the imposition of retail regulation. He agrees with the Commission that appropriate regulation at the wholesale level should address any competition concerns relating to the

provision of these leased lines, since the competition problems associated with the provision of higher bandwidth circuits are typically less severe than those encountered at lower bandwidths.

Other retail services

1.24 In addition to retail leased lines this review will affect a range of other retail services. This category includes all retail services which use the wholesale input services that are part of the relevant wholesale markets ie symmetric broadband origination and trunk segments (see below). These services include the following:

- symmetric broadband internet access;
- virtual private networks;
- · other data services; and
- mobile voice and data services.

1.25 In relation to these services, the Director believes that the most pertinent issue in the context of this review is not whether they should be subject to retail regulation, but ensuring that any dominance found to exist in the provision of the relevant wholesale services cannot be exploited through charging excessive prices, so raising the costs of the retail services to end users, or leveraged into the provision of retail services to the detriment of consumers. This issue concerning the scope of the wholesale access remedies is considered further in Chapter 6.

Wholesale services

1.26 There are two broad categories of wholesale services covered by this review: those relating to symmetric broadband origination and those relating to trunk segments. Within the first category, there are two broad sub-categories, namely traditional interface symmetric broadband origination ("TISBO") services and alternative interface symmetric broadband origination ("AISBO") services. The key differences between these categories and sub-categories are explained below.

Traditional interface symmetric broadband origination services

1.27 Traditional interface symmetric broadband origination ("TISBO") services provide symmetric capacity from a customer's premises to an appropriate point of aggregation, generally referred to as a node, in the network hierarchy. In this context, a "customer" refers to any public electronic communications network provider or end user. The capacity is symmetric because traffic can be carried at the same rate in both directions between the customer and the node (in contrast with asymmetric services, whereby a large volume of data may be sent in one direction and a lesser volume in the other). In addition, although they are referred to as origination services, traffic is also terminated over these services. There are a number of existing and potential relevant services as described further below.

The definition of the specific TISBO service sometimes varies, ultimately depending upon which of the retail services discussed above it is being used to provide.

1.28 The services may be contended or uncontended. Uncontended services provide dedicated capacity from one end of the service to the other, whilst contended services are shared by a number of services or customers, so that the transmit and receive path data rates are not guaranteed depending on the use of the service.

Uncontended origination services

- 1.29 Uncontended symmetric broadband origination services include (but are not necessarily limited to) the following:
 - terminating segments, which may form all or part of PPCs when supplied by a particular supplier to another communications provider;
 - · LLU backhaul services; and
 - · RBS backhaul circuits.

Wholesale terminating segment services

1.30 A communications provider can purchase a complete end-to-end leased line from another communications provider where it does not have its own network available for providing service to a customer. Alternatively, if it is able to provide the leased line partly using its own network, it has the option of purchasing the remaining parts or segments of leased lines from another communications provider. The diagram below illustrates how this works in practice.

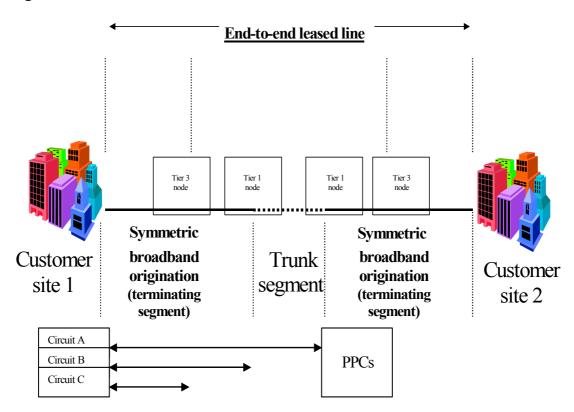


Figure 1.1: Elements of a traditional interface retail leased line

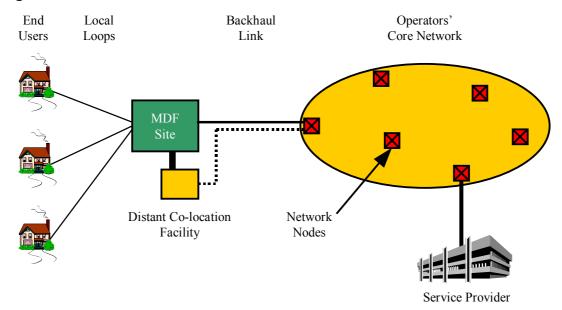
- 1.31 To be more specific about the service it is helpful to refer to BT's network, since BT supplies PPCs to other communications providers where they do not have sufficient network available for providing an end to end service to a customer. The length of the PPC supplied will depend on the amount of own network used by the communications provider. In the above diagram:
 - Circuit B shows the situation where a communications provider has built out to BT's main or Tier 1 node, and will need only to purchase the terminating segment;
 - Circuit C shows the situation where a communications provider has built out further, for example to a Tier 3 node, and will only need to purchase a local access part of a terminating segment; and
 - Circuit A shows the situation where a communications provider has built out less, and needs to purchase a trunk segment in addition to a terminating segment (see section on 'conveyance services' below).
- 1.32 PPCs are provided at a range of bandwidths. In relation to the provision of wholesale symmetric broadband origination it is therefore necessary to consider whether separate markets exist at different bandwidths. This is discussed in Chapter 2 and Annex A.
- 1.33 While the discussion above has illustrated the use of this type of symmetric broadband origination service in relation to the provision of a traditional interface

retail leased line, the input service is used by communications providers to provide a number of other retail services such as VPN or fixed link internet access.

LLU backhaul services

1.34 LLU backhaul services are another type of symmetric broadband origination service. Such services are the link that is used to convey digital data between another communications provider's LLU co-location facility and one of its core network nodes. Backhaul is required to connect the end users' local loop traffic to the communications provider's core network for subsequent connection to the relevant service provider. This is illustrated below.

Figure 1.2: LLU backhaul services

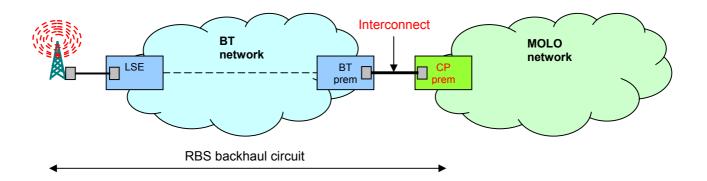


1.35 LLU backhaul services may be used as inputs to the supply of a variety of retail services, such as leased lines, symmetric broadband internet access or other data services. LLU backhaul services can be provided using traditional or alternatives interfaces.

RBS backhaul circuits

1.36 A further form of symmetric broadband origination services are Radio Base Station (RBS) backhaul circuits. These provide transparent transmission capacity between a mobile communications provider's radio base station premises and that communications provider's point of connection (POC) with the network of the communications provider supplying the circuit such as BT.

Figure 1.3: RBS backhaul circuits



1.37 RBS backhaul circuits are used as inputs to the supply of retail mobile voice and data services.

Contended origination services

1.38 In addition to the specific uncontended symmetric broadband origination services described above, it is likely during the period covered by this market review that other forms of symmetric broadband origination will be introduced which are both uncontended and contended. As explained in Chapter 2 and Annex A, the Director believes that contended and uncontended symmetric origination services should be considered as part of the same market. At the moment, it is possible to provide contended services using SDSL technology and such products are currently available from both BT and LLU operators.

Alternative interface symmetric broadband origination services

1.39 As well as the traditional interface symmetric broadband origination ("TISBO") services discussed above, the Director has identified a separate range of symmetric broadband origination services that have particular distinguishing characteristics. The Director is referring to these as alternative interface symmetric broadband origination ("AISBO") services.

1.40 AISBO services can be identified by the following distinguishing features:

- they have different (predominately Ethernet IEEE 802.3) interfaces;
- they cannot, in general, be used to carry voice traffic;
- they can be used to carry many types of data; and

- 1.41 In contrast, TISBO services have a CCITT G703 interface, they can easily be used to carry voice or data, they can be used over any distance, and they are generally provided using SDH technology or PDH technology. Note that although it is useful to refer to different technologies or technical specifications, AISBO is distinguished from TISBO based on the different functionality offered to the end user. The Director explains in Chapter 2 that the differences between these types of products are such that they cannot all be included within the same market from a demand-side perspective.
- 1.42 It is worth clarifying, for purely illustrative purposes, some of the ways in which it might be possible to use wholesale AISBO services. However, it should be noted that the Director is not at this stage setting out his views on the relative attractiveness of any particular options.
- 1.43 Firstly, at the simplest level, the services might be used by a communications provider to provide end to end leased line services to retail customers whose sites are located close together (ie typically, no more than 25-35km apart). Such services might consist of one link between two sites or a network of links between a collection of sites. AISBO services are currently, for example, being used to provide an alternative to SDH-based circuits for the provision of LLU backhaul.
- 1.44 Secondly, it might be possible for a communications provider to use these services to provide longer links by combining the wholesale AISBO service with its own network. The communications provider might choose to join the service to an Ethernet-based or an SDH-based network, and a variety of connection methods are possible. One such connection method is the subject of a current dispute raised by Energis (see Oftel's competition bulletin entry www.oftel.gov.uk/publications/comp_bull/cases/cw_656.htm for details). The Director has not yet concluded this dispute.
- 1.45 The diagram below shows a possible configuration of a Virtual Private Network (VPN) provided using an SDH network and Ethernet access circuits to connect third party customers to the VPN. This configuration could also be achieved using an Ethernet or ATM core network.

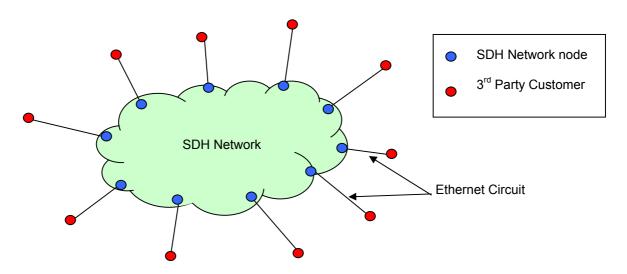


Figure 1.4: Possible VPN configuration

WDM services

- 1.46 In responses to the first consultation, communications providers asked the Director to clarify the position of Wave Division Multiplexed (WDM) services. These are services that can be used to provide transmission of multiple wavelengths of light over short or long distances using wave division multiplexers. At present, there are three broad types of wave division multiplexers available, Coarse Wave Division Multiplexer (CWDM), Dense Wave Division Multiplexer (DWDM) and Ultra Dense Wave Division Multiplexer (UDWDM).
- 1.47 CWDM uses lower frequency lasers and a wide spread of frequencies to enable transmission of up to 18 wavelengths over distances up to 60km. DWDM uses higher frequency lasers and a lower range of frequencies in order to enable transmission of up to 32 to 128 wavelengths nation-wide. CWDM is therefore cheaper and more cost effective for certain applications where fewer wavelengths and/or smaller transmission distance is needed. UDWDM, meanwhile, uses high frequency lasers and a very narrow spread of frequencies to carry a greater number of wavelengths.
- 1.48 The Director explains in Chapter 2 that he considers WDM services to constitute an upstream market that can provide an input into the TISBO and AISBO markets identified above. Chapter 2 sets out why this is the case and gives economic clarification of where WDM sits in relation to the other markets. It is, however, also helpful to consider this technology in terms of the Open Systems Interconnection (OSI) Reference Model.
- 1.49 The diagram below illustrates how the different services could fit into the OSI Reference Model with the example using Email as the application. In the

case where WDM is used in the physical layer, WDM replaces Ethernet or SDH as the technology responsible for passing signals between devices via physical cables.

Figure 1.5: OSI reference model examples

OSI Model	\$ SDH over fibre	Eth	ernet over fibre	Ethernet over VDM over fibre
Application	Email		Email	Email
Presentation	POP/SMTP		POP/SMTP	POP/SMTP
Session	POP		POP	POP
Transport	TCP		TCP	TCP
Network	IPv4		IPv4	IPv4
Data Link	PPP		Ethernet	Ethernet
Physical	 SDH		Ethernet	 WDM

POP/SMTP Post Office Protocol/Simple Message Protocol
TCP Transmission Control Protocol
IPv4 Internet Protocol version 4
PPP Point to Point Protocol

Trunk Segment services

- 1.50 The second broad category of wholesale services covered by this review are those which provide trunk segments across core transmission networks. These trunk services are often used to provide a link between origination services where a communications provider does not have available network to its nearest point of connection. As in the case of symmetric broadband origination services, trunk segment services may be used to provide a wide range of downstream retail services.
- 1.51 The particular services which are provided at the moment are the same as described above for symmetric broadband origination. In the context of the provision of retail leased lines and services such as virtual private networks, PPCs which include a trunk segment (see circuit A in Figure 1.1 above) are sold. In this context the trunk segment portion is the capacity between BT's Tier 1 nodes. Additionally, LLU backhaul services and RBS backhaul circuits may, in particular circumstances, involve some trunk segment services as part of the overall service. This would correspond to intra core transmission on the BT network in Figures 1.2 and 1.3. At the moment, no standalone trunk segment

services are sold to third parties, although such a service may be requested at some point in the future.

1.52 The trunk market also includes core transmission of the AISBO services mentioned above.

Existing regulation

1.53 The Director has introduced various regulatory measures over the years to promote competition and protect consumers in the UK leased lines markets. These measures are discussed in more detail in Chapters 4 to 9 which assess the need for future regulation of these markets. However, it is useful to set out in brief at this point the primary measures taken by the Director to date, in order to set matters in context.

Regulation for the UK excluding Kingston upon Hull

- 1.54 The existing obligations applicable to all bandwidths of retail leased lines are as follows:
 - obligation to supply;
 - price publication;
 - price notification;
 - non discrimination; and
 - cost orientation, including a cost accounting system and a price control on analogue traditional interface leased lines.
- 1.55 The existing obligations applying in relation to all bandwidths of wholesale TISBO services are as follows:
 - obligation to offer leased line interconnection;
 - non discrimination;
 - cost orientation;
 - cost accounting;
 - price control;
 - accounting separation;
 - publication of prices, terms and conditions;
 - advance notification of prices, terms and conditions for new products;
 - advance notification of changes to prices of existing products;
 - requirement to provide quality of service information; and
 - requirement to publish technical information.
- 1.56 The only form of wholesale AISBO service that BT is currently required to supply is in relation to LLU backhaul, at bandwidths of 10Mbit/s to 1000Mbit/s. The obligations applying to this service are those in paragraph 1.55 above.
- 1.57 In addition, these markets are subject to detailed regulation following these Directions:

- PPCs Phase I (June 2002);
- PPCs Phase II (December 2002);
- LLU backhaul (August 2002); and
- RBS backhaul (June 2003).
- 1.58 The existing obligations applying in relation to the trunk segment market are as follows:
 - obligation to offer wholesale trunk segments;
 - non discrimination;
 - cost orientation;
 - cost accounting;
 - accounting separation;
 - publication of prices, terms and conditions;
 - advance notification of prices, terms and conditions for new products;
 - advance notification of changes to prices of existing products;
 - requirement to provide quality of service information; and
 - requirement to publish technical information.
- 1.59 In addition, these markets are subject to detailed regulation following these Directions:
 - PPCs Phase I (June 2002);
 - PPCs Phase II (December 2002);
 - LLU backhaul (August 2002); and
 - RBS backhaul (June 2003).

Regulation for Kingston upon Hull

- 1.60 The existing obligations applicable to the retail leased lines markets in Hull are as follows:
 - obligation to supply;
 - price publication;
 - price notification;
 - non discrimination; and
 - cost orientation, including a cost accounting system.
- 1.61 The existing obligations applying in the wholesale TISBO, AISBO and trunk markets in Hull are as follows:
 - obligation to offer wholesale leased line interconnection;
 - non discrimination:
 - cost orientation:
 - accounting separation;
 - publication of prices, terms and conditions;
 - advance notification of prices, terms and conditions for new products;
 - advance notification of changes to prices of existing products; and
 - requirement to publish technical information.

Outline of this document

- 1.62 The rest of the document is structured as follows. Chapter 2 provides a broad overview of the market definition which is examined in detail in Annex A of this document. It examines the degree of substitutability between different services and reaches a proposed conclusion as to how the different markets should be defined. The market definition takes into account the Commission's Recommendation and explains how and why the Director's approach differs where appropriate.
- 1.63 Chapter 3 gives a broad overview of the assessment of whether BT or any other communications provider has SMP in any or all of the markets relating to leased lines, examined in detail in Annex B of this document. It uses both the criteria identified by the Commission and the additional criteria identified by the Director to inform the proposed conclusions.
- 1.64 Chapters 4 to 10 of this document discuss the costs and benefits of the SMP service conditions which it is proposed to impose in light of the SMP findings discussed in Chapter 3. Chapter 5 discusses the proposed obligations which will be imposed on BT in the retail markets, whilst Chapters 6 to 8 assess the obligations to be imposed in its wholesale markets. In Chapter 6, the Director discusses amongst other obligations a proposed price control on PPCs, and this discussion is supported by a cost benefit analysis set out in Annex C, conducted by the Director in order to assess in more depth the advantages and disadvantages of imposing this regulation.
- 1.65 Chapter 9 discusses the proposed obligations which will be imposed on Kingston Communications (Hull) plc ('Kingston'). Note that in all cases 'Hull' or 'the Hull Area' refers to 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 Communications (Hull) plc.
- 1.66 Chapter 10 discusses in more detail the costs and benefits of the proposed cost accounting and accounting separation conditions. The Director is publishing separate consultation documents on the precise nature of the obligations necessary for implementing the processes of cost accounting systems and accounting separation.
- 1.67 Chapter 11 explains how to make representations, while Annexes D and E contain the Notifications and Directions containing the Director's draft measures.

Related market reviews

- 1.68 Readers are referred to the following consultations being made by the Director.
- 1.69 As explained above, this consultation document relates to symmetric 'always-on' services and in particular to leased lines. The Director is publishing a separate consultation document relating to other types of broadband services which are asymmetric in character.
- 1.70 The Director is publishing a separate consultation on cost accounting and accounting separation. Chapters 4 to 9 set out in brief the cost accounting and accounting separation conditions the Director considers appropriate for implementation in each of the markets relating to leased lines, while Chapter 10 sets out the conditions in more detail together with the reasons the Director considers these conditions should be implemented. The precise wording of the proposed conditions to be applied in these markets relating to cost accounting and accounting separation will, however, be set out in the separate accounting consultation document.
- 1.71 The Director is also publishing a separate consultation covering quality of service. This will set out the precise quality of service Directions to be made under the quality of service condition in most of the markets being reviewed by the Director. One exception to this is the wholesale trunk segments and symmetric broadband origination markets, where the Director recently reviewed quality of service in the course of resolving the PPC dispute, and where conditions have been imposed recently. The Director has assessed the validity of these conditions for the new regime and is proposing in this consultation the precise wording of the Directions to be imposed under the quality of service condition, that will carry forward the majority of these recently introduced measures. This is discussed in more detail in Chapters 6 to 8.

Chapter 2

Summary of market definition

Identification of markets

- 2.1 Section 79(1) of the Act provides that before a market power determination may be considered, the Director must identify the markets for which, in his opinion and in the circumstances of the United Kingdom, it is appropriate to consider such a determination and to analyse that market. The Director is, as noted above, required to take due account of all applicable guidelines and recommendations issued by the European Commission. He is required to issue a notification of his proposals. He is entitled, by virtue of section 79(5) of the Act, to issue this notification with his proposal as to a market determination and with his proposals for setting SMP services conditions. The notification at Annex D is a single notification containing all such proposals.
- 2.2 The Director has conducted an assessment of the markets for retail leased lines, symmetric broadband origination and wholesale trunk segments in order to reach a conclusion on how and why he has defined the relevant markets, and as preparatory work for the assessment of SMP in each market that is introduced in Chapter 3. The Director's complete analysis of market definition is set out in Annex A of this document. This chapter summarises the Director's findings, setting out the different markets that he has identified, and giving brief reasoning for his proposed conclusions.

The Commission's approach to market definition

- 2.3 In formulating his approach to market definition, the Director has paid the utmost regard to the Commission's Recommendation.
- 2.4 Where the proposed market definition differs from the Commission's Recommendation the difference is identified and justification given in the light of the national circumstances which justify this departure, in the manner prescribed by the Commission's Recommendation.
- 2.5 Recital (7) of the Recommendation clearly states that the starting point for market definition is a characterisation of the retail market over a given time horizon, taking into account the possibilities for demand and supply-side substitution. The wholesale market is identified subsequently to this exercise being carried out in relation to the retail market. This approach is repeated in paragraph 3.1 of the main Recommendation and is exactly that followed by the Director.

- 2.6 Paragraph 3.1 also says: 'Because market analysis is forward-looking, markets are defined prospectively taking account of expected or foreseeable technological or economic developments over a reasonable horizon linked to the timing of the next market review. Again, this is the approach followed by the Director. The market analysis has been carried out on a forward looking basis and, where it is thought possible that market conditions may change significantly between the time of this review and the time the next leased lines market review is conducted (in approximately two years from now), these changes are identified and discussed.
- 2.7 Paragraph 3.1 also states that market definition is not an end in itself, but a means to assessing effective competition for the purposes of ex-ante regulation. The Director has adopted an approach by which this consideration is at the centre of his analysis. The purpose of market definition is to illuminate the situation with regard to competitive pressures. For example, the Director's approach to supply-side substitution explicitly identifies as the key issue the question of whether additional competitive constraints on pricing are brought to bear by additional suppliers entering the market. Thus, the key issue is not the market definition for its own sake, but an identification of the extent and strength of competitive pressures.
- 2.8 Paragraph 4 of the Recommendation states that retail markets should be examined in a way which is independent of the infrastructure being used, as well as in accordance with the principles of Competition Law. Again this approach is at the heart of the Director's analysis. The Director's approach is based on a Competition Law based assessment of markets and an assessment of the extent to which switching among services by consumers constrains prices, irrespective of the infrastructure used by the providers of those services.

Identification of markets

- 2.9 There are two dimensions to the definition of a relevant market: the relevant products to be included in the same market and the geographic extent of the market. The Director's approach to market definition follows that used by UK competition authorities (see *Office of Fair Trading Market Definition Guideline*, *OFT 403*, March 1999, that can be found at:
- www.oft.gov.uk/Business/Legal+Powers/ca98+publications.htm#guide) and is in line with those used by European and US competition authorities.
- 2.10 Market boundaries are determined by identifying constraints on the price-setting behaviour of firms. There are two main competitive constraints to consider: how far it is possible for customers to substitute other services for those in question (demand-side substitution); and how far suppliers could switch, or increase, production to supply the relevant products or services (supply-side substitution) following a price increase.

- 2.11 The concept of the 'hypothetical monopolist test' is a useful tool to identify close demand-side and supply-side substitutes. A product is considered to constitute a separate market if a hypothetical monopoly supplier could impose a small but significant, non-transitory price increase (SSNIP) above the competitive level without losing sales to such a degree as to make this unprofitable. If such a price rise would be unprofitable, because consumers would switch to other products, or because suppliers of other products would begin to compete with the monopolist, then the market definition should be expanded to include the substitute products.
- 2.12 Sometimes an additional consideration is whether there are common pricing constraints across customers, services or areas such that they should be included within the same relevant market even if demand and supply side substitution are not present.

Order of market analysis and proposed remedies

- 2.13 This consultation document defines the relevant markets both at the retail and the wholesale level. The analysis of retail market definitions is logically prior to the definition of upstream (wholesale) markets. This is because demand for upstream services is a derived demand, ie the level of demand for wholesale inputs depends on the demand for outputs (retail services). The definition of a retail market is likely to influence the market definition, and consequently any assessment of SMP, in related upstream markets. The relevant upstream markets are generally (at least) as broad as the demand-side substitutes in the relevant retail market.
- 2.14 Because of this, the Director's preferred approach to market definition is to define markets sequentially, starting with those that are furthest downstream, and ending with those that are furthest upstream.
- 2.15 The purpose of the Director's market definition exercise is to inform his assessment of market power and identify appropriate remedies in the relevant market. It is therefore important that, at the wholesale level, markets are defined using the assumption that there is no regulation in any market. This approach ensures that the assessment of market power at the wholesale level does not depend on a retail market definition that is influenced by wholesale remedies. The method avoids the potential problem of circularity which could arise in market definition. However, the market definition used in any assessment of market power in downstream markets must be conducted in the presence of any proposed regulation in markets that are further upstream, since the presence of any such regulation may provide a constraint at the retail level by removing barriers to entry.
- 2.16 The Director's preferred approach is therefore to:

- define all markets in the absence of regulation, starting downstream and then moving upstream, with the aim of defining the most upstream market;
- assess market power in the furthest upstream market, defined in the absence of regulation, and identify appropriate remedies in that upstream market. Then
- redefine all markets further downstream in the presence of that upstream regulation, and use these redefined markets for the assessment of market power and appropriate remedies in these downstream markets. This analysis starts upstream and then moves downstream, because the Director needs to assess whether upstream remedies remove downstream market power and the need for downstream remedies.

The application of this approach to leased lines markets is discussed below.

Application to market analysis

- 2.17 The Director has identified the following vertical levels in this review:
- retail end-to-end leased lines using traditional interfaces, split by bandwidth; and (in a separate market – see below) retail leased lines using alternative interfaces without bandwidth split;
- wholesale trunk segments; and
- wholesale symmetric broadband origination.
- 2.18 These three broad product groupings can be characterised as being vertically linked, with retail products being the furthest downstream and wholesale symmetric broadband origination (both traditional interface or TISBO and alternative interface or AISBO) the furthest upstream. Trunk segments are further downstream than symmetric broadband origination since symmetric broadband origination circuits are at the periphery of the network, providing connections to end users, whilst trunk segments are part of 'core networks', providing capacity between nodes on core networks.
- 2.19 Based on this upstream/downstream distinction, and in the light of the introductory text above, the Director has conducted his market analysis, ie market definition and assessment of market power and appropriate remedies, sequentially, as outlined in the table below. The numbers 1 to 11 indicate the logical order in which the Director's analysis has taken place. The physical order of these analyses in this document is different for ease of presentation, eg there is one section on retail market definition which covers both analyses 1 and 9 in the Table. The analysis has been undertaken for both geographic areas defined, ie the UK excluding Hull and the Hull area.

Table 2.1 – Order of market analysis

	Market definition	SMP assessment	Remedies	
Retail	In absence of retail or wholesale regulation In presence of proposed terminating and trunk segment remedies, but no retail regulation	10. In presence of proposed terminating and trunk segment remedies, but no retail regulation	11. In presence of proposed terminating and trunk segment remedies, but no retail regulation	
Trunk segments	In absence of retail or wholesale regulation In absence of retail regulation, but in presence of proposed terminating segment remedies	7. In absence of retail regulation, but in presence of proposed terminating segment remedies	8. In absence of retail regulation, but in presence of proposed terminating segment remedies	
Symmetric broadband origination	In absence of retail or wholesale regulation	In absence of retail or wholesale regulation	5. In absence of retail or trunk regulation	

Substitution possibilities and additional constraints

- 2.20 Markets are defined first on the demand side. The analysis of demand side substitution will be undertaken by considering if other retail services could be considered as substitutes by consumers, in the event of the hypothetical monopolist introducing a SSNIP above the competitive level.
- 2.21 Supply side substitution possibilities are then assessed to consider whether they provide any additional constraints on the pricing behaviour of the hypothetical monopolist which have not been captured in the demand side analysis. In this assessment, supply side substitution will be considered as a low cost form of entry, which could take place within a relatively short period of time. The OFT Guidelines on *Market Definition*, OFT 403, March 1999, consider the relatively short period to be within a year. That is, for supply side substitution to be relevant, there would need to be additional competitive constraints arising from entry into the supply of the service in question, from suppliers who are able to enter quickly and at low cost, by virtue of their existing position in the supply of other services. As discussed earlier, only those supply side substitution

possibilities that are viable in the absence of unregulated wholesale inputs will be considered as relevant to the analysis.

- 2.22 There might be suppliers who provide other retail and wholesale services but who might also be materially present in the provision of demand side substitutes to the service for which the hypothetical monopolist has raised its price. However, such suppliers are not relevant to supply side substitution, as they supply services already identified as demand side substitutes. As such, their entry has already been taken into account and so supply side substitution cannot provide an additional competitive constraint on the hypothetical monopolist. However, the impact of expansion by such suppliers can be taken into account in the assessment of market power.
- 2.23 A third factor that should be considered is whether there are common pricing constraints across customers, services or areas such that they should be included within the same relevant market even if demand- and supply- side substitution are not present.

Relationship between market reviews and Competition Act 1998 and Enterprise Act 2002 investigations

- 2.24 The economic analysis carried out in this consultation document is for the purposes of determining whether an undertaking or undertakings have SMP in relation to this market review. It is without prejudice to any economic analysis that may be carried out in relation to any investigation or decision pursuant to the Competition Act 1998 or the Enterprise Act 2002.
- 2.25 The fact that economic analysis carried out for a market review is without prejudice to future competition law investigations and decisions is recognised in Article 15(1) of the Framework Directive which provides that:
- "...The recommendation shall identify ...markets ...the characteristics of which may be such as to justify the imposition of regulatory obligations ...without prejudice to markets that may be defined in specific cases under competition law..."
- 2.26 This intention is further evidenced in the Commission's SMP guidelines which state:
- Para 25 "... Article 15(1) of the Framework Directive makes clear that the market to be defined by NRAs for the purpose of ex ante regulation are **without prejudice to those defined by NCAs** and by the Commission in the exercise of their respective powers under competition law in specific cases." (repeated in paragraph 37)

- 2.27 Para 27: "...Although NRAs and competition authorities, when examining the same issues in the same circumstances and with the same objectives, should in principle reach the same conclusions, it cannot be excluded that, given the differences outline above, and in particular the broader focus of the NRAs' assessment, markets defined for the purposes of competition law and markets defined for the purpose of sector-specific regulation may not always be identical".
- 2.28 Para 28: "...market definitions under the new regulatory framework, even in similar areas, may in some cases, be different from those markets defined by competition authorities."
- 2.29 In addition, it is up to all communications providers to ensure that they comply with their legal obligations under all the laws applicable to the carrying out of their businesses. It is incumbent upon all communications providers to keep abreast of changes in the markets in which they operate, and in their position in such markets, which may result in legal obligations under the Competition Act 1998 or Enterprise Act 2002 applying to their conduct.

Draft decision on the relevant market(s)

2.30 The market definitions proposed in this chapter are based on the evidence available to the Director and take account of comments made in the first stage of consultation which closed on 20 June 2003. Annex D lists the names of organisations which made non confidential responses to that consultation exercise.

Markets identified

- 2.31 In summary, the Director has identified the following product markets in the UK excluding Kingston upon Hull:
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s) – this includes analogue circuits of relevant bandwidths, and incorporates the minimum set of retail leased lines up to and including 2Mbit/s identified by the Commission;
- wholesale low bandwidth traditional interface symmetric broadband origination ("TISBO") (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination ("TISBO") (above 8Mbit/s up to and including 155Mbit/s);
- wholesale very high bandwidth traditional interface symmetric broadband origination ("TISBO") (above 155Mbit/s);
- wholesale alternative interface symmetric broadband origination ("AISBO");
 and
- wholesale trunk segments (note that this market extends to the whole of the UK).

- 2.32 In addition, the Director has identified the following product markets in the Kingston upon Hull area:
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s) – this incorporates the minimum set of retail leased lines up to and including 2Mbit/s identified by the Commission;
- wholesale low bandwidth traditional interface symmetric broadband origination ("TISBO") (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination ("TISBO") (above 8Mbit/s up to and including 155Mbit/s); and
- wholesale alternative interface symmetric broadband origination ("AISBO").
- 2.33 Although the Director has considered retail traditional interface leased lines at bandwidths above 8Mbit/s and retail alternative interface leased lines during his analysis, he does not consider it necessary to formally identify (for the purposes of section 79 of the Act) retail markets covering such products as he considers that regulation at the wholesale level is sufficient to meet regulatory objectives in these areas.

Issues discussed in identifying markets

- 2.34 The Director sets out below and in Annex A how he has arrived at the above market definitions. The Director discusses the following issues in arriving at these definitions:
 - 1. retail symmetric vs asymmetric services
 - 2. retail leased lines vs other data services
 - 3. retail leased lines using traditional interfaces vs retail leased line using alternative interfaces
 - 4. retail leased lines bandwidth distinctions
 - 5. retail leased lines analogue vs digital circuits
 - 6. retail leased lines geographic markets
 - 7. retail leased lines Hull area
 - 8. wholesale trunk vs symmetric broadband origination
 - 9. wholesale trunk bandwidth distinctions
 - 10. wholesale trunk geographic considerations
 - 11. TISBO vs AISBO
 - 12. TISBO bandwidth distinctions
 - 13. AISBO bandwidth distinctions
 - 14. Wave Division Multiplexed services
 - 15. SBO geographic considerations.

Retail markets

Issue 1: Symmetric vs asymmetric – rationale for separate markets for retail leased lines and asymmetric broadband products and services

- 2.35 The Director considers that in the UK, retail leased lines (offered using both traditional and alternative interfaces) and asymmetric broadband products and services are in separate markets. The Director has reached this conclusion on the assumption that there is an absence of any regulation, as well as an assumption of the presence of wholesale remedies.
- 2.36 On the demand side, the Director is of the view that retail leased line customers do not consider the currently available asymmetric broadband services to be close substitutes for leased lines because these asymmetric services do not offer dedicated capacity. Even if uncontended asymmetric broadband services were to become available within the lifetime of this market review, potential substitutability would be restricted because an asymmetric service can only be used to offer a leased line at a speed up to the lower of the speeds in each direction (usually upstream). The Director therefore considers that in the absence of wholesale remedies, asymmetric broadband services do not constrain leased lines.
- 2.37 In the absence of wholesale remedies, existing suppliers of asymmetric broadband services relying on LLU do not create any, or a sufficiently material, competitive constraint to justify broadening the market definition because they are few and do already sell retail leased lines. The other suppliers of asymmetric broadband services can only provide supply-side substitutes if they could have access to the wholesale symmetric inputs. However in the absence of wholesale regulation, the requisite inputs would not be available and this type of substitution would not be possible.
- 2.38 The presence of wholesale remedies does not modify the conclusion reached by the demand-side substitution analysis in the absence of wholesale remedies. This is because the reasoning is independent of the availability of cost based wholesale inputs, ie PPCs.
- 2.39 The presence of wholesale regulation, such as PPCs, is expected to make it easier for suppliers of asymmetric broadband services to enter the supply of leased lines. However the Director has identified factors (eg PPC lead times, barriers to switching and to expansion) that are likely to reduce the strength of the competitive constraint these potential entrants would impose on the hypothetical monopolist in case of a SSNIP, so that they do not satisfy the criteria for supply-side substitution.
- 2.40 Therefore, in the presence of wholesale remedies, the Director considers that retail leased lines and asymmetric broadband services are in separate

markets because demand-side substitution and supply-side substitution are not powerful enough to make unprofitable a SSNIP by a hypothetical monopolist.

Forward look

2.41 The Director has considered the likelihood of competitive or technical developments that might affect the markets identified during the period covered by this review. The Director's view is that there are likely to be no developments that would require a change in these market definitions within a 2-3 year period. However, the Director will keep market conditions under review. This is particularly important in high technology markets such as these.

Issue 2: Retail leased lines and other data services

2.42 The Director has concluded that retail leased lines constitute a separate market from other data services. As discussed in the consultation document on the *Review of Wholesale Broadband Access* (www.oftel.gov.uk/publications/eu_directives/2003/eu_wholesale_broadband/ind

(www.oftel.gov.uk/publications/eu_directives/2003/eu_wholesale_broadband/ind ex.htm), the Director considers that asymmetric and symmetric services are in separate markets. However, the director also considers that leased lines are in a separate retail market to other (symmetric) data products, such as symmetric broadband Internet access and VPNs. The rationale for sub-dividing symmetric services into separate markets is explained below.

Demand side substitution

- 2.43 A leased line has the following important features:
- it offers dedicated transparent transmission capacity between two points, providing guaranteed bandwidth that is available 24/7, not shared with other users (ie it is uncontended);
- it is highly flexible users can determine and manage what services are carried over it;
- it offers a secure communication channel; and
- it is normal for leased lines to be supplied with high levels of customer care Leased lines therefore represent one of the most versatile and highest quality electronic communications services available to retail consumers.
- 2.44 In comparison, other managed data products such as VPNs and Internet access, are generally contended/shared at some point, and thus do not provide guaranteed bandwidth. Further, the end user has less flexibility, as there is more third party management. Also, these products are not usually provided with a high level of customer care as standard and although it is possible for consumers to purchase enhanced service levels on some products, it normally falls short of leased line service levels.

- 2.45 Due to the versatility of leased lines they can, in some instances, be used as inputs into other data services, although the reverse is not true. Use of retail leased lines in the provision of other data services is discussed further under supply side substitution below.
- 2.46 Given the unique characteristics of a leased line it is considered that consumers who require a leased line are unlikely to switch to an alternative data service if a hypothetical monopolist was to increase the price of leased lines by 5 to 10 per cent above the competitive level. The Director therefore believes that other symmetric data products are not demand-side substitutes for leased lines.

Supply side substitution

- 2.47 A proportion of the existing suppliers of other symmetric data products (such as managed data products) supply these products by buying retail leased lines. Thus if a hypothetical monopolist increases retail leased lines prices by 5 to 10 per cent above the competitive price, these suppliers would have to pay 5 to 10 per cent more for their inputs. They would thus not be in a position to impose a competitive constraint on the hypothetical monopolist.
- 2.48 Although competitive cable access networks already exist in the UK they are not suitable for providing leased lines, because cable networks in the UK are inherently asymmetric and it would be extremely inefficient to use them to provide symmetric services such as leased lines, and to 'up-grade' them would take considerable time and cost. In addition, leased lines tend to be purchased predominantly by businesses and hence are typically deployed in business districts, whereas the cable networks in the UK have been deployed mainly in residential areas.
- 2.49 Therefore in the absence of wholesale regulation existing suppliers of other symmetric data products/services would not be able to constrain the activities of a hypothetical leased line monopolist to the competitive level through supply side substitution.

Conclusion

2.50 The above supply-side and demand-side analysis leads the Director to conclude that retail leased line services and other symmetric data services are in separate markets.

Issue 3: Retail traditional interface leased lines vs retail alternative interface leased lines

2.51 Responses to the previous consultation submitted by alternative network communications providers suggested that the Director's market definitions for the leased lines markets were too narrow, in that they did not fully consider the role

of alternatives to the traditional SDH-based retail leased line products such as BT's *KiloStream* and *MegaStream* ranges (and their wholesale equivalents, including symmetric broadband origination).

2.52 Specifically, it was suggested that alternatives, such as Ethernet-based LES circuits, should be included within the relevant markets in addition to the SDH-based services discussed in the previous consultation. The following sections discuss the Director's views on this issue.

Demand side substitutability

2.53 As discussed in Chapter 1, the term 'LES circuits' refers to a broad category of products supplied by means of Ethernet¹ over fibre. These circuits have some similarities with SDH-based leased lines as outlined in paragraph 3.28 of the previous consultation. The key characteristics in question are that they offer dedicated transparent transmission capacity between two points, providing guaranteed bandwidth that is available 24/7, and is uncontended (ie it is not shared with other users). However, the Director has identified a number of limitations to the degree of substitutability between LES and SDH circuits. These are discussed below.

End user applications

2.54 Ethernet and SDH are different ways of packaging data. The relative merits of the two vary according to the required end user application, for example:

- Ethernet-based services cannot readily be used to convey certain types of traffic, eg conventional voice (although it can support Voice Over IP), ISDN, Centrex or national virtual private networks (VPN), or for transferring data based on protocols other than Ethernet; and
- SDH-based services are not suitable for use in certain data applications such as storage area networks. This is discussed in more detail in Annex A.

2.55 On a forward-looking basis, it has been suggested to the Director that since customers are increasingly moving to IP virtual private networks (IPVPN) as a substitute for ATM and Frame (over SDH), it could be argued that the importance of the first difference (Ethernet services not supporting conventional voice) will diminish over time. However, the Director's view is that the demand for IPVPN - type solutions is currently not sufficiently widespread to alter the market definition, and that this position is unlikely to change to a sufficient extent during the period of this review to warrant the finding of an alternative definition.

¹ Other interfaces are also used in some instances. While Ethernet is currently the most widespread, others (eg Fibre Channel) may increase in importance over time.

Distance constraints

- 2.56 The provision of LES circuits is constrained to relatively short distances in certain cases. For example, the retail LES circuits sold by BT are in many cases restricted to a maximum radial distance of 25km (or 35km in certain cases).
- 2.57 The Director's view is that this factor is unlikely to be as significant a consideration in assessing substitutability as the functionality differences identified above. For example, while a LES circuit delivered by means of a direct fibre connection is limited in distance to a maximum of 25km, longer end-to-end circuits can be provided using LES based tails plus a core (SDH/other) network. Such circuits are central to the plans of the communications providers who have requested that BT provide a wholesale network access version of LES circuits, and they fall within the retail LES circuits market since in all respects other than distance constraints they resemble LES circuits delivered direct over fibre. Additionally, Ethernet-based circuits can be supplied over WDM technology (see below), in which case distance constraints do not apply.
- 2.58 Notwithstanding the above caveats, given the distance restrictions that currently apply to a significant proportion of the LES circuits that are currently in supply, this issue will restrict substitutability to some extent, and as such has been taken into account by the Director in his analysis.

Availability

2.59 Standard SDH circuits offer 99.95% availability of service, whilst Genus SDH circuits offer 99.995% availability. Standard LES circuits offer a slightly lower level of availability than standard SDH circuits, 99.9%, although dual provision LES circuits offer the same availability as Genus SDH circuits, 99.995%. Given the closeness of these figures, the Director's view is that considerations of service availability are unlikely to be a key factor in the analysis.

Criteria for demand side substitutability

- 2.60 The differences in functionality (traffic type and range restrictions) outlined above represent a significant barrier to demand side substitution between LES and SDH-based products. In analysing this issue it is useful to consider three groups of consumers, namely:
- customers whose preferences are such that either a LES or SDH-based solution will meet their needs (eg they want a solution to carry data traffic that can be routed over SDH or LES);
- (b) customers whose preferences are such that only an SDH-based solution will meet their needs a LES solution will not (eg they want to transmit voice (and possibly also data) traffic); and

- (c) customers whose preferences are such that only a LES solution will meet their needs an SDH-based solution will not (eg needing a high level of accuracy regarding data transfer times).
- 2.61 Customers in groups (b) and (c) would never switch between LES and SDH-based products following a SSNIP and would therefore never view the two as close substitutes.
- 2.62 Some customers in group (a) might switch, depending on price and other considerations. However, even a very detailed survey exercise would not make it possible to assess the relative size of this group on a forward looking basis. The Director has therefore informed his analysis by means of a price comparison, as outlined below.

Price comparisons and conclusions on demand side substitutability

- 2.63 The extent to which demand-side substitution by group (a) would be likely to happen can be informed by a comparison of the retail prices of SDH-based and LES circuits. The Director has conducted such a comparison which concludes that SDH-based circuits are considerably more expensive than LES circuits. In the light of these differences in price, it is unlikely that the price of SDH-based circuits would constrain the price of LES circuits, since the preferences of any consumer whose technical requirements were satisfied by LES circuits would not be altered by a price increase of 5%-10% to LES circuits, since these would remain considerably cheaper than the SDH-based alternative.
- 2.64 It does, however, seem possible that the price of LES circuits could constrain that of SDH-based circuits. If the prices of LES circuits were significantly below their SDH based equivalents, an increase in the price of SDH-based circuits might be expected to lead to customers switching away from SDH-based circuits. In view of the limitations of LES circuits described above, it is difficult to assess the proportion of consumers who would be likely to switch from SDH-based to LES circuits. In view of the similarities in functionality outlined above, it could be argued that at least a degree of substitution would occur.
- 2.65 However, the Director's view is that such substitution is unlikely to be widespread. This is because it is highly unlikely that a significant number of customers in group (a) would currently be using (or considering using) SDH-based solutions if their needs were met equally well by a LES solution, given the large price differential. While it is possible that there are consumers who have opted for SDH-based circuits because they were not aware of the availability and prices of LES circuits, the Director does not propose to rely on such an argument as LES circuits have been available for some time and he has received comments from various sources indicating that leased lines consumers are relatively well informed about the choices available. He is therefore of the view that SDH-based and LES circuits are not sufficiently close demand side

substitutes to be included in the same market. On a forward-looking basis the availability of LES-based circuits may increase, eg as distance restrictions become less important. However, the Director's view is that such a consideration is unlikely to be relevant within the timeframe of this review given that distance restrictions currently apply to the vast majority of LES-based circuits that have been sold.

Supply side substitutability

2.66 The Director has considered whether supply side substitutability at the retail level would lead to a widening of the existing market definition to include both SDH-based and LES circuits. Such supply side substitutability would exist if, in the absence of wholesale regulation, the suppliers of LES circuits were able to provide SDH-based circuits at low cost and within a relatively short period of time. However, since the majority, if not all, of the suppliers of LES circuits already supply SDH-based circuits (and vice versa), LES suppliers would not place any additional constraints on a hypothetical monopolist supplier of SDH-based circuits (and vice versa).

2.67 The Director's view is therefore that supply side substitution would not lead to a widening of the SDH market definition to include LES.

Conclusion on retail traditional interface leased lines vs retail alternative interface leased lines

2.68 As outlined above, the Director's view is that SDH-based (traditional interface) and LES-based (alternative interface) circuits form distinct economic markets at the retail level.

Issue 4: Retail leased lines - bandwidth distinctions

2.69 For the UK excluding Kingston upon Hull, the Director has found there to be separate markets for low, high and very high capacity retail traditional interface leased lines and a single market for retail alternative interface leased lines. The Director has identified two breaks in the chain of substitution between traditional interface retail leased lines of different bandwidths, namely above 8Mbit/s and above 155Mbit/s. Thus the Director's definition of low bandwidth retail leased lines departs from the Commission's recommendation that defines the market for the minimum set of retail leased lines, ie those up to and including 2Mbit/s.

Traditional interface - bandwidth distinction at 8Mbit/s

2.70 The Director considers that the split between low and high bandwidth traditional interface leased lines in the UK occurs above 8Mbit/s rather than above 2Mbit/s principally because there is a greater likelihood of 2Mbit/s leased lines constraining the price of 8Mbit/s leased lines than there is of 8Mbit/s leased

lines constraining the price of 34Mbit/s leased lines. 8Mbit/s leased lines cannot constrain the prices of other services since new 8Mbit/s leased lines are no longer available, due to technical obsolescence.

- 2.71 BT's standard charges for retail 8Mbit/s circuits are very expensive relative to PPC charges, ie the rental charge on a per km basis is more expensive than even that for a single 34 Mbit/s wholesale symmetric broadband origination circuit, or four 2 Mbit/s wholesale symmetric broadband origination circuits. In this context, all customers with an 8Mbit/s circuit would, if offered the opportunity, switch to a symmetric broadband origination service, even without the 8Mbit/s charge being increased. This could be interpreted as suggesting that 8Mbit/s circuits might form a distinct economic market.
- 2.72 However, it is clear that the above comparison between retail prices for end-to-end leased lines and service-based wholesale charges for symmetric broadband origination is a simplified assumption. Because of this, the Director has analysed BT's relatively low London (020 7) retail charges for 8Mbit/s circuits. Doing so avoids the possibility of reaching the non-meaningful conclusion that symmetric broadband origination 'dominates' 8Mbit/s retail circuits without a SSNIP.
- 2.73 The Director's analysis suggests that a relatively large group of customers would be likely to, following a SSNIP, switch from the use of a single 8Mbit/s retail circuit for multiples of 2Mbit/s symmetric broadband origination services. However, the likelihood of customers switching from the use of multiples of 8Mbit/s retail circuits to the use of 34Mbit/s symmetric broadband origination appears to be considerably smaller.
- 2.74 The Director therefore considers that the price of 8Mbit/s circuits is likely to be constrained by the availability of 2Mbit/s circuits, and not by that of 34Mbit/s circuits, and that 8Mbit/s circuits should therefore be considered to be part of the low bandwidth market.
- 2.75 Consequently, in his assessment of the regulatory options for the retail market in Chapter 5, the Director is conducting regulatory option appraisals of both the Commission's minimum set of retail leased lines up to and including 2Mbit/s, which fall within the jurisdiction of Article 18 of the Universal Service Directive (dealing specifically with the minimum set), and 8Mbit/s retail traditional interface leased lines, which fall within the jurisdiction of Article 17 of the Universal Service Directive (dealing with all other retail services).

Traditional interface - bandwidth distinction at 155Mbit/s

2.76 The Director has considered whether a further bandwidth split might be appropriate based on demand-side considerations. In particular, he has

considered whether 622 Mbit/s and above circuits might form a distinct economic market.

2.77 The significant bespoke element of pricing (which exists at both the wholesale and retail level) complicates any attempt to compare cost based charges for 155 and 622 Mbit/s circuits. However, the Director's analysis, using various sets of assumptions, suggests that there is a relatively narrow range of bandwidth demands within which a SSNIP would induce switching between 155Mbit/s and 622Mbit/s. This has led the Director to conclude that a break in the chain of substitution occurs here.

Alternative interface - no bandwidth distinction

- 2.78 The Director has considered whether there should be a similar bandwidth split for alternative interface retail leased lines as he has identified for traditional interface leased lines. He has carried out a substitution analysis to determine whether the bandwidth distinctions identified for traditional interface leased lines apply similarly to alternative interface leased lines.
- 2.79 The costs of provision of LES-based alternative interface circuits do not vary significantly by bandwidth. This is because the costs of duct and fibre, which are generally variant with bandwidth, form a very high proportion of the total cost of provision, even at higher bandwidths. This is supported by confidential information submitted by communications providers during the first consultation period. This information suggested that the one-off capital expenditure required to provide a retail product equivalent to BT's LES 1000 (1Gbit/s) product was less than 1% greater than that required to provide an equivalent to a 10Mbit/s product. It is therefore not appropriate to define distinct markets according to bandwidth, as has been done in other leased lines markets, because the higher bandwidth LES circuits do competitively constrain the prices of lower bandwidth LES circuits.
- 2.80 The Director has, therefore, concluded that there is no break in the chain of substitution between different bandwidth alternative interface retail leased lines and that this forms a single market.

Supply-side substitution

2.81 Demand-side factors suggest that the breakpoints in the chain of substitution between low and high bandwidth traditional interface circuits occurs between 8Mbit/s and 34Mbit/s circuits and above 155Mbit/s — otherwise all other traditional interface circuits are linked to those of higher and lower bandwidth by a chain of substitution. Similarly, demand-side factors suggest that all alternative interface circuits are linked to those of higher and lower bandwidths by a chain of substitution. The key question in terms of supply-side substitution is therefore whether the breakpoints for traditional interface circuits are removed by supply-

side substitution – if so, the Director's market definition needs to be broadened accordingly.

- 2.82 The Director notes that suppliers of leased lines generally supply circuits at a variety of bandwidths. The aggregation of current suppliers of low bandwidth traditional interface circuits the 'hypothetical monopolist' therefore already includes all significant suppliers of very high bandwidth traditional interface circuits, and vice versa. Switching on the supply side from one bandwidth to another would not therefore constitute new entry or an additional competitive constraint. Therefore, such suppliers are not relevant to supply-side substitution since they supply services already identified as demand-side substitutes.
- 2.83 In addition, in the absence of wholesale regulation, the Director considers that supply-side substitution of this type at the retail level is unlikely, because the costs of local access to a new site that would be incurred by a new entrant are significant and include sunk costs, such as digging and ducting. The absence of access to cost based wholesale inputs therefore means that other communications providers would not be able quickly or cheaply to commence the supply of these services to undermine the price increase of a hypothetical monopolist.
- 2.84 The Director is therefore minded to conclude that there is no supply-side substitution between high and low traditional interface leased line markets.

Responses to previous consultation – bandwidth distinctions

- 2.85 Energis suggests in its response that there is little distinction between high and very high bandwidth services, particularly on a forward looking basis. It suggests that communications providers can use the cheaper LES circuits at higher (622Mbit/s) bandwidths, reducing or removing the price differential between 155Mbit/s and 622Mbit/s and placing the two bandwidths in the same market. Communications providers observe that customers do use multiples of 155Mbit/s circuits as substitutes for 622Mbit/s circuits. Going forward, Energis suggests that flexible bandwidth Ethernet and LES services will make a distinction between high and very high bandwidth unsustainable.
- 2.86 The Director has re-assessed the extent of the symmetric broadband origination market in the light of communications providers' responses (see below), and concluded that LES based services are in a distinct economic market. As a result the distinguishing features of such services which mean that bandwidth differentiations cannot be identified, do not undermine or conflict with the bandwidth distinctions for 'standard' symmetric broadband origination services, identified by the Director in the first consultation document and set out above.

Conclusion on bandwidth distinctions

2.87 Considerations of demand-side substitution have been key in the Director's market definition analysis. These have led him to conclude that there are the following retail leased lines product markets:

- traditional interface products with bandwidths up to and including 8Mbit/s;
- traditional interface products with bandwidths from 34Mbit/s to 155Mbit/s inclusive;
- traditional interface products with bandwidths of 622Mbit/s and above; and
- alternative interface products of all bandwidths (currently supplied at bandwidths of 10Mbit/s and above).

2.88 Although the Director has considered traditional interface retail leased lines at bandwidths above 8Mbit/s and alternative interface retail leased lines during his analysis, he does not consider it necessary to formally identify (for the purposes of section 79 of the Act) retail markets covering such products, as he considers that regulation at the wholesale level is sufficient to meet regulatory requirements.

Forward look

2.89 The Director has considered the likelihood of competitive or technical developments that might affect the markets identified during the period covered by this review. The Director's market definition has taken into account the anticipated technological advances highlighted in communications providers' responses, in order to ensure that the definition remains robust on a forward looking basis. The Director's view is that there are no further developments that would require a change in these market definitions within an 2-3 year period. However, the Director will keep market conditions under review.

Justification for inclusion of 8Mbit/s circuits in low bandwidth traditional interface market against the requirements in the Commission's Recommendation

2.90 As noted above, the inclusion of 8Mbit/s circuits in the retail low bandwidth traditional interface leased lines market has the effect of requiring the Director, in his assessment of the regulatory options for the retail market in Chapter 5, to conduct regulatory option appraisals of both the Commission's minimum set of retail leased lines up to and including 2Mbit/s, and 8Mbit/s retail leased lines. It also represents a departure from the Commission's Recommendation on markets, and as a consequence the Director is required to justify the departure specifically against the three criteria set out in the Recommendation, namely:

1. barriers to entry and the development of competition;

- 2. 'dynamic aspects' ie whether the market is dynamically moving towards effective competition with new entrants and increased innovation; and
- 3. the relative efficiency of competition law.

1. Barriers to entry and the development of competition

- 2.91 The provision of 8Mbit/s circuits is characterised by very high barriers to entry (sunk costs). This is reflected by BT's high market share in low bandwidth traditional interface circuits, which is in the region of 70% by revenue at the retail level (and in the region of 50% by revenue in the case of 8Mbit/s circuits alone).
- 2.92 In the interests of proportionality and the fact that the 8Mbit/s standard is becoming obsolete (see Chapter 5), the Director has decided not to mandate LRIC plus pricing at this bandwidth (as he has for all other low bandwidth TISBO PPC products). This means that barriers to entry in the 8Mbit/s segment of the retail leased lines market will remain high.

2. Dynamic aspects

- 2.93 Since no new 8Mbit/s circuits are being sold, this product is characterised by very high barriers to expansion since there are no new customers available over which alternative retail (or wholesale) providers will be able to compete with existing suppliers.
- 2.94 This is due to the technical obsolescence of the 8Mbit/s standard.
- 2.95 These factors, together with the barriers to entry alluded to above, mean that there is no prospect of competition developing in this segment of the low bandwidth market.

3. Relative efficiency of competition law

2.96 The relative efficiency of competition law is discussed in detail in Chapter 4.

Issue 5: Analogue and digital circuits

- 2.97 The Director has concluded that analogue retail leased lines are in the same market as digital retail leased lines. This accords with the Commission's Recommendation which states in section 4.2.3 that "It is not felt necessary to identify specific markets for each category of leased line in the minimum set since it is likely that the market structure will be similar for each sub-set".
- 2.98 On the demand side, a substitution analysis shows that analogue and digital leased lines should be viewed as being in the same market because, on a forward looking basis, the price of digital leased lines is likely to constrain the price of analogue leased lines. This is explained in more detail in Annex A.

Issue 6: Retail leased lines geographic markets

- 2.99 In addition to the products to be included within a market, market definition also requires the geographic extent of the market to be specified. The geographic market is the area within which demand side and/or supply side substitution can take place and is defined using a similar approach to that used to define the product market. The Director has considered the geographic extent of each relevant market covered in his market review consultation documents.
- 2.100 There are a number of possible approaches to geographic market definition. One approach would be to begin with a narrowly-defined area and then consider whether a price increase by a hypothetical monopolist in that narrowly defined area would encourage customers to switch to suppliers located outside the area (demand-side substitution) or communications providers outside the area to begin to offer services in the area (supply-side substitution). If supply and/or demand side substitution is sufficient to constrain prices then it is appropriate to expand the geographic market boundary.
- 2.101 The Director recognises that in certain electronic communications (product) markets in the UK (eg wholesale trunk segments of leased lines), there could be different competitive pressures in different geographic areas. In these circumstances it might be possible to identify separate geographic markets for some services.
- 2.102 However, a number of difficulties would then arise. In particular, the definition of separate geographic markets using the hypothetical monopolist test as outlined above would likely lead to a proliferation of markets. This, when considered along with the dynamic nature of electronic communications markets, would likely mean that the boundary between areas where there are different competitive pressures would be unstable and change over time, rendering the market definition obsolete. It is not clear that determining ex-ante where the boundary would be is an exercise that could be carried out with any degree of accuracy.
- 2.103 Because of the difficulties associated with defining separate geographic areas, there is a risk that inappropriate decisions would be made about the imposition or removal of regulations, which could be detrimental to consumers and competition. In any case, even if separate narrow local markets were to be defined it is likely that BT would continue to have SMP in many of these markets. Therefore, such a detailed approach is unlikely to add significant benefit to the regulatory outcome being proposed.
- 2.104 An alternative approach is to define geographic markets in a broader sense. This involves defining a single geographic market but recognising that this single market has local geographical characteristics. That is to say, recognising

that within the single market there are areas where competition is more developed than in other areas. This avoids the difficulties of proliferation and instability.

Conclusion on retail leased lines geographic markets

- 2.105 The Director has concluded, based on the hypothetical monopolist test, that neither demand nor supply factors will constrain the pricing behaviour of a hypothetical monopolist of retail leased lines products in a local area, or even on a line by line basis. In addition, in the absence of regulation there is unlikely to be a national common pricing constraint since markets would probably be characterised by bespoke pricing. As discussed above, practical considerations suggest that defining a very large number of geographic markets would not be feasible. Consequently, with the exception of Hull in which competitive conditions are completely different to the rest of the UK the most sensible option is to define a national market, albeit in the knowledge that localised characteristics are likely to be present, for example in the Central London Zone (CLZ), discussed in Chapter 5.
- 2.106 Similar considerations apply to retail LES circuits, and the Director has therefore defined a distinct UK excluding Hull market for retail alternative interface circuits.

Issue 7: Retail leased lines - Hull area

- 2.107 The Director considers that the Hull area constitutes a separate market from the rest of the UK, for the reasons set out below (the text below being equally applicable in the cases of traditional and alternative interfaces).
- 2.108 For retail markets in the Hull area, a leased line should be regarded as a permanent connection providing capacity between two points in Kingston upon Hull (although this may be part of a leased line between a point in Kingston upon Hull and a point elsewhere in the UK). This can be used directly by a consumer or can form an input for the provision of other retail services.
- 2.109 On the demand side, in response to an increase in the price above the competitive level it seems clear that retail leased lines outside the Kingston upon Hull area, ie permanent connections providing capacity between two points in areas outside Kingston upon Hull, would not be perceived as substitutes.
- 2.110 On the supply side, it may be possible for a communications provider outside the Hull area to enter and invest in the infrastructure necessary to supply symmetric broadband origination within the Hull area in response to a price increase by a hypothetical monopolist. However, this is likely to be costly relative to the likely gains from supplying an end-to-end leased line product, since there are likely to be relatively low numbers of customers requiring a leased line in

Kingston upon Hull. As a result, there is little scope for supply-side substitution. However, the potential for new entry will be taken into account in the SMP assessment.

- 2.111 Consequently, it seems clear that demand and supply factors will not constrain the pricing behaviour of a hypothetical monopolist in the Kingston upon Hull area. As a result it is appropriate to define a separate traditional interface retail leased lines market for Kingston upon Hull.
- 2.112 Similar considerations apply to retail LES circuits, and the Director has therefore defined a distinct Hull market for retail alternative interface circuits.

Responses to previous consultation – separate market for Hull area

- 2.113 Kingston states in its response that it accepts that the Hull area forms "a distinct geographic market", and that the degree of competition should therefore be reviewed separately. Kingston does, however, question the Director's precise definition of the Hull area, suggesting that it should be refined through consultation between Oftel, the DTI and Kingston.
- 2.114 The Director remains of the view that the definition previously used, namely "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 Communications (Hull) plc", does ensure that the current regulatory regime, which sets different obligations in Hull from those in the rest of the UK, is maintained as transparently as possible. The Director is currently working with industry to create a new definition for the new regime, but this work has not been concluded in time for any new definition to be included in this review. The Director will consult on any change to the definition of the 'Hull Area' in due course, although it is not anticipated that any such change would substantially affect the geographical definition of the area.

Wholesale markets

Symmetric broadband origination and leased lines

- 2.115 This review covers leased line services at the retail level and corresponding services and products at the wholesale level.
- 2.116 A leased line is defined as a permanently connected link between two premises dedicated to the customer's exclusive use. The corresponding services and products at the wholesale level are the wholesale inputs required to offer this dedicated transparent transmission capacity at the retail level. One feature of this type of dedicated transparent capacity is that it must offer symmetric services.

These wholesale inputs must therefore be capable of providing symmetric services at a given bandwidth.

- 2.117 The wholesale inputs required to provide retail leased lines can also be used to provide other symmetric services at the retail level, namely symmetric broadband Internet access and other symmetric data services. Since all these retail services offer some type of broadband services at the retail level, the Director has decided to refer to the corresponding wholesale inputs as symmetric broadband origination and trunk segments.
- 2.118 As discussed in Chapter 1, symmetric broadband origination can itself be further subdivided between the traditional interface symmetric broadband origination ("TISBO") services such as wholesale terminating segments (PPCs), RBS and LLU backhaul and SDSL, and alternative interface symmetric broadband origination ("AISBO") services used as inputs for retail services such as LES and as an alternative form of LLU backhaul. The economic rationale for splitting the market in this way is discussed below. First, though, the Director discusses the distinctions between symmetric broadband origination and trunk services.

Issue 8: Wholesale trunk vs symmetric broadband origination

2.119 The Director has previously, in the context of both broadband and leased lines markets, identified distinct economic markets relating to core conveyance (see PPC Phase 1 Direction). The diagram in Chapter 1 illustrates the breakpoint between trunk segments and symmetric broadband origination that has been previously used by the Director. In the context of this review, the Director proposes to retain this distinction, based on the criteria outlined below.

Demand-side analysis

2.120 On the demand side, trunk and symmetric broadband origination are complements – they cannot be demand-side substitutes since they relate to dedicated capacity provided across different elements of the hypothetical monopolist's network.

Supply-side analysis

2.121 On the supply side, a hypothetical monopolist in the provision of either trunk or symmetric broadband origination would not be able to substitute into the other input without incurring the significant sunk costs (and amounts of time) required to build a distinct network.

Conclusion

2.122 Given the lack of demand and supply-side substitution described above, and the absence of a common pricing constraint, trunk and symmetric broadband origination constitute distinct wholesale markets.

Location of breakpoint between trunk and symmetric broadband origination

2.123 For the sake of clarity, the breakpoint between symmetric broadband origination and trunk segments is specified as BT's Tier 1 nodes, but the relevant markets include the equivalent on other communications providers' networks. The choice of Tier 1 as the breakpoint is based on evidence supplied to the director by BT regarding the extent of other communications providers' networks. This evidence shows that a significant number of other communications providers have built their networks up to the proximity of many of BT's Tier 1 nodes on BT's SDH network (see Annex B for details), whereas only a very small number reach other nodes. Handover therefore takes place, in the main, at Tier 1 nodes. Given the high sunk costs involved in extending a network to get closer to customer sites, the Director does not expect this situation to alter in the foreseeable future. This has led him to consider that BT's Tier 1 nodes provide the appropriate cut-off point. These nodes tend to be located at differing distance from customer sites, meaning that a market definition based on an average length of circuits would demonstrably fail to reflect actual market conditions.

Responses to previous consultation – location of breakpoint

- 2.124 BT considers the Tier 1 breakpoint to be somewhat arbitrary and unsustainable going forward, and suggests that it might be appropriate to define the breakpoint based on centres of population. Cable & Wireless agrees that it is an imperfect proxy, but states that adoption of an alternative would hinder market development since communications providers are currently adjusting their networks to take account of the recent decision by the Director on the Tier 1 breakpoint, and need a period of stability in order to make appropriate investment decisions. Other communications providers agree strongly with the latter viewpoint.
- 2.125 The Director agrees with communications providers that, while the Tier 1 breakpoint is not a perfect proxy, it is nevertheless the best and most transparent proxy available at the current time and any change to the proxy at this time would be likely to have a significant adverse effect on market development. The Director has obtained from BT its methods of determining the definition of a particular node as Tier 1 or otherwise, and is satisfied that these definitions are sufficiently robust to enable the Tier 1 breakpoint to remain appropriate at least for the period of this review.

Responses to previous consultation – symmetric trunk versus asymmetric wholesale broadband access

- 2.126 Communications providers suggest that there is a potential conflict in the definition for, and consequently the remedies applied to, the "core" markets in the leased lines and wholesale broadband access reviews, ie trunk conveyance and broadband conveyance respectively. SPC Network, on behalf of the competing operators, argued that, if its understanding was correct, then as ADSL and SDSL based services use the same ATM core infrastructure, that ADSL and SDSL conveyance may be substitutable and that the two types of conveyance could therefore be regarded as being in the same economic market (on the demand side).
- 2.127 The Director agrees with SPC Network's view that the broadband conveyance service that supports ADSL is technically the same product as the core conveyance that supports SDSL services. Conveyance across the ATM network used to support asymmetric end user applications is not itself restricted to being "asymmetric", since the degree of symmetry of traffic to and from end users is determined at the DSLAM. It is therefore the case that, when supplying core conveyance for a number of end users, a solution based on conveyance across the ATM network (using SDSL tails) may be substitutable with one based on conveyance across, for example, BT's tiered SDH network (using TISBO tails).
- 2.128 These two services could arguably be considered to be in the same market, and the SMP assessment relating to that conveyance across the ATM network that is used to support SDSL might therefore arguably be conducted in either or both of the leased lines or broadband market reviews. The Director's view is that it is only appropriate to assess the market for these services in one market review. Since SDSL-based products are symmetric and hence relate to this market review, the Director's view is that this is the appropriate place to consider such conveyance.
- 2.129 The Director considers that the potential substitutability of conveyance across the ATM network used to support SDSL-based services with conveyance across an SDH-based network that supports, for example, SDH-based leased line services does not remove the previously identified distinction between the markets for broadband conveyance and leased lines trunk segments. This is because SDSL downstream services do not currently constitute a significant part of the associated leased lines trunk markets, and therefore the prices of broadband conveyance (mostly used to support ADSL-based services) is unlikely to be constrained by the price for the trunk segments, and vice versa. The Director considers that this is unlikely to change over the period of this review.

Forward look

2.130 The Director has considered the likelihood of competitive or technical developments that might affect the markets identified during the period covered by this review. The Director's view is that there are no developments that would require a change in these market definitions within an 2-3 year period. However, the Director will keep market conditions under review, in particular the continued relevance of the Tier 1 breakpoint as the most appropriate proxy available for the breakpoint between trunk and symmetric broadband origination..

Issue 9 – Trunk segments at different bandwidths

2.131 It is not appropriate to define distinct trunk markets at different bandwidths. A very narrow market, such as trunk segments at a given bandwidth, can be broadened to encompass trunk segments at all bandwidths – see Annex A for details.

Responses to previous consultation – trunk at different bandwidths

2.132 BT considers that very high bandwidth trunk segments should be viewed as a separate market without regulation, since the Director proposed not to find SMP in very high bandwidth symmetric broadband origination. However, it would be neither theoretically nor practically appropriate to attempt to subdivide the trunk market by bandwidth, in view of the potential for substitution between bandwidths.

Issue 10: Geographic markets for wholesale trunk segments

- 2.133 As with retail circuits, there appears to be very limited scope for supply-side or demand-side substitution between trunk segments in different areas of the UK or different routes. The same point applies with respect to the impracticality of defining a very large number of narrow geographic markets (eg route-by-route), discussed in more detail above. The Director is therefore proposing to define one national market representing wholesale trunk segments in the UK, albeit in the knowledge that localised characteristics are likely to be present.
- 2.134 In the case of trunk segments, a separate market for the Hull area has not been defined because the size of the Hull area does not appear to be sufficiently large to warrant the functionality provided by trunk segments. The fact that an end-to-end leased line between two premises in the Hull area is provided using two symmetric broadband origination circuits illustrates this.
- 2.135 Kingston has provided information confirming that essentially its end-toend leased lines service is made up of two local ends.

Responses to previous consultation – geographic wholesale trunk market

- 2.136 BT states that it does not agree with the Director's inclusion of the Hull area in the wholesale trunk segments market. BT has no Tier 1 node in the Hull area and, it states, cannot therefore supply trunk segments in that region.
- 2.137 The Director notes BT's confirmation that it does not have a Tier 1 node in the Hull area and on this basis confirms that unless a Tier 1 node is set up in the Hull area at some point in the future, BT's obligations under the wholesale trunk segments market will not apply in respect of the Hull area.

Forward look

2.138 The Director has considered the likelihood of competitive or technical developments that might affect the markets identified during the period covered by this review. The Director's view is that there are no developments that would require a change in these market definitions within an 2-3 year period. However, the Director will keep market conditions under review.

Issue 11: Traditional interface symmetric broadband origination vs alternative interface symmetric broadband origination

- 2.139 As discussed in Chapter 1, symmetric broadband origination can itself be further subdivided between the traditional interface symmetric broadband origination ("TISBO") services such as wholesale terminating segments (PPCs), RBS and LLU backhaul and SDSL, and alternative interface symmetric broadband origination ("AISBO") services such as LES and alternative forms of LLU backhaul.
- 2.140 LES circuits are often supplied over short distances by means of a single direct end-to-end fibre. However, other configurations are possible, as has been discussed by BT and other communications providers in their negotiations regarding the availability of a wholesale product enabling other communications providers to replicate services such as BT's retail SHDS product line. With this in mind it is appropriate to define distinct markets for the access portion of end to end circuits delivered using LES based technology.
- 2.141 AISBO services can be identified by the following distinguishing features, discussed in more detail in "Issue 3: Retail traditional interface leased lines vs retail alternative interface leased lines" above:
- end user applications; and
- distance constraints.
- 2.142 The AISBO market would potentially include wholesale equivalents of end to end LES circuits (currently constrained to distances up to 25km although this may change over time and as noted above this is not the defining feature of this

- market), as well as the access segments of longer end to end circuits, delivered using LES based technology.
- 2.143 The Director's substitution analysis carried out in respect of the equivalent retail markets (see Issue 3 above) translates through to the corresponding wholesale markets, since there is a derived demand for the wholesale services.
- 2.144 Even with the availability of a cost based TISBO/AISBO input, the pricing of a hypothetical monopolist supplier of either TISBO or AISBO services would not be constrained by the availability of the other service.
- 2.145 Given the technical differences between AISBO and TISBO, the two are likely not to be cost effective substitutes for one another in the majority of cases.

Responses to previous consultation – wholesale symmetric broadband origination product markets

2.146 BT does not consider that RBS backhaul, LLU backhaul or SDSL should be included in the TISBO market.

SDSL

- 2.147 In relation to SDSL, the Director notes that uncontended SDSL-based services can be used to provide the same functionality as a terminating segment, that is, dedicated transparent transmission capacity up to a maximum of 8Mbit/s. Thus, uncontended SDSL-based services are in the same market as low bandwidth terminating segments.
- 2.148 Furthermore, as set out in Annex A there is a chain of substitution between uncontended and contended SDSL-based products on the demand side as well as on the supply side, leading to the conclusion that all SDSL-based symmetric broadband origination services should be included in the same relevant market. It would be inappropriate for the Director to specify a contention threshold to separate contended and uncontended SDSL services into two markets.
- 2.149 The Director therefore concludes that SDSL is a symmetric broadband origination service and that it should be included within the TISBO market.

RBS backhaul

2.150 In relation to RBS backhaul, the Director notes first that RBS backhaul circuits, which as described in Chapter 1 are wholesale inputs required for the provision of retail mobile telephony services, are technically equivalent to PPCs. A radio base station can be viewed as equivalent to an end user's premises, with traffic being carried to the appropriate point of interconnection on the mobile

communications provider's network. Because they are technically equivalent, these services are essentially the same product and ought therefore to be part of the same relevant product market, however they are labelled.

- 2.151 Notwithstanding this, the Director has carried out a substitution analysis assuming that the products are different. The conclusion of this analysis, which is set out in more detail in Annex A, is that in a competitive environment with prices set at the competitive level for both products and no restrictions on eligibility, demand-side substitution between RBS backhaul circuits and PPCs is likely in response to a SSNIP.
- 2.152 The Director therefore concludes that RBS backhaul is a symmetric broadband origination service and that it should be included within the TISBO market.

LLU backhaul

- 2.153 In relation to LLU backhaul, BT pointed out that it is also used for supplying asymmetric broadband services. Video Networks shared BT's view that LLU backhaul might form a separate market, because it believes that there is no demand- and supply-side substitution with SBO since LLU originates at a BT MDF site.
- 2.154 As described in more detail in Annex A, the Director has clarified how he reached his conclusions regarding LLU backhaul. LLU backhaul consists of LLU backhaul trunk and LLU backhaul link. LLU backhaul trunk is similar to the trunk segment of a leased line and is hence a substitute for trunk segments. This is why the Director considers that LLU backhaul trunk is part of the wholesale trunk market.
- 2.155 The Director is of the view that the issue of LLU backhaul links can be addressed in two different ways. The first involves carrying out a demand- and supply-side substitution analysis, This analysis suggest that SDH-based and LES-based LLU backhaul links are not demand-side substitutes for TISBO and AISBO respectively because they do not include a local end. Similarly either TISBO or AISBO are not demand-side substitute for LLU backhaul links because they offer a local end that is not needed and that has to be paid for. Supply side substitution analysis does not modify the conclusion of absence of substitution. This first approach leads to the conclusion that SDH-based LLU backhaul links should be in a separate relevant market to TISBO. Similarly, LES-based LLU backhaul links should be in a separate market to AISBO.
- 2.156 The second approach relies on the similarity of competitive conditions between SDH-based LLU backhaul links and TISBO on the one hand, and between LES-based LLU backhaul links and AISBO on the other hand. The similarity arises because the same technology is involved for providing

transparent transmission technology between an operator's POC and a point in the local access network (one further than the other one). This similarity means that the same type of entry barriers and economies of scale and scope are faced, especially those relating to digging and ducting. The Director further notes that competitive conditions for SDH-based LLU backhaul links and TISBO vary per bandwidth category (low/high/very high) whereas those for LES-based LLU backhaul links and AISBO do not.

2.157 Although the first approach has the attraction of addressing the fact that LLU backhaul can be used to supply both symmetric and asymmetric broadband services, the Director believes that the practical considerations in paragraph 2.156 should be given more weight. LLU backhaul links should be regarded as a symmetric broadband origination service and should therefore be included within the TISBO or AISBO markets, depending on the technology in use - bandwidth considerations being taken into account in the case of the SDH technology.

Conclusion on symmetric broadband origination product markets

2.158 From the above analysis, the Director has concluded that AISBO services form a distinct market separate from TISBO services.

Forward look

2.159 The Director has considered the likelihood of competitive or technical developments that might affect the markets identified during the period covered by this review. The Director's view is that there are no developments that would require a change in these market definitions within an 2-3 year period. However, the Director will keep market conditions under review.

Justification for definition of wholesale symmetric broadband origination markets against the requirements in the Commission's Recommendation

- 2.160 The definition of symmetric broadband origination markets differs from the Commission's Recommendation on markets, which discusses only a narrower market for wholesale terminating segments of leased lines (although the Recommendation does allow for segmentation by bandwidth). As a consequence, the Director is required to justify the departure specifically against the three criteria set out in the Recommendation, namely:
- 1. barriers to entry and the development of competition;
- 2. 'dynamic aspects' ie whether the market is dynamically moving towards effective competition with new entrants and increased innovation; and
- 3. the relative efficiency of competition law.
- 2.161 Before looking specifically at the three criteria in turn, the Director is minded to clarify in more general terms why he considers it appropriate to adopt

a slightly broader market at the wholesale level. Firstly, he wants to ensure that the remedies do not discriminate unduly between the technologies used to provide retail leased lines. Secondly, he wishes to include all other wholesale services (that is, services sold to public electronic communications network operators) that are technologically equivalent substitutes or that should not be considered as part of a separate market for pragmatic reasons.

1. Barriers to entry and the development of competition

- 2.162 Symmetric broadband origination covers symmetric transparent transmission capacity from a customer's premises to an appropriate point of aggregation. This functionality is supplied by using the same network components and technologies as the more specific wholesale terminating segments of leased lines. These network components, especially the local access (and to a lesser extent the main link) network, are characterised by high barriers to entry. These barriers to entry are of a structural type and arise because of high sunk costs, and large economies of scale and of scope. In particular the digging and ducting required by SBO services are very expensive and are at the source of these features.
- 2.163 The existence of high entry barriers, especially the high sunk costs, creates asymmetric conditions between the incumbent and entrants to the market, impeding or restricting the entry of the latter. Entrants will not be in a position to compete at the wholesale level until they have sunk a significant percentage of their costs.
- 2.164 Even if entry would intensify over the period covered by the review, the Director is of the view that the ubiquity advantage of the incumbent is unlikely to be sufficiently eroded as a result of that entry.

2. Dynamic aspects

2.165 The Director does not anticipate that the high barriers to entry mentioned above will be significantly reduced in the coming 18 to 24 months through market dynamism. On the one hand these barriers mainly reside in the deployment of local access (and main link) networks that is known to be exorbitant. On the other hand demand is not expected to be strong enough to justify significant investment in these networks by non-incumbent players and/or new entrants. In addition there is no evidence at the moment that technological progress would generate a commercially acceptable alternative enabling entrants to provide SBO without needing an access (and link) network similar to that of the incumbent.

3. Relative efficiency of competition law

2.166 The relative efficiency of competition law is discussed in detail in Chapter 4.

Issue 12: Bandwidth distinctions for traditional interface symmetric broadband origination

- 2.167 The Director has concluded that the separate markets by bandwidth at the retail level, defined on the demand side, also apply to traditional interface symmetric broadband origination ("TISBO").
- 2.168 The Director's analysis of demand-side substitution in retail markets for end-to-end leased lines is broadly applicable to the markets for wholesale TISBO. In particular, the Director considers that the arguments outlined in his retail market definition concerning bandwidth distinctions all read across directly into TISBO markets. This is because TISBO is a derived demand, reflecting retail demands, and the bandwidth of the origination circuit is determined by the bandwidth of the retail leased line (unlike trunk segments).
- 2.169 Therefore, as described above, the Director is of the view that (on the demand side) there is a chain of substitution (multiples of lower bandwidth circuits constraining the price of higher bandwidth circuits) that links TISBO segments at speeds up to and including 8Mbit/s;TISBO segments at speeds between 34Mbit/s and 155Mbit/s; and TISBO segments at 622Mbit/s and above.

Supply side analysis

- 2.170 The relevant question here is whether the definition on the demand side can be broadened by supply side substitution, eg whether a supplier of 8Mbit/s (or lower) TISBO services would enter the market for 34Mbit/s TISBO services in response to a significant price increase by a hypothetical monopolist supplier. However, the Director considers that the likelihood that a communications provider may already be serving the premises is very low, due to the relatively low penetration of these services. A communications provider would therefore be likely to need to incur the significant sunk costs of network build, including digging and ducting. Supply side substitution (ie quick, inexpensive entry) is therefore not feasible on a scale sufficient to constrain the prices of a hypothetical monopolist.
- 2.171 In addition, for supply side substitution between bandwidths to be present there would need to be communications providers that supplied, for example, TISBO segments at high bandwidths but not at low bandwidths, but would enter the supply of low bandwidth if the price of high bandwidth were to rise. However, as for retail leased lines, the biggest communications providers already provide both low and high bandwidth segments, so there is no additional competitive constraint beyond that already captured in the demand-side market definition and supply side substitution is not relevant.

2.172 Therefore, the Director believes that supply-side substitution on this basis is so limited that it does not represent an effective constraint and, as such, does not justify the inclusion of high (defined as 34Mbit/s and above) and low (defined as 8Mbit/s and below) bandwidth TISBO services in the same market. By the same token, the Director does not consider that such substitution would justify the inclusion of very high (defined as 622Mbit/s and above) bandwidth TISBO services in the same market as those of lower bandwidths.

Issue 13: Bandwidth distinctions for alternative interface symmetric broadband origination

- 2.173 The Director has considered whether the bandwidth distinctions identified in the retail leased lines and TISBO services markets apply equally to the AISBO market.
- 2.174 As discussed in Annex A, the costs of the provision of LES based circuits do not vary significantly by bandwidth. It is therefore not appropriate to define distinct markets according to bandwidth, as has been done in other leased lines markets, because the higher bandwidth LES circuits do competitively constrain the prices of lower bandwidth LES circuits.

Conclusion on bandwidth distinctions for alternative interface symmetric broadband origination

2.175 The Director has concluded that in the AISBO market there are no identifiable bandwidth distinctions, and that there is therefore only one market for AISBO.

Issue 14: Wave Division Multiplexed services

- 2.176 Responses to the April 2003 consultation suggested that Wave Division Multiplexed (WDM) circuits (such as BT's *WaveStream* products) should be included within the relevant markets identified by the Director, in addition to the SDH-based services discussed in the previous consultation. The text below discusses the Director's views on this issue.
- 2.177 BT offers a number of retail products (the *WaveStream* product set) which are characterised by use of WDM in the access segment. WDM services are services that can be used to provide transmission of multiple wavelengths of light over short or long distances using wave division multiplexers. At present, there are three broad types of wave division multiplexers available, Coarse Wave Division Multiplexer (CWDM), Dense Wave Division Multiplexer (DWDM) and Ultra Dense Wave Division Multiplexer (UDWDM).
- 2.178 CWDM uses lower frequency lasers and a wide spread of frequencies to enable transmission of up to 18 wavelengths over distances up to 60km. DWDM

uses higher frequency lasers and a lower range of frequencies in order to enable transmission of up to 32 to 128 wavelengths nation-wide. CWDM is therefore cheaper and more cost effective for certain applications where fewer wavelengths and/or smaller transmission distance is needed. UDWDM, meanwhile, uses high frequency lasers and a very narrow spread of frequencies to carry a greater number of wavelengths.

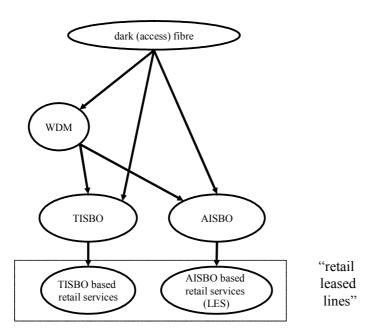
- 2.179 The use of WDM is well established within core networks. However, its use in communications providers' access networks to offer products such as BT's WaveStream range is a relatively new innovation.
- 2.180 The distinguishing characteristics of WDM when used as an access technology are as follows:
 - WDM based access circuits are mainly used for emerging very high bandwidth requirements such as data warehousing, and Storage Area Networking (SAN) applications;
 - WDM (currently) uniquely, supports multiple delivery of different interfaces as the service is transparent to what technology each wavelength provides. Each wavelength can be used to supply SDH, Ethernet, or other protocols such as Fibre Connection (FICON) or Enterprise Systems Connection (ESCON).
 - WDM based access can provide a combination of Metropolitan area ring and longer haul city-to-city connectivity to meet resilience requirements between sites such as data centres and head offices;
 - above 1.25Gbit/s, bandwidth is not a significant cost driver for WDM based circuits (it remains a significant cost driver for SDH circuits of all bandwidths), due to the ability to add extra wavelengths/bandwidth at low cost: and:
 - as an access technology WDM remains very expensive relative to other technologies, although this need not be true on a per Mbit/s basis, and the incremental cost of providing additional wavelengths is likely to be relatively small.

The Director's view

- 2.181 WDM is a technology used by communications providers to supply various types of circuits, and is not itself bought as a standalone product. It can be used as an input to provide a number of products in retail leased lines markets, including:
 - (a) SDH over WDM over fibre;
 - (b) Ethernet over WDM over fibre; and
 - (c) other protocols over WDM over fibre, for example:
 - fibre channel;
 - FICON; and
 - ESCON.

- 2.182 The Director's view is that the most appropriate way to characterise retail products such as (a) to (c) above is to view them as being in the same market as equivalent end user applications delivered over fibre, rather than a separate market of applications delivered over WDM over fibre. This approach focuses on the characteristics of the retail product, not the technology used to deliver it and so is technologically neutral.
- 2.183 For example, based on a demand side substitution argument, all products which offer Ethernet-presented dedicated transmission capacity are likely to be in the same market, whether they are delivered over WDM over fibre (eg BT's *WaveStream* product range) or directly over fibre (eg BT's *Shorthaul data services (SHDS)* product range).
- 2.184 The WDM element of the service is therefore an *upstream* characteristic of the products described above. It can be used as an input into different products that are in distinct (downstream) economic markets see Figure 2.1 below.

Figure 2.1 – Leased lines markets



2.185 Based on these findings, the Director does not propose to conduct a review of the WDM market, in the same way as no review will be conducted of any other input markets into TISBO or AISBO that may exist, such as dark fibre.

Issue 15: Wholesale symmetric broadband origination geographic markets

- 2.186 Based on the type of reasoning set out above in relation to other leased lines markets, there is limited scope for substitution between symmetric broadband origination services in different areas of the UK excluding Kingston upon Hull. However, the same issue of impracticality of a very large number of geographic markets arises in relation to symmetric broadband origination as for retail leased lines and trunk segments. The Director is therefore proposing to define one national market including wholesale symmetric broadband origination in the UK excluding Kingston upon Hull, albeit in the knowledge that localised characteristics are likely to be present.
- 2.187 Kingston upon Hull is a distinct geographic market because on the demand side, in response to an increase in the price above the competitive level in the Hull area it seems clear that wholesale symmetric broadband origination services outside the Kingston upon Hull area would not be perceived as substitutes.
- 2.188 On the supply side it is unlikely that a communications provider would incur the fixed sunk costs necessary to develop a local network in the Hull area within the timescales relevant to the hypothetical monopolist test, given the time it would take to do this and also the relatively low likely returns. However, the potential for new entry will be taken into account in the SMP assessment.
- 2.189 Consequently the Director concludes that Kingston upon Hull should form a separate geographic market.

Conclusion on market definition

- 2.190 In summary, the Director has identified the following leased line product markets in the UK excluding Kingston upon Hull:
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s) – this includes analogue circuits of relevant bandwidths, and incorporates the minimum set of retail leased lines up to and including 2Mbit/s identified by the Commission;
- wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s);
- wholesale very high bandwidth traditional interface symmetric broadband origination (above 155Mbit/s);
- wholesale alternative interface symmetric broadband origination; and
- wholesale trunk segments (note that this market extends to the whole of the UK).

- 2.191 In addition, the Director has identified the following leased line product markets in the Hull area:
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s) – this incorporates the minimum set of retail leased lines up to and including 2Mbit/s identified by the Commission;
- wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s); and
- wholesale alternative interface symmetric broadband origination.
- 2.192 Although the Director has considered traditional interface retail leased lines at bandwidths above 8Mbit/s and alternative interface retail leased lines during his analysis, he does not consider it necessary to formally identify (for the purposes of section 79 of the Act) retail markets covering such products, as he considers that regulation at the wholesale level is sufficient to meet regulatory requirements.
- 2.193 In the next chapter, the Director sets out his analysis of SMP in the wholesale markets identified above, and in the retail low bandwidth traditional interface leased lines market which contains the minimum set of retail leased lines identified by the Commission. The Director is not conducting an assessment of SMP in other retail markets, preferring instead to regulate at the wholesale level where possible, in line with the Commission's Recommendation.

Chapter 3

Summary of assessment of significant market power

Market Power determinations

3.1 Section 45 of the Act details the various conditions that may be set under the new regime. Section 46 details who those conditions may be imposed upon. In relation to SMP services conditions, section 46(7) provides that they may be imposed on a particular person who is a communications provider or a person who makes associated facilities available and who has been determined to have significant market power in a "services market" (ie: a specific market for electronic communications networks, electronic communications services or associated facilities). Accordingly, having identified the relevant market as discussed in Chapter 2, the Director is required to analyse the market in order to assess whether any person or persons have significant market power as defined in section 78 of the Act (Article 14 of the Framework Directive).

Approach used to assess Significant Market Power

3.2 The Framework Directive and the EC Guidelines for market analysis and the assessment of SMP clarify that a market shall be deemed effectively competitive where no communications providers in that market possess SMP. Under the new Directives and section 78 of the Act, SMP has been newly defined so that it is equivalent to the competition law concept of dominance. Article 14(2) of the Framework Directive states that:

"An undertaking shall be deemed to have significant market power if, either individually or jointly with others, it enjoys a position equivalent to dominance, that is to say a position of economic strength affording it the power to behave to an appreciable extent independently of competitors, customers and ultimately consumers."

3.3 Further, Article 14(3) of the Framework Directive states that:

"Where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a closely related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking".

3.4 Therefore, in the relevant market, one or more undertakings may be designated as having SMP where that undertaking, or undertakings, enjoys a position of dominance. Also, an undertaking may be designated as having SMP

where it could lever its market power from a closely related market into the relevant market, thereby strengthening its market power in the relevant market.

- 3.5 In assessing whether an undertaking has SMP, this review takes the utmost account of the Commission's SMP Guidelines as well as Oftel's equivalent guidelines, as referred to in Chapter 1.
- 3.6 Article 16 of the Framework Directive requires that, where a national regulatory authority determines that a relevant market is not effectively competitive, it shall identify "undertakings" with SMP on that market and shall on such "undertakings" impose appropriate specific regulatory obligations. For the purposes of EC competition law, "undertaking" includes companies within the same corporate group (see Viho v Commission Case C-73/95 P [1996] ECR I-5447), for example, where a company within that group is not independent in its decision making.
- 3.7 Accordingly, the Director considers it appropriate that for the UK excluding Kingston upon Hull, the obligations detailed in Annexes D and E and the draft notification shall apply to British Telecommunications plc, whose registered company number is 1800000, and any BT subsidiary or holding company, 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.
- 3.8 For the Kingston upon Hull area, the Director considers it appropriate that the obligations detailed in Annexes D and E and the draft notification shall apply to Kingston Communications plc, whose registered company number is 2150618, and any Kingston subsidiary or holding company, 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.

Assessment of SMP

3.9 The Director's complete assessment of SMP is set out in Annex B of this document. This chapter summarises the Director's findings for each of the leased lines markets, presenting the conclusions and identifying in brief the key criteria that have led to these conclusions. The SMP assessment is based on the evidence available to the Director and takes account of comments made in the first stage of consultation.

UK excluding Kingston upon Hull

Low bandwidth traditional interface retail leased lines (up to and including 8Mbit/s)

3.10 The Director has examined the market for low bandwidth traditional interface retail leased lines in the UK excluding Kingston upon Hull, which

incorporates leased lines of bandwidths up to and including 8Mbit/s. This market includes retail leased lines constituting the minimum set of leased lines identified by the Commission in the Universal Service Directive (ie up to and including 2Mbit/s). If the Director finds that BT has SMP in this market it will be necessary, for the minimum set of leased lines, to introduce the regulation set out by the Commission in Annex VII of the Universal Service Directive. In addition, the Director will need to consider whether it is necessary to apply regulation to leased lines of 8Mbit/s.

- 3.11 The Director has, as noted in the introduction to Chapter 3, examined this market in the context of the remedies proposed in the markets for symmetric broadband origination and trunk segments, including PPCs at cost oriented charges, and cost orientation together with a prohibition on vertical discrimination for trunk segments. The analysis assumes an absence of regulation at the retail level.
- 3.12 The Director has concluded that BT has SMP in this market. In the absence of retail regulation BT is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- BT has a very high market share, in the region of 75% by value and higher still by volume, which has not declined substantially in recent years;
- the existence of contractual, financial, and perceived barriers to switching; and
- the remaining scope for vertical leverage by BT given the difference between marginal and average costs.

This conclusion is supported by international benchmarking data.

3.13 The Director considers that entry into this market has been difficult and unattractive. As a result, BT has been able to retain its substantial market share, competition is not intensive, and customers do not get good value for money. With the imposition of wholesale remedies this situation will improve significantly. But the Director does not consider that the increased competition in the next two years will be enough to mitigate BT's SMP sufficiently.

Responses to previous consultation – SMP in low bandwidth retail leased lines

- 3.14 BT states in its response that it does not consider that the Director has taken adequate consideration of the wholesale PPC obligations when assessing SMP at the retail level, particularly on a forward looking basis. BT notes that to date over 76,000 PPCs have been sold.
- 3.15 BT also considers the international benchmarking data to be flawed, due to differing price and discount structures operating in different countries. In particular, BT asks the Director to take into account its own term and volume based discounts which it says can result in a 40% reduction in price.

- 3.16 The Director notes that a relatively small number so far of PPCs are newly supplied circuits, the bulk of the initial provision having been migrated from previously supplied retail leased lines. Of the first 60,000 PPCs sold, 43,000 were migrated from retail leased lines. This can only be an upper bound indication of the decrease of BT's retail market share, because PPCs are used for other purposes besides retail leased lines.
- 3.17 Furthermore, other factors will limit the impact of PPCs in the short term. First, barriers to switching such as contractual terms and penalties, inertia, discount schemes, BT's brand, and customer perception will slow down the rate at which other communications providers can win end users away from BT. These barriers are not affected by the implementation of a wholesale remedy in the short term. Second, the economies of scale and of scope specific to retail activities are unlikely to be significantly reduced in the short term by the creation of a wholesale remedy within the period covered by this review because BT's very high market share will only be eroded on a very gradual basis. Third, market conditions are such that telecommunications budgets both of end users and of communications providers are under pressure. This is unlikely to generate a situation in which communications providers' positions in the retail low bandwidth leased lines market can change rapidly and significantly, especially given BT's current very high market share. Therefore, while the Director agrees in principle with BT that upstream regulation should in future reduce or even obviate the need for continued regulation of retail leased lines, the full effects of regulation of PPCs have yet to feed through to the retail market and retail regulation remains fully justified for the period covered by this review.
- 3.18 The Director agrees with BT that comparisons of international benchmarking data are made more difficult by the differing price and discount structures operating in different countries, but considers that the overall picture given by these comparisons is consistent with the other clearer indications of SMP set out by the Director.

Likelihood of competition developing in the future

3.19 The Director has, as noted above, considered the potential impact of PPCs on this market during the period covered by this review. The Director's view is that, although PPCs are likely over a longer period help to create competitive conditions at the retail level, for the reasons set out in the above paragraphs they will not generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Wholesale trunk segments

- 3.20 The Director has, as noted in the introduction to Chapter 2, examined this market in the context of the remedies proposed in the markets for symmetric broadband origination, but in the absence of the proposed regulation for the retail and trunk segments markets.
- 3.21 The Director is aware that the degree of competition on trunk segment routes appears to differ significantly. Some are subject to little or no competition, while on others there are a number of competing communications providers. For the reasons set out in Chapter 2 and Annex A, the Director has concluded that it is not practical to define separate markets by route and he has instead decided to define a national market. Having considered the evidence, the Director has concluded that BT has SMP in the national market for trunk segments.
- 3.22 BT is able to behave, to an appreciable extent, independently of competitors and customers. This is possible principally because of the following factors:
- the ubiquity of BT's infrastructure and the number of trunk routes subject to little or no competition;
- barriers to entry;
- economies of scale;
- the relatively high percentage of terminating segments with which trunk segments were purchased from BT (especially given the charges set by BT); and
- BT's vertical integration.

Responses to previous consultation – SMP in trunk

- 3.23 BT has provided alternative analysis suggesting that 98% of intra-Tier 1 routes are subject to competition from at least one communications provider, 87% from at least two communications providers and 71% from at least three communications providers. This finding is based on a view that a competing network provider having a possible interconnection point at proximity of 15km from Tier 1 node is sufficient indication of ability to compete, and revised data covering distance from all Tier 1 nodes combined with actual communications provider node locations. BT also suggests that other points of interconnection (PSTN, ATM) could be included in the analysis.
- 3.24 In contrast, Energis suggests that communications providers do not exert a competitive constraint on BT unless they are physically interconnected even 1km distance from a Tier 1 node is, it suggests, insufficient because of build costs and timescales.

- 3.25 BT has also conducted alternative analysis based on major postcode areas which it states shows that at least three other communications providers have wider trunk coverage than BT.
- 3.26 In the light of the comments made by BT, the Director has refined his analysis regarding the proximity of BT's Tier 1 nodes to other communications providers' points of presence. The results of this analysis are set out in Figure B.6 (see paragraph B.123) in Annex B. The analysis was informed by two further data sources supplied to the Director following the publication of his first consultation. These related to the volume of traffic passing through each of BT's Tier 1 nodes, and a comprehensive list of the network points of presence of the alternative communications providers.
- 3.27 The Director's revised analysis shows, for example, that the competing communications provider with the greatest level of network coverage could potentially compete for almost 40% of the traffic at BT's Tier 1 nodes by digging 1km from its points of presence; and the same communications provider could potentially compete for almost 95% of the traffic at BT's Tier 1 nodes by digging 10km from its points of presence.
- 3.28 The Director's view is that, while BT's postcode analysis is of some interest, his own analysis presents a better portrayal of the degree of competitiveness in the trunk market. This is because, significantly, BT's use of the "number of businesses per postcode area" is a considerably cruder measure of the relative importance of different trunk routes than the Director's own total traffic weighting. This is because using the total number of businesses as a weighting measure does not take into account the size of different businesses in terms of their importance with regards to communications markets.
- 3.29 The Director is inclined to agree with the view expressed by network communications providers that they need to be located at or very close to Tier 1 nodes in order to provide a constraint on BT (see Annex B). He is therefore of the view, given the above evidence and arguments outlined elsewhere in this section, that while there is potential for competition on a number of trunk routes, as yet such potential has significant limitations.
- 3.30 BT suggests in its response that barriers to entry in trunk are less significant than suggested by the Director, and cites evidence on the breadth and extent of competitor core networks and on the economic considerations involved in the provision of core network infrastructure. It suggests that all efficient communications providers have the potential to achieve similar economies of scale. As discussed in more detail in Annex B, the Director considers that BT has not offered sufficient evidence to refute the Director's arguments on these issues. In addition, the Director notes that BT has provided no evidence to contradict the Director's previous comments that there is some evidence suggesting that trunk segments may currently be over-priced.

- 3.31 BT also suggests that the distribution of self-supplied trunk segment services is not a good indicator of relative scope to exploit economies of scale since it reflects investment decisions made prior to the Director's Tier 1 breakpoint decision. It suggests that with optimal routing of circuits by communications providers, only 27% of low bandwidth circuits and 41% of high bandwidth circuits would require a trunk segment. Many of the PPCs sold with trunk segments in fact contain only a very short distance of trunk element.
- 3.32 The Director does expect that the proportion of PPCs sold with trunk segments should be expected to decline over time as communications providers optimise their networks to reflect the Tier 1 pricing scheme referred to by BT. However, such network build out will take time, and, as demonstrated by Figures B.7 and B.8 (see paragraph B.131) in Annex B, competing communications providers are currently dependent on BT for the supply of trunk segments to a very significant extent. Data of this sort will be reviewed when the Director next reviews the leased lines markets. In the meantime, the Director considers that, given that BT's trunk charges are currently above cost (see Table B.4 in Annex B for details)the high proportion of PPCs that are sold with an element of a trunk segment provides persuasive evidence of communications providers being dependent on BT for the provision of trunk segments.
- 3.33 The Director's view is further supported by the level of profitability that BT appears able to make on trunk segments. Table B.4 [see paragraph B.108] in Annex B suggests that BT may be able to set relatively high prices for trunk segments.
- 3.34 Energis asks whether 'own exchange' circuits (which do not require trunk segments) were included in the Director's analysis of the number of PPCs sold with trunk segments. If they were, then of the remaining circuits sold without trunk segments, a significant proportion would not require trunk in any case and the dependence on BT would therefore be understated. The Director confirms that the analysis did not include 'own exchange' circuits.
- 3.35 Energis points out that there has been very little price movement during the last two years, indicating a lack of competition. The Director largely agrees with this point, while noting that price movement or its absence can result from a variety of factors.
- 3.36 Communications providers state that they are unlikely to purchase trunk from other communications providers as lack of ubiquity means having to buy some terminating segments (and, for large customers with cross country requirements, some trunk too) from BT or different communications providers. This causes multi vendor problems with service provision and service level guarantees. They add that the addressable market is small because of the

dominance of BT Retail. The Director has considered these issues in his market analysis, and considers that this evidence supports his conclusions.

Likelihood of competition developing in the future

3.37 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that, for the reasons set out above, there are no developments that would generate sufficient additional competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s)

- 3.38 The Director has, as noted in the introduction to Chapter 3, examined the traditional interface symmetric broadband origination ("TISBO") markets in the absence of any regulation at either the retail or the wholesale level.
- 3.39 The Director has concluded that BT has SMP in the market for wholesale low bandwidth TISBO. BT is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- BT controls a wide reaching infrastructure;
- it is able to exploit economies of scope and scale more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs.
- 3.40 This conclusion is supported by data on market shares, collected at the retail level. BT's market share in low bandwidth TISBO is likely to be significantly larger than its retail market share, in excess of 80 per cent. It is also supported by BT's past behaviour in the absence of regulation in failing to supply symmetric broadband origination (other than as part of retail leased lines at retail prices, at charges well in excess of cost-based prices). This is explained in more detail in Annex B.

Likelihood of competition developing in the future

3.41 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. This is because the sources of SMP are high structural barriers to entry and because demand conditions and technological progress are unlikely to be able to reduce the strength of these entry barriers in the near future. However, the Director will keep market conditions under review.

Wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s)

- 3.42 The Director has, as noted in the introduction to Chapter 3, examined the traditional interface symmetric broadband origination ("TISBO") markets in the absence of any regulation at either the retail or the wholesale level.
- 3.43 The Director has concluded that BT has SMP in the market for wholesale high bandwidth TISBO. BT is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- BT controls a wide reaching infrastructure;
- BT is able to exploit economies of scope and scale more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs, in this market.
- 3.44 This conclusion is supported by data on market shares, collected at the retail level. BT's market share in high bandwidth TISBO is likely to be larger than its retail market share, which itself is in the region of 40 to 50 per cent and has not declined over the last few years. It is also supported by BT's past behaviour in the absence of regulation in failing to supply symmetric broadband origination (other than as part of retail leased lines at retail prices, at charges well in excess of cost-based prices). This is explained in more detail in Annex B.

Responses to previous consultation – SMP in high bandwidth TISBO

- 3.45 BT states that the market share figures provided by the Director are inconsistent with those in the PPC Phase I Direction, and in particular that it considers the quoted high bandwidth market shares to be above its true market share. BT suggests that there is 'double counting' in view of the majority of its high bandwidth sales being to communications providers rather than retail customers. BT also considers that its advantages derived from economies of scale are less for high bandwidth services than for low bandwidth services, because of its smaller customer base.
- 3.46 The Director's view is that his market shares are the best available. The "double counting" issue is not relevant to the use of retail market shares to proxy wholesale market shares. In fact, the retail market share is likely to underestimate BT's share of sales to other customers since no other providers sell circuits to BT (as discussed in relation to low bandwidth TISBO in Annex B). The Director agrees that there would be a risk of a "double counting" issue if this data were to be used to inform SMP at the retail level. However, he has not done this.

- 3.47 Energis suggests that retail leased line market shares are not an appropriate proxy for wholesale TISBO market shares at higher bandwidths, since there are a number of other retail services which rely upon these wholesale services. It suggests that BT has greater shares of these other retail markets, and that its share of the wholesale market is accordingly greater. Energis also points out that if LES and WDM services are included in symmetric broadband origination, BT's share of the market at higher bandwidths will be greater.
- 3.48 The Director notes communications providers' concerns with regard to LES and WDM services. LES products, as discussed in Chapter 2, belong in a separate market for alternative interface symmetric broadband origination (AISBO), and therefore they have no bearing on whether or not BT holds SMP in the traditional interface symmetric broadband origination markets. WDM products, meanwhile, belong in a separate upstream market, again as discussed in Chapter 2, and therefore similarly have no bearing on whether BT holds SMP in the TISBO markets. SMP in the market for alternative interface symmetric broadband origination is discussed below.

Likelihood of competition developing in the future

3.49 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Wholesale very high bandwidth traditional interface symmetric broadband origination (over 155Mbit/s)

- 3.50 The Director has, as noted in the introduction to Chapter 3, examined the traditional interface symmetric broadband origination ("TISBO") markets in the absence of any regulation at either the retail or the wholesale level.
- 3.51 The Director has concluded that BT does not have SMP in the market for wholesale very high bandwidth TISBO. This conclusion has been reached because, principally, barriers to entry appear to be much lower in relation to the potential rewards than for other bandwidths, since other communications providers have found it relatively easy to enter this market. This is demonstrated by BT's significantly lower market share, in the region of 10%.

Responses to previous consultation – SMP in very high bandwidth TISBO

3.52 Communications providers suggest that there is SMP in very high bandwidth TISBO, for a number of reasons.

- 3.53 Firstly, they state that market share data is too sparse. In response to this, the Director highlights that he has information on retail market shares for two years, which show a consistent picture of low shares for BT. In addition, since these circuits are relatively new it seems most likely that insufficient data received from alternative providers would be likely to *underestimate* alternative providers' volumes of such circuits, ie lead to an overestimation of BT's market share.
- 3.54 Secondly, communications providers suggest that as wholesale circuits are used for many purposes including core/ access network construction and retail data and Ethernet services, leased line market shares are not a reliable proxy. The Director accepts that these market shares are not an ideal proxy, but considers that they are sufficiently reliable when retail services based on LES (AISBO) and WDM are ignored, given that the latter products belong in separate wholesale markets for the reasons set out in Chapter 2.
- 3.55 Thirdly, communications providers suggest that LLU backhaul circuits will significantly increase the number of very high bandwidth lines over the next two years. The Director considers that in view of the current very small number of unbundled local loops, there would have to be a very large increase in their numbers in order to affect market shares sufficiently.
- 3.56 Fourth, communications providers point out that the Director ruled in the LLU backhaul Direction that it (and LES) was not competitive. The Director discusses the issue of SMP in AISBO below, but considers that his analysis in relation to very high bandwidth SDH based circuits as set out in the previous consultation remains correct.
- 3.57 Fifth, communications providers state that they do not just target high population densities; they target sectors of the market. However, as large businesses tend to be found in areas of high population density, this amounts to much the same effect.
- 3.58 Sixth, communications providers state that high barriers to entry outweigh expected revenues. Communications providers often purchase LES circuits from BT rather than PPCs, at very high bandwidths. Dig costs are comparatively high. Time delays from dig mean competition is easy only if self provided access has already been carried out. However, the Director has defined LES circuits as being in a separate market.
- 3.59 Seventh, communications providers state that expected revenues will reduce as lines become cheaper. The Director notes in relation to this point that falling prices may be an indicator of increased competition in the market.
- 3.60 Finally, communications providers cite economies of scale and access to capital. The Director notes that advantages of economies of scale will tend to

depend on market shares. The Director has not relied on access to capital as being one of the most significant factors in his assessment of SMP.

3.61 Looking at the overall picture, the Director is confident that his original analysis is correct and that, especially in view of LES and WDM services being in separate markets, BT does not have SMP in the market for very high bandwidth TISBO.

Wholesale alternative interface symmetric broadband origination

3.62 The Director has, as noted in the introduction to Chapter 3, examined the alternative interface symmetric broadband origination ("AISBO") market in the absence of any regulation at either the retail or the wholesale level.

3.63 The Director has concluded that BT has SMP in the market for wholesale AISBO. BT is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:

- BT controls a wide reaching infrastructure;
- BT enjoys advantages resulting from its vertical integration;
- BT is able to exploit economies of scope and scale more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs, in this market.

3.64 This conclusion is supported by data on market shares, collected at the retail level. BT's market share in AISBO is likely to be larger than its retail market share, which itself is above 80 per cent. It is also supported by BT's past behaviour in the absence of regulation in failing to supply symmetric broadband origination on a wholesale basis. This is explained in more detail in Annex B.

Likelihood of competition developing in the future

3.65 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Responses to previous consultation – UK ex Hull markets in general

3.66 BT suggests that even if it does have better access to capital markets, this does not necessarily give it more market power than its competitors. It adds that financial restructuring by some communications providers may enable them to compete far more effectively in future.

3.67 BT also notes that the Director has not analysed any retail markets other than retail leased lines, or demonstrated that SMP in wholesale symmetric

broadband origination and wholesale trunk segments restricts or distorts competition in those other downstream markets.

- 3.68 The Director does not consider that BT's access to capital markets is in isolation a definitive source of market power rather, it is just one of the considerations to bear in mind. However, it is worth noting the advantage enjoyed by BT as a result of its position as incumbent, to access capital markets and to attract customers worried by the financial difficulties faced by some communications providers and the implications these can have for the continuity of services. The Director considers that although the restructuring of some communications providers may improve their competitive ability, this is unlikely to impact significantly on BT's market power in the next 18 to 24 months given BT's current strong position.
- 3.69 The Director is restricting his investigation of the retail markets in the Leased Line Market Review to those proposed by the EU Recommendation. The lack of competition in these retail markets has prompted the Director to propose remedies at the wholesale level, where the main problem appears to lie. This is also in line with the EU Recommendation, which proposes wholesale terminating segments of leased lines to be considered for ex ante regulation. The Director has already explained in Chapter 2, why he considers it appropriate to adopt a slightly broader market at the wholesale level.
- 3.70 First he wants to ensure that the remedies do not discriminate among technologies used to provide leased lines at the retail level. Second he wishes to include all other wholesale services (that is, services sold to communications providers) that are technologically equivalent or that economic analysis suggests should be placed in the same market. Distortion of retail competition is one type of market failure, but it is not the only type. Therefore, whether or not the competition in other retail markets using these symmetric broadband origination services is distorted is not a necessary pre-condition for a finding of SMP or the application of proportionate remedies.

Kingston upon Hull

Low bandwidth retail traditional interface leased lines (up to and including 8Mbit/s)

- 3.71 The Director has examined the market for low bandwidth traditional interface retail leased lines in Kingston upon Hull, which incorporates leased lines of bandwidths up to and including 8Mbit/s. This market includes retail leased lines constituting the minimum set of leased lines identified by the Commission in the Universal Service Directive (ie up to and including 2Mbit/s).
- 3.72 If the Director finds SMP in this market it will be necessary, for the minimum set of leased lines, to introduce the regulation set out by the Commission in

Annex VII of the Universal Service Directive. As there are no 8Mbit/s retail leased lines, the Director does not need to consider regulation for leased lines of 8Mbit/s.

- 3.73 The Director has, as noted in the introduction to Chapter 3, examined this market in the context of the remedies proposed in the markets for symmetric broadband origination, but assuming an absence of regulation at the retail level.
- 3.74 The Director has concluded that Kingston has SMP in this market. Kingston is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- Kingston has a very high market share, in the region of 80%, and this market share is unlikely to have declined much in recent years;
- Kingston benefits from vertical integration; and
- Kingston is able to exploit economies of scope more effectively than other communications providers.
- 3.75 The Director considers that entry into this market is likely to be difficult and unattractive. As a result, Kingston has been able to retain its substantial market share, and competition is not intensive.

Likelihood of competition developing in the future

3.76 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. There are at least two reasons for this view. First, Kingston's market share is very high in the Hull area (83% including sales to other communications providers). Second the small size of, and the slow growth in, the Hull area make it unattractive for other communications providers to start supplying retail leased lines. However, the Director will keep market conditions under review.

Wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s)

- 3.77 The Director has, as noted in the introduction to Chapter 3, examined the traditional interface symmetric broadband origination ("TISBO") markets in the absence of any regulation at either the retail or the wholesale level.
- 3.78 The Director has concluded that Kingston has SMP in the market for wholesale low bandwidth TISBO. Kingston is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- Kingston controls an infrastructure that is not easy for competitors to duplicate;

- it is able to exploit economies of scope more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs.

3.79 This conclusion is supported by estimates of market shares, provided by Kingston, showing a market share in low bandwidth TISBO in the region of 75%. This is explained in more detail in Annex B.

Likelihood of competition developing in the future

3.80 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. This is mainly because of the existence of substantial barriers to entry. As an incumbent, Kingston has sunk the costs of network deployment, and entrants will not be in a position to effectively compete at the wholesale level until they have sunk these costs. Another reason, also deriving from the legacy position of Kingston, is the greater economies of scope enjoyed by Kingston compared to those of any entrant. However, the Director will keep market conditions under review.

Wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s)

- 3.81 The Director has, as noted in the introduction to Chapter 3, examined the traditional interface symmetric broadband origination ("TISBO") markets in the absence of any regulation at either the retail or the wholesale level.
- 3.82 The Director has concluded that Kingston has SMP in the market for wholesale high bandwidth TISBO. Kingston is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- Kingston controls an infrastructure that is not easy for potential competitors to duplicate:
- it is able to exploit economies of scope more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs.
- 3.83 This conclusion is supported by estimates of market shares, provided by Kingston, showing a market share in high bandwidth TISBO in the region of 65%. This is explained in more detail in Annex A.

Likelihood of competition developing in the future

3.84 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there

are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Wholesale very high bandwidth traditional interface symmetric broadband origination (above 155Mbit/s)

3.85 The information made available to the Director suggests that there are currently no very high bandwidth retail or wholesale TISBO products sold in the Kingston upon Hull area. Therefore, whilst the market for very high bandwidth TISBO is a potential future market, it does not currently exist in the Kingston-upon-Hull area. Given this, the Director considers it premature to conduct an SMP assessment.

Wholesale alternative interface symmetric broadband origination

- 3.86 The Director has, as noted in the introduction to Chapter 3, examined the alternative interface symmetric broadband origination ("AISBO") market in the absence of any regulation at either the retail or the wholesale level.
- 3.87 The Director has concluded that Kingston has SMP in the market for wholesale AISBO. Kingston is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because, principally:
- Kingston controls an infrastructure that is not easy for potential competitors to duplicate;
- it is able to exploit economies of scope more effectively than other communications providers; and
- there are significant barriers to entry, including sunk costs.
- 3.88 This conclusion is supported by estimates of market shares, provided by Kingston, implying a market share in AISBO in the region of 65%. This is explained in more detail in Annex B.

Likelihood of competition developing in the future

3.89 The Director has considered the potential impact of external factors on this market during the period covered by this review. The Director's view is that there are no developments that would generate sufficient competitive pressures within the next 2-3 years to alter the current finding of SMP. However, the Director will keep market conditions under review.

Responses to previous consultation – SMP in Hull markets

3.90 Kingston questions the Director's use of its "informal" market share estimates, stating that these are an inappropriate basis for an SMP designation,

and that it is disappointed that the Director "has failed to undertake a complete and comprehensive market analysis". Kingston further states that SMP in low bandwidth symmetric broadband origination in Hull is "debatable". At high bandwidths, it makes a case for no SMP based on the relatively small size of the Hull area, Kingston's economies of scale and scope being smaller than BT's, and it having less privileged access to capital than BT.

- 3.91 The Director disagrees with Kingston. It cannot be inferred from paragraph B.370 of the first consultation document that the Director has not undertaken a sufficiently comprehensive analysis. The Director stated that communications providers' responses to questions on the Hull area were insufficient for him to determine *market shares* with complete certainty. Notwithstanding this, they did provide sufficient support for the Director's findings of SMP based on factors other than market shares and these findings are clearly supported by Kingston's own estimates of market share, estimates which it is reasonable to assume are not overstated given their source and that given this, are well above the level at which a presumption of SMP can be inferred.
- 3.92 Indeed, Kingston admits later in its response that providing market data are acceptable, it does possess "some degree of market power" in the Hull area, and that the Director's analysis "rightly identifies that Kingston probably has a relatively strong market position". The Director is not, however, as Kingston states, concluding that such a position is the *result* of anti-competitive behaviour. It could, of course, lead to or be maintained by anti-competitive behaviour, and this is why it is necessary for the Director to impose a proportionate level of ex ante regulation for the Hull area.
- 3.93 In a contestable market potential entrants face no barriers to entry. Competition takes the form of the threat of entry from potential entrants. This is sufficient to restrain the pricing behaviour of the incumbent and ensure the removal of supernormal profits. It is worth emphasising that the tests for a market to be contestable are extremely tough. In particular there must be no sunk costs at all. This clearly is not true for wholesale services in the Hull area. Kingston is able to behave, to an appreciable extent, independently of competitors and customers. This is possible because Kingston controls an infrastructure that is not easy for potential competitors to duplicate, it is able to exploit economies of scope more effectively than other communications providers and there are significant barriers to entry, including substantial sunk costs.
- 3.94 Although in absolute terms the scale of investment required to enter Hull markets may be relatively small, since the network build costs faced by potential entrants are comparatively small, nevertheless the size of the potential market is also relatively small.

Chapter 4

Approach to regulatory remedies

The legal framework for imposing regulatory remedies

- 4.1 As set out in Chapter 3, the Director proposes that BT has SMP in the following markets in the UK excluding the Hull area:
 - retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s);
 - wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
 - wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s);
 - wholesale alternative interface symmetric broadband origination; and
 - wholesale trunk segments (including Kingston upon Hull).
- 4.2 The Director also proposes that Kingston has SMP in the following markets in the Hull Area:
 - retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s);
 - wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
 - wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s); and
 - wholesale alternative interface symmetric broadband origination.
- 4.3 As explained in Chapter 6, the Director has identified interconnection circuits as an appropriate technical area for the purpose of imposing appropriate regulatory remedies. The relevant interconnection circuits are:
- interconnection services, being In Span Handover ("ISH") and Customer Sited Handover ("CSH");
- ISH extension circuits; and
- Synchronous Transfer Mode ("STM")-1 ISH and CSH handover.
- 4.4 In the following chapters, the Director proposes SMP services conditions to be set as the regulatory remedies to deal with BT's and Kingston's SMP in the markets set out above.
- 4.5 Section 87(1) of the Act provides that, where the Director has made a determination that a person is dominant in a particular market, he must set such SMP conditions as he considers appropriate and as are authorised in the Act. This implements Article 8 of the Access Directive.

4.6 Paragraphs 21 and 114 of the Commission's SMP Guidelines state that NRAs must impose one or more SMP conditions on a dominant provider, and that it would be inconsistent with the objectives of the Framework Directive not to impose any SMP conditions on an undertaking which has SMP. Thus, the Director is under an obligation to impose at least one appropriate SMP condition where SMP is confirmed.

The need for ex ante regulation

- 4.7 Recital 27 of the Framework Directive states that ex ante regulation should only be imposed where there is not effective competition and where competition law remedies are not sufficient to address the problem. Oftel's own guidelines on regulatory option appraisal note that Oftel will consider the option of no formal ex ante regulation in its option appraisal process. (See www.oftel.gov.uk/publications/about_oftel/2002/roa0602.htm for further details.)
- 4.8 In this light, it is considered below whether ex ante regulation is justified in the markets identified above or whether it would be sufficient to rely on competition law alone to address market failures, while noting the obligation referred to in paragraph 4.6.

Introduction

- 4.9 As a competitive market will produce a more efficient outcome than a regulated market, the promotion of competition is central to the Director's goal of securing the best deal for the consumer in terms of quality, choice and value for money.
- 4.10 Where markets are effectively competitive, ex post competition law is sufficient to deal with any competition abuses that may arise. However, without the imposition of ex ante regulation to promote actively the development of competition in a non-effectively competitive market, it is unlikely that ex post general competition law powers will be sufficient to ensure that effective competition becomes established. For example, this is because ex post powers prohibit abuse of dominance rather than the holding of a dominant position. Ex ante powers can be utilised to reduce the level of market power in a market and thereby encourage effective competition to become established.
- 4.11 The risk is not all in one direction the imposition of some ex ante measures can limit or add nothing to the development of competition. The Director has recognised this in removing some regulation where markets are not effectively competitive.

Characteristics of communications markets in general

- 4.12 Generally, the case for ex ante regulation in communications markets is based on the existence of market failures which, by themselves or in combination, mean that competition might not be able to become established if the regulator relied solely on its ex post competition law powers established for dealing with more conventional sectors of the economy. Therefore, it is appropriate for ex ante regulation to be used to address these market failures and entry barriers that might otherwise prevent effective competition from becoming established. By imposing ex ante regulation that will promote competition, it may be possible to reduce the need for such regulation as markets become more competitive, with greater reliance on ex post competition law.
- 4.13 The European Commission has stated, in paragraph 3 of section 3.2 of the Explanatory Memorandum to its Recommendation, that ex ante regulation is justified: "[...] where the compliance requirements of an intervention to redress a market failure are extensive (eg the need for detailed accounting for regulatory purposes, assessment of costs, monitoring of terms and conditions[...])." This is the case for many markets where persistent SMP leads to a risk of a firm setting excessive prices and the need for efficiency incentives, where a price control would be justified, or where there is likely to be a need for intervention to set detailed terms and conditions for access to networks.

Market dominance

4.14 Although communications markets have in general become increasingly competitive over time, this is from a position in which most were controlled by a legacy monopoly communications provider. The increase in competition that has occurred inevitably reflects the imposition of ex ante regulation to counter the market power of the legacy communications provider. Moreover, despite this, the legacy communications providers remain, in the Director's view, strongly dominant in a number of key markets in this review. Therefore, it is appropriate to continue to impose ex ante regulations in these markets in order to ensure that effective competition can become established.

Network externality effects

- 4.15 Externality effects are present in many communications markets. In particular, the network externality effect, which means that the value of a network increases more than proportionately with the number of subscribers, gives the large incumbent network a great advantage over potential competitors. As a consequence, this would enable it to exclude rivals from the market.
- 4.16 General ex post competition law powers may not be sufficient to address the effects of the network externality. This is because the network externality

effect generally reinforces a dominant position and under general competition law there is no prohibition on holding a position of dominance in itself. Therefore, it may be more appropriate to address the impact of network externality through ex ante obligations, for example by requiring interconnection with the incumbent's network.

Entry barriers

- 4.17 Communications networks are characterised by economies of scale, that is, average costs fall as output increases. Economies of scale result from the fact that a high proportion of the costs of a communications network are fixed while marginal costs (the costs of an extra unit of output) are relatively low. While the extent of economies of scale varies in different parts of the network, their existence means that a large network will tend to have lower average costs than a smaller one.
- 4.18 Successful entry by new network communications providers will therefore require significant investment and most of this will be sunk costs, in the sense that the costs will not be recoverable if the entrant decides to exit the market. Significant sunk costs create an asymmetry in the market between incumbents and potential entrants that the former could exploit to deter entry, if allowed to. Incumbents could exploit this asymmetry by signalling to a potential entrant that if it were to enter the market prices would be too low to cover sunk costs. Entry might therefore be deterred.
- 4.19 In addition, although entry at the retail level by communications providers without their own networks is likely to require relatively smaller sunk investments, it is also likely to require regulated supply of wholesale inputs if retail competition is to become established where there is market power at the network level.
- 4.20 Therefore, in many of the communications markets in this review, especially where there is a requirement for larger sunk investments, ex ante regulation is appropriate to address the effect of this barrier to entry.
- 4.21 Where appropriate, in considering whether it is necessary to impose appropriate and proportionate ex ante regulation to address the market failures identified, the Director has included a consideration of the sufficiency of competition law by itself in addressing market failures such as reducing or removing entry barriers or restoring effective competition.
- 4.22 In general, high and persistent entry barriers and absence of characteristics such that the market would tend towards effective competition are likely to justify possible ex ante regulation. Ex ante regulation would generally be considered to constitute an appropriate complement to competition law in circumstances where the application of competition law would not adequately address the market failures concerned.

- 4.23 The Director considers that in general, different considerations apply to the leased lines markets in Kingston upon Hull from those applicable in the remainder of the UK. He must of course apply the minimum level of regulation to the minimum set of retail low bandwidth leased lines as required by Annex VII of the Universal Service Directive, and he will consider what other regulation is required in each of the markets being reviewed.
- 4.24 However, probably in view of the small size of the Kingston upon Hull market, there has to date not been the same level of interest expressed by other communications providers for the provision of retail leased lines to Kingston upon Hull-based customers. In view of this lack of demand, the Director considers that it would be disproportionate to apply the same level of ex ante regulation in the Kingston wholesale markets as he is proposing to introduce in the remainder of the UK particularly if the imposition of such regulation would involve Kingston in considerable additional expense. This overarching factor will be borne in mind when assessing the regulatory options for the Kingston upon Hull area. These options are set out in Chapter 9.

Proposed remedies

- 4.25 The Act (sections 45-50 and 87-92) sets out the obligations that the Director can impose if he finds that any undertaking has SMP. Sections 87 to 92 implement Articles 9 to 13 of the Access Directive and Articles 17 to 19 of the Universal Service Directive. The obligations relevant to this review are:
 - the provision of network access;
 - no undue discrimination;
 - transparency;
 - cost recovery, including price controls; and
 - cost accounting and accounting separation.
- 4.26 Section 4 of the Act sets out the Community requirements on the Director which flow from Article 8 of the Framework Directive. The Director in considering whether to propose any conditions has considered all of these requirements. In particular, the Director has considered the requirements to promote competition in relation to the provision of electronic communications networks and electronic communications services, and to secure efficient and sustainable competition for the benefit of consumers. In addition, in the anticipation of the coming into force of section 3 of the Act on 29 December 2003 by virtue of the Office of Communications Act 2002 (Commencement No. 3) and Communications Act 2003 (Commencement No. 2) Order 2003, S.I. 2003 No. 3142 (C. 125), the Director considers that, in carrying out the above-mentioned functions and acting in accordance with the six Community requirements, he has also performed his general duties under section 3 of the Act. Namely, the Director considers that furthering the interests of citizens in relation to communications matters and of consumers in relevant markets, where appropriate by promoting competition, are

matters forming part of his proposals and an outcome he also expects to achieve by the proposed remedies. In this context, the Director also notes that section 3(6) of the Act requires him to, in carrying out functions mentioned in section 4(1) of the Act, prioritise his duty under section 4 of the Act if any of his general duties conflict with it.

- 4.27 As well as being appropriate (see section 87(1)), each SMP condition must also satisfy the tests set out in section 47 of the Act, namely that each condition must be:
 - objectively justifiable in relation to the networks, services or facilities to which it relates;
 - not such as to discriminate unduly against particular persons or a particular description of persons;
 - proportionate to what the condition is intended to achieve; and
 - in relation to what it is intended to achieve, transparent.
- 4.28 It is the Director's view that the proposed remedies satisfy the relevant requirements specified in the Act and relevant European Directives. This view is explained in detail in the following chapters.

Chapter 5

Regulatory remedies – proposed retail SMP services conditions for BT

Introduction

- 5.1 This chapter sets out the proposed remedies for the retail low bandwidth traditional interface leased lines market in the UK excluding Hull. It begins with some more general comments on the aims of regulation in the retail leased lines markets, before moving on to set out the effect of, and the Director's reasons for making, proposals to set SMP services conditions in this market. It also explains how certain tests in the Act are satisfied.
- 5.2 The proposed conditions in respect of BT are attached to the Notification in Annex D of this document.
- 5.3 The Director has identified for the purposes of section 79 of the Act only one distinct product market for retail leased lines. This is:
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s). This incorporates the minimum set of retail leased lines identified by the Commission, that is retail leased lines up to and including 2Mbit/s (which includes analogue leased lines), and retail leased lines of 8Mbit/s;
- 5.4 The Director has concluded that there are two separate geographic markets, one for the UK excluding Kingston upon Hull and one for Kingston upon Hull. The latter is considered separately in Chapter 8. The following discussion relates only to retail leased lines for the UK excluding Kingston upon Hull.

Aims of regulation

Regulation in the high and very high bandwidth retail leased lines markets

5.5 The Director generally agrees with the view set out in the Commission's Recommendation that:

"It is not necessary to expand the retail leased line categories to capacities beyond the minimum set since there must always be a presumption that an intervention at a wholesale level will be sufficient to address any problems that arise".

5.6 Accordingly, the Director proposed that the existing regulation applicable to high and very high bandwidth retail traditional interface leased lines should be removed and that no regulation should be imposed for retail alternative interface leased lines (see Chapters 6 and 7 for proposed wholesale remedies).

Responses to previous consultation – adjacent market SMP

- 5.7 A number of respondents to the previous consultation comment on the use of Article 14(3) of the Framework Directive. This states that "where an undertaking has significant market power on a specific market, it may also be deemed to have significant market power on a related market, where the links between the two markets are such as to allow the market power held in one market to be leveraged into the other market, thereby strengthening the market power of the undertaking." Some non dominant providers argue that the Director should use this provision to determine that BT has SMP in all markets which are only "competitive" to the extent that the provision of components from an adjacent market (typically an upstream market) is subject to effective regulation. These providers argue that, having determined that SMP can be leveraged into the second market in this way, BT should be made subject to an obligation to publish prices in the second market, so that competitors can more easily identify margin squeeze.
- 5.8 The respondents distinguish three market types depending on the degree of competition displayed. The market from which SMP is leveraged is said to feature 'persistent dominance', that is, dominance is expected to remain due to the economic conditions prevailing in that market. The markets into which dominance is leveraged are characterised either by potential competition or by dependent competition. Potential competition refers to a market in which there could be competition if SMP was not successfully leveraged into it, and the example cited is dominance from retail low bandwidth leased lines being leveraged into retail high and very high bandwidth leased lines by means of discount schemes across bandwidth ranges see section on volume discounts below. Dependent competition refers to the issue discussed in this section, that is, a market in which competition depends upon regulation of upstream inputs the example of leveraging from dominance in high bandwidth SBO into retail high bandwidth leased lines is used by respondents to illustrate this case.
- 5.9 The Director recognises the behaviour which Article 14(3) of the Framework Directive is intended to address and has stated in Oftel's Access Guidelines, at paragraph 3.38, that he would consider using Article 14(3) of the Framework Directive where, for example, "obligations imposed at the upstream level are insufficient". Further, Article 17 of the Universal Service directive allows NRAs to impose obligations at the retail level, but only where upstream remedies would not be sufficient.
- 5.10 In making a determination under Article 14(3) of the Framework Directive, it would be necessary to identify the 'closely related' market using competition law principles, and taking the utmost account of the Commission's Guidelines on market analysis. It would not, therefore, be possible to make a blanket

designation in respect of all markets which are dependent in some way on a closely related market where there is SMP.

- 5.11 Any decision to use Article 14(3) of the Framework Directive would have to be applied selectively to identified economic markets; and be proportionate, transparent, objectively justified and non-discriminatory. Such a decision would be taken only after it had been ascertained that the identified problem in the market could not be addressed effectively by competition law or, failing that, by a designation of SMP made in accordance with Article 14(2) of the Framework Directive. The Director remains alert to the possibility that, in specific circumstances, it may be appropriate to use Article 14(3) of the Framework Directive.
- 5.12 An obligation to publish downstream prices may conceivably assist competitors in identifying possible cases of margin squeeze. The Director does not believe, however, that any upheld complaints about margin squeeze would not have surfaced within a similar timeframe in the absence of an obligation on the dominant provider to publish retail prices; many complaints of this kind originate either as a concern that a dominant provider has offered an unpublished discount or that a widely advertised price represents a margin squeeze relative to its regulated wholesale components. In neither instance would a price publication rule help to identify the offence.
- 5.13 As a number of communications providers have recognised, an effective price publication obligation in the closely related market would also need to be aligned with a further obligation requiring adherence to the published price list. A blanket obligation to adhere to published prices in non-SMP markets would be a disproportionate response to concerns raised regarding the possible leverage of market power without a considered economic assessment of the relationship between the markets concerned.
- 5.14 Oftel, and its successor Ofcom, have adequate powers to require dominant providers to supply information needed to investigate allegations of anti competitive behaviour, whether those allegations are initiated by competitors or the regulator. A price publication rule in markets adjacent to markets where there is significant market power, offers few advantages to Oftel. The Director recognises that the regulatory staff of many non dominant providers currently use published regulatory price lists in the daily course of their work, particularly in making an initial sift of concerns expressed by sales colleagues about the reasons why a sales bid has been lost to a dominant provider. The Director believes, however that the availability of other data, including the published prices of the regulated wholesale components of the bid and the breakdown of the non dominant provider's own bid, amplified by market intelligence, would be sufficient to enable competitors to judge whether the dominant communications provider was likely to have been engaging in margin squeeze; similar

calculations would be necessary when assessing the likelihood that a dominant provider had been offering off-list discounts within his bid.

- 5.15 A price publication obligation per se provides no controls against margin squeeze and any action would have to be taken using competition law or some other regulatory provision. The Director is committed to applying the Competition Act rigorously and effectively. Exposure to a significant fine is likely to present a far more serious disincentive to anti competitive behaviour than a rule requiring the maintenance of a regulatory price list. The sharper focus of the new regulatory regime, and the narrower markets which are considered susceptible to ex ante regulation, are likely to give renewed prominence to the use of ex post competition law when tackling abuses.
- 5.16 With regard to preventing the vertical leverage of market power, the Director also notes that where a dominant provider is required to provide wholesale services on fair and reasonable terms but offers retail prices which create a margin squeeze, this may call into question whether, in the context of the retail prices offered, the wholesale prices can be considered fair and reasonable.
- 5.17 The Director will continue to take a close interest in the behaviour of vertically integrated dominant providers, particularly in markets which are reliant on new wholesale access products or where there are other reasons to believe that margin squeeze may occur. The Director will not hesitate to take action under the Competition Act 1998 and, where this is considered insufficient to prevent a recurrence of an offence, will give full consideration to making a designation under Articles 14(2) or 14(3) of the Framework Directive and imposing ex ante regulation.
- 5.18 With regard to preventing the horizontal leverage of market power, the Director proposes dealing with this via Oftel's policy on the implementation of undue discrimination in the context of bundling in business markets.

Conclusion on adjacent market SMP and Article 14(3)

5.19 In the light of the above considerations, the Director has decided that it would not be appropriate or proportionate at this stage to make SMP designations under Article 14(3) of the Framework Directive.

Regulation in the low bandwidth traditional interface retail leased lines market

5.20 The Director is examining the level of regulation in the low bandwidth traditional interface market which incorporates both the minimum set of retail leased lines identified by the Commission, that is traditional interface retail leased lines up to and including 2Mbit/s (which includes analogue leased lines), and

traditional interface retail leased lines of 8Mbit/s. The Director believes that different considerations apply to these two sets of leased lines, principally because new 8Mbit/s leased lines have not been available to new customers for some time and they are therefore of decreasing importance. In addition, they are regulated by different Articles of the new Directives. The differences in approach are discussed below.

- 5.21 The existing obligations applicable to low bandwidth traditional interface retail leased lines are as follows:
- obligation to supply;
- price publication;
- price notification;
- non discrimination; and
- cost orientation, including a cost accounting system and a price control on analogue leased lines.
- 5.22 In his assessment of retail low bandwidth traditional interface leased lines set out in Chapter 3 and Annex B, the Director has concluded that the market is not effectively competitive and proposed that BT be designated with SMP. Section 92 of the Act provides that where Ofcom has made a determination that a person is dominant in the market reviewed, it shall set such SMP conditions as it considers are appropriate and as are authorised in the Act. This implements Article 18 of the Universal Service Directive.
- 5.23 With regard to 8Mbit/s traditional interface retail leased lines, the Director considers that the test set out in section 92 is satisfied. In particular, he considers that it is proportionate to regulate these leased lines at the retail level. There are currently no 8Mbit/s wholesale PPCs and it is unlikely that there will be demand for such a product, since 8Mbit/s retail leased lines are a legacy product, for the technical reasons outlined below.

The minimum set of retail leased lines (up to and including 2Mbit/s)

- 5.24 Article 16 of the Framework Directive and Article 17 of the Universal Service Directive together provide that "where an NRA determines that the relevant market is not effectively competitive, it shall identify undertakings with SMP on that market…and…shall on such undertakings impose appropriate specific regulatory obligations…".
- 5.25 Annex VII to the Universal Service Directive ('Annex VII') states that if the market for the minimum set of retail leased lines is not found to be effectively competitive then NRAs must ensure that
- 1. these leased lines are provided; and that they are provided on the principles of
- 2. non discrimination;
- 3. transparency; and

- 4. where appropriate, cost orientation and a cost accounting system.
- 5.26 As BT has been found to have SMP in this market, the Director does not have any discretion regarding the imposition of the first three obligations. He has not therefore considered a potential option of 'no ex ante regulation' that was considered for the wholesale markets. The Director does, however, have discretion as regards the fourth obligation.
- 5.27 For digital retail leased lines, the Director believes that their price will be constrained over time by the increased competition which should come about as a result of PPC regulation, in particular the price control on symmetric broadband origination PPC services. Consequently, he does not believe it is proportionate to apply a cost orientation obligation for digital retail leased lines.
- 5.28 For analogue traditional interface retail leased lines, however, there is no such underlying wholesale regulation and consequently the Director has considered whether cost orientation or other relevant obligations should be imposed.

8Mbit/s traditional interface retail leased lines

- 5.29 Article 17 of the Universal Service Directive, which deals with the regulation of retail markets other than the minimum set of retail leased lines, states that where an NRA determines that the relevant retail market is not effectively competitive and has identified undertakings with SMP on that market, it shall "impose appropriate regulatory obligations" on those undertakings.
- 5.30 In his assessment of the retail low bandwidth traditional interface leased lines market (set out in Chapters 2 and 3 and Annexes A and B), the Director has concluded that this market includes 8Mbit/s leased lines and that it is not effectively competitive, and proposed that BT should be designated with SMP. The Director is assessing the appropriate level of future regulation for 8Mbit/s retail leased lines not only in the light of this proposed finding but also against the particular circumstances relating to leased lines of this bandwidth.
- 5.31 New 8Mbit/s leased lines have not been available since September 2001. BT only allows existing MegaStream8 customers to continue to rent current leased lines at the prevailing rental charge. The reasons for this are largely due to the technical considerations of the infrastructure over which these leased lines are supplied.
- 5.32 BT's 8Mbit/s retail leased lines have been provided over old PDH technology, and are not supported by the newer SDH technology used to provide other traditional interface leased lines above 2Mbit/s. In addition, there have been problems in finding appropriate tributary cards to support 8Mbit/s in the PDH network; and the Network Terminating Equipment has been updated to

support multiple 2Mbit/s delivery rather than 8Mbit/s. Consequently, the 8Mbit/s lines represent a legacy service that is only viable where already installed.

Remedies considered

5.33 In the light of the above considerations, the Director examined in the previous consultation the following options for future regulation in the market for low bandwidth traditional interface leased lines:

- 1. obligation to supply the minimum set of retail leased lines, and to continue to supply existing 8Mbit/s retail leased lines being provided on the date the conditions come into force:
- 2. requirement not to unduly discriminate;
- 3. no cost/price obligations;
- 4. cost orientation and a cost accounting system for analogue circuits and 8Mbit/s retail leased lines:
- 5. a co-regulatory option by which BT would voluntarily commit to a contractually binding price guarantee for its customers in relation to analogue circuits and/or 8Mbit/s retail leased lines; and
- 6. for all leased lines in this market, requirement to publish a reference offer (obligation to publish current prices, terms and conditions; and same day price notification) note that the requirement to publish information concerning delivery and repair times is now being set out in a separate condition, for reasons that are explained in the relevant sections.
- 5.34 The Director undertook a regulatory option appraisal of these options, concluding that option 3 (see paragraphs 5.45 to 5.50 of first consultation document) was an inappropriate response to the degree of SMP existing in this market. Responses to the first consultation have confirmed the Director's opinion on the appropriate regulation for this market, and consequently this document discusses only the remaining options. The Director has, following responses, decided that for pricing a combination of options 4 and 5 would be the most proportionate solution. This pragmatic solution is described in detail below.
- 5.35 In assessing the level of regulation to be applied, the Director has taken into account the Commission's SMP Guidelines which state at paragraph 15 that regulation should aim to promote an open and competitive market, and at paragraph 16 that *ex ante* regulations should be imposed to ensure that an SMP communications provider cannot use its market power to restrict or distort competition on the relevant market or leverage market power on to adjacent markets.
- 5.36 The Director has also borne in mind his overall view that it is preferable, where possible and appropriate, to deal with any problems found in a retail market by means of the imposition of regulation at the wholesale level. The regulation proposed for this retail market is proportionate in line with this intention.

5.37 The Director has also acted in accordance with the duties set out in section 4 of the Act. All of the conditions proposed by the Director will promote competition in the provision of retail leased lines and, as part of the implementation of the EC Directives referred to above, will assist with the development of the European internal market. In addition, each individual proposed condition fulfils one or more of the other duties set out in section 4, as set out in the discussion of the conditions below.

5.38 The Director considers that the proposed conditions satisfy the tests set out in section 47 of the Act. They are objectively justifiable, in that they relate to the need to ensure that competition develops to the benefit of consumers. They do not unduly discriminate against BT because BT has been found to be the only communications provider holding a position of SMP in this market. They are proportionate, since BT has SMP in this market and these products might not be made available on fair and reasonable terms in the absence of the conditions. The proposed conditions are set out in a transparent form in Annex D, so that the Director considers that they meets the requirement of transparency set out in the Act.

Volume discounts

5.39 The Director is, as discussed in Annex B, aware that BT offers volume discounts on its retail leased lines. In view of the ubiquity of its network, customers in many areas have no alternative to BT. If these customers also need leased lines in other areas where other communications providers also provide leased lines, they are likely to prefer buying these leased lines from BT in order to maximise their volume discounts. It can thus be inferred that offering discounts may enable BT to leverage SMP from its position of sole provider in many areas across the whole of this market.

5.40 As noted in the recent consultation on BT's pricing of services for business customers published in October 2003 (see www.oftel.gov.uk/publications/licensing/2003/price1003.pdf), "where potential competitors are unable, commercially or technically, to replicate all of the services which BT offers to bundle for the purpose of calculating discounts, customers would probably be reluctant to consider splitting their purchase between competing providers if the cost of purchasing services from several suppliers is greater than the cost of purchasing the full bundle offered by BT. If BT is the only viable supplier of one or more elements of the bundle, the level at which BT sets its stand-alone prices for these elements, relative to the implicit prices when supplied within the bundle, may heavily weight the customer's calculation in favour of a bundled purchase, thus foreclosing the market to competitors." In that document, the Director considers a number of possible tests that could be used to assess whether a particular discount structure is anticompetitive. Consultation closes for comment on 15 January 2004.

Responses to previous consultation – volume discounts

5.41 A number of respondents supported the Director's comments on volume discounts, adding that since BT's discount schemes are aggregated across product lines it is possible for SMP to be leveraged across product lines as well as geography. BT stated that it did not consider an investigation was necessary.

Conclusion on volume discounts

5.42 The Director, separately from this market review, is currently considering the appropriate regulatory treatment of relevant volume discounts in two other exercises. In addition to the consultation document mentioned in paragraph 5.40 above, he is investigating a specific complaint that BT's volume discounts in relation to circuits used for RBS backhaul, are anti-competitive. Consequently, it would be premature to reach a conclusion in this market review as to whether specific ex-ante rules are required. These can be added at a later stage if found to be appropriate. The Director will, of course, give consideration to any other fully substantiated and evidence-based complaints made about BT's retail volume discounts.

Low bandwidth traditional interface retail leased lines proposed regulation 1:

Requirement to provide the minimum set of retail leased lines, and to continue to provide 8Mbit/s leased lines already being supplied

- 5.43 The Universal Service Directive states that NRAs must ensure that organisations with SMP provide the minimum set of retail leased lines. The minimum set has been defined in the Commission Decision 2003/548/EC of 24 July 2003, as meaning leased lines of bandwidths up to and including 2Mbit/s. As BT has been found to have SMP, the Director must impose a general obligation to supply the minimum set of retail leased lines as required by Article 18(1) of the Universal Service Directive.
- 5.44 For 8Mbit/s traditional interface retail leased lines, the Director considers that it would be disproportionate to impose a condition requiring BT to supply new leased lines, for the technical reasons outlined above. Furthermore, although BT has been identified as having SMP in respect of these services, the shares of volumes previously supplied suggest that competitive conditions may be different from those applying to the remainder of the low bandwidth retail leased lines market.
- 5.45 BT's share of 8Mbit/s traditional interface retail leased lines is in the region of 45%, whereas for the remainder of low bandwidth traditional interface retail leased lines BT's share is nearer to 70%. BT's position in the lower bandwidths seems to be a more important source of its SMP in this market than its position in

8Mbit/s leased lines, because of the comparative volumes involved. Thus there appears to be a greater need for regulation for the lower bandwidths and the arguments for regulation of 8Mbit/s leased lines are less conclusive.

- 5.46 The Director does consider that it is necessary to implement a condition requiring BT to maintain its existing 8Mbit/s traditional interface retail leased lines, ie those that are in existence on the date the conditions come into force. This will ensure that the customers using these lines can continue to use them, and will prevent BT from ceasing to supply these products to existing customers wishing to retain the service. In the absence of these products, the customers would be likely to be faced with a choice of alternatives (such as four 2Mbit/s retail leased lines) that is potentially more expensive and less appropriate to their particular needs.
- 5.47 Implementation of this obligation to provide the minimum set of retail leased lines, and to continue to provide 8Mbit/s leased lines already being supplied, fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. BT will be required to provide these products irrespective of the methods and technology by which they are provided.

Conclusion on requirement to provide

- 5.48 Having considered the consultation responses the Director proposes to impose condition I1 in Annex D, which requires BT to provide the minimum set of retail leased lines, and to continue to provide 8Mbit/s leased lines already being supplied. This condition remains in the same terms as the condition previously consulted on, except that the wording now makes it clear that where, in response to a particular request, the Dominant Provider considers it unreasonable to provide a traditional interface retail leased line of up to and including 8Mbit/s at the charges, terms and conditions set out in the relevant Reference Offer, it may only depart from its Reference Offer with the consent of the Director.
- 5.49 The Director is not amending the class of persons ("Third Parties") to whom such circuits can be provided (as he is for wholesale markets see proposed regulation 1 in subsequent chapters), since retail leased lines should be made available to any person reasonably requesting them.

Communications Act tests

- 5.50 The Director considers that the proposed condition meets the tests set out in the Act.
- 5.51 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition promotes the interests of consumers in accordance with sections 4(5) and 4(9), particularly businesses,

since BT has SMP in this market, and in the absence of supply by BT business consumers may find themselves unable to obtain retail leased lines on fair and reasonable terms.

Low bandwidth traditional interface retail leased lines proposed regulation 2:

Requirement not to unduly discriminate

- 5.52 Annex VII of the Universal Service Directive states that NRAs must ensure that organisations with SMP "apply similar conditions in similar circumstances to organisations providing similar services, and are to provide leased lines to others under the same conditions and of the same quality as they provide for their own services, or those of their subsidiaries or partners, where applicable." As BT has been found to have SMP, the Director must impose a no undue discrimination obligation in relation to the minimum set of leased lines. This regulation will promote competition in traditional interface retail leased lines by preventing BT from discriminating in ways which are anti-competitive.
- 5.53 The Director considers that it is necessary also to impose this obligation in respect of 8Mbit/s traditional interface leased lines. This will ensure that BT does not amend the terms and conditions of supply of existing leased lines in a discriminatory way, and it will also protect customers for new leased lines against any potential discrimination in their conditions of supply, should BT choose to recommence supply of new leased lines.
- 5.54 The Director considers that application of a non discrimination condition should not prevent BT from setting geographically de-averaged tariffs, ie charging different prices for traditional interface retail leased lines at different locations (as it does currently for the Central London Zone (CLZ)), provided that in doing so it did not discriminate between customers or have a material adverse effect on competition.

Responses to previous consultation – no undue discrimination

- 5.55 In their responses, a number of communications providers suggested that the Director should remove the word "undue" from this condition. While communications providers' concerns related primarily to the application of the "undue" qualification to this condition in wholesale markets, they also set out concerns that this approach would be too lenient if used at the retail level.
- 5.56 While the Director understands the concerns of BT's competitors, and recognises that effective control of anti competitive discrimination is an essential part of the ex ante regulatory framework, the Director does not believe it is appropriate or necessary to amend the condition in the manner suggested by communications providers. The Act provides for the Director to impose conditions which, amongst others, prohibit "undue" discrimination, and the Director

considers that this condition is both proportionate and sufficiently effective. As BT notes in its response, there may be objective reasons for attaching different terms and conditions to products and services aimed at different categories of customer.

5.57 BT welcomes the Director's suggestion that some geographic flexibility may be appropriate, providing it does not discriminate between customers or have a material adverse effect on competition.

Conclusion on no undue discrimination

5.58 Having considered the consultation responses the Director proposes, to impose condition I2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

- 5.59 The Director considers that the proposed condition meets the tests set out in the Act.
- 5.60 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition protects business consumers by ensuring supply on equal terms to all parties. As BT has SMP in this market, it is in a position where in the absence of this condition it would be able to discriminate unduly on the terms of retail leased lines between different parties.

Low bandwidth traditional interface retail leased lines proposed regulation 3:

Voluntary customer price guarantee and cost orientation obligation

- 5.61 Annex VII states that "National regulatory authorities are, **where appropriate**, to ensure that tariffs for leased lines referred to in Article 18 follow the basic principles of cost orientation. To this end, national regulatory authorities are to ensure that undertakings identified as having SMP pursuant to Article 18(1) formulate and put in practice a suitable cost accounting system." (emphasis added)
- 5.62 The Director stated in the April consultation document that a cost orientation obligation would in his view be disproportionate in relation to digital retail leased lines up to 2Mbit/s, where PPC regulation should provide a constraint on prices. However, the Director did consider whether it would be appropriate at this stage to impose cost orientation and associated cost accounting obligations either for analogue retail leased lines or for 8Mbit/s retail leased lines, for which there are no PPC type products available at the wholesale level.

Analogue retail leased lines

- 5.63 At the retail level, BT is currently subject to a 'safeguard' price cap on analogue traditional interface retail leased lines of RPI+0%. This prevents BT from raising the price of retail analogue leased lines by more than the rate of inflation. This protection for consumers is considered by the Director to be necessary because of BT's position of SMP in this market. The market share information set out in Annex B shows that BT's position in sales of analogue circuits is stronger if anything than its position in the remainder of the low bandwidth traditional interface retail leased lines market. BT's share of analogue circuit volumes is extremely high at 95%, compared with a low bandwidth traditional interface market share of 84%. The revenue shares tell a similar story, with BT having 92% of analogue circuits compared with a low bandwidth traditional interface market share of 78%.
- 5.64 As explained in Chapter 2 and Annex A, the Director has concluded that analogue circuits are part of the same market as low bandwidth traditional interface digital circuits on a forward looking basis and in particular focussing on the substitution choices available to purchasers of new leased lines (rather than existing analogue customers). In certain circumstances and for customers with certain demand requirements, there are considerable price differences at present, with digital leased lines KiloStream and MegaStream2 services being significantly more expensive than analogue. However, the Director believes that the underlying costs of provision of analogue leased lines are not systematically lower than for digital services.
- 5.65 Accordingly, if prices were set at the competitive level (ie cost reflective) such price differences would not exist. At present the Director does not believe that the prices of BT's retail low bandwidth traditional interface digital leased lines are at the competitive level. Indeed the PPC regulatory regime has been introduced in part to bring down these prices through the promotion of retail competition. This will, however, take some time to occur.
- 5.66 Therefore the Director believes that some form of ongoing control on the prices of traditional interface analogue circuits is necessary to prevent analogue prices from rising to the current price level of digital circuits rather than the prices of digital circuits falling towards analogue prices. Furthermore, existing customers of analogue services do face some costs of switching to digital services, particularly where the minimum contract period has not expired. This serves to magnify the effect of the current price differences that already exist between analogue and digital for all or some of the existing analogue customers. Consideration of existing analogue customers' switching costs therefore further strengthens the case that transitory measures are warranted. The Director anticipates that in due course such measures will no longer be required and intends to consider this issue as part of the next review of the market, scheduled for 2005/6.

- 5.67 In relation to the Director's consideration of cost orientation, BT has provided figures to the Director on its ROCE for analogue traditional interface retail leased lines, calculated on a Current Cost Accounting Fully Allocated Cost basis (set out in full in Annex B). These figures indicate that BT's ROCE for these types of line has declined over the last two years, to the point where in the most recent year (2001/2002) it was only 6%, a figure below BT's regulated cost of capital which is set at 13.5%.
- 5.68 At first glance, these figures might indicate that BT is earning less than its cost of capital and that it should be allowed to raise prices by more than RPI in order for them to be cost oriented. However, even based on an initial examination of that profitability data, the Director has already identified a number of questions and issues that would need to be resolved before such a conclusion could reliably be drawn. Thus far, BT has been unable to satisfy the Director as to the reliability of its figures or their basis of preparation. Significant potential price increases, which would be to the detriment of consumers, would need to be thoroughly justified as being consistent with appropriate cost recovery, and cost information would need to be prepared on a robust basis.
- 5.69 The Director notes that traditional interface analogue leased lines form a declining market. The Director's strategy is one of regulation where appropriate where the same or similar ends can be achieved by the use of less intrusive measures, the Director actively seeks to use them. In this case, the Director considers that imposition of regulation in this market might be regarded as disproportionate, if control of prices could be achieved by means of co-regulation (see below).

8Mbit/s traditional interface retail leased lines

- 5.70 In relation to 8Mbit/s traditional interface retail leased lines, the Director again considers that some form of control on prices is likely to be appropriate in order to ensure that existing leased lines continue to be supplied on a cost oriented basis, and to protect customers for new leased lines by ensuring that they are supplied on a cost oriented basis, should BT choose to recommence supply of new leased lines.
- 5.71 Such protection is necessary for customers in the short term because the current price of an 8Mbit/s traditional interface retail leased line is significantly lower than the price of four 2Mbit/s lines if there were no protection, 8Mbit/s prices might rise to the current price level of four 2Mbit/s digital circuits rather than the reverse. In addition, existing customers of 8Mbit/s services are likely to face some costs of switching to 2Mbit/s services, magnifying the effect of the current price differences. There are no 8Mbit/s PPCs, reflecting the technical issues discussed earlier, and therefore there is no direct constraint from wholesale regulation on leased lines of this bandwidth.

5.72 As noted above, the Director's strategy is one of regulation where appropriate – where the same or similar ends can be achieved by the use of less intrusive measures, the Director actively seeks to use them. In this case, the Director again considers that imposition of regulation might be regarded as disproportionate, if control of prices could be achieved by means of co-regulation (see below).

Voluntary price guarantee

- 5.73 In the April consultation document, the Director set out a co-regulatory alternative which would entail BT giving a voluntarily undertaking that it would not raise the prices of traditional interface analogue and/or 8Mbit/s retail leased lines by more than RPI before the end of 2005. Such an undertaking might, for example, be made by way of a binding customer agreement.
- 5.74 This option would achieve the same ends for consumers (ie protection from excessive price increases) as a cost orientation condition without involving the Director and BT in the associated compliance costs, such as time and resource for detailed cost investigations. It would also be less prescriptive and therefore more appropriate for these declining products. It would also support the Director's strategy of regulation only where appropriate. Where a communications provider displays a willingness to pursue self and co regulatory initiatives, this reduces the pressure on the regulator to impose formal regulation.

Responses to previous consultation – voluntary price guarantee

- 5.75 Most communications providers welcomed this co regulatory initiative, although Easynet expressed concern that it would be impractical for communications providers to pursue a contractual remedy unless a breach of BT's contractual commitment resulted in a loss of sufficient magnitude. The Director considers that the price publication obligation set out below will be sufficient to prevent BT from targeting individual customers in the manner suggested by Easynet.
- 5.76 In its response, BT confirmed its agreement to the Director's proposal, noting that it represented a reasonable balance of pragmatism and flexibility to price control. BT stated that it was prepared to implement a voluntary price cap of an annual RPI increase on a basket of traditional interface analogue and 8Mbit/s private circuit products. BT has since agreed by official letter (see below) that this should take effect retrospectively from June 2003 (in order to dovetail with the period for the existing analogue price cap) and run through to June 2006 or the implementation of the next market review, whichever is the earlier. BT has confirmed that if the next market review is not implemented by June 2006, it is prepared to discuss maintaining the price cap until the conclusion of the review.

- 5.77 BT has, however, expressed concern at the practicality of providing compensation for customers in the event of a breach of the price cap. It would not be immediately apparent which customers should receive compensation since it would be impossible to determine without a full cost investigation which of the products in the basket had been subject to an inappropriately high increase (or inappropriately low decrease). There would also be substantial costs involved in calculating and providing compensation. The Director accepts BT's concerns and has proposed a pragmatic solution to which BT has agreed. The Director proposes to apply a cost orientation condition which will be suitably worded so that it, and the associated cost accounting system, will only come into force in the event that BT breaches the price cap. As BT has agreed to continue giving the Director prior notice of annual changes to the price cap, the Director considers that this is sufficient incentive for BT to honour its voluntary agreement.
- 5.78 The assurance offered in BT's official letters of 24 September 2003 to the Director and to Ofcom reads as follows:
- 5.79 "BT commits to implement with effect from the date of withdrawal of the Continuation Notice for condition 73 of BT's licence, an assurance in relation to a basket of services that consists of all retail analogue private circuits and 8M/bit digital private circuits contained within the BT Price List that any changes in the prices of individual services contained within that basket will not result in a percentage increase in the overall charges for that basket of services which exceeds the Retail Prices Index (All Items) ("RPI") over a 12 month period. The period for the first assessment of the increase in price over the basket of services against RPI commenced on 30 June 2003 and will run for 12 months. Any subsequent period of assessment will commence at the end of the first 12 month period."
- 5.80 "BT also commits to the Director General of Telecommunications and to Ofcom to annual reporting on the circuits contained within the basket. BT commits to provide the Director General of Telecommunications and/or Ofcom with revenues broken down into kilometre lengths of the various circuits contained within the basket."
- 5.81 "BT gives this assurance for a period up until 30 June 2006 or the date on which the proposals following from Ofcom's next review of the retail leased lines market are implemented, whichever is earlier. BT will be prepared to discuss a roll-over of this undertaking at the appropriate time if required."

Conclusion on voluntary price guarantee and cost orientation obligation

- 5.82 The Director has concluded that this combination of voluntary price guarantee and cost orientation (and cost accounting) obligation to apply in the event of a breach of the undertaking, represents a proportionate and balanced solution to the potential pricing concerns for these declining retail markets. The advantages and disadvantages of a cost accounting system, and justification against the various regulatory tests, are set out in Chapter 10.
- 5.83 The Director considers that imposition of this combined solution will minimise the risk of adverse effects arising from price distortion that would occur if BT, which has SMP in this market, were to fix and maintain some or all of its

prices at an excessively high level. Thus the voluntary guarantee and back up cost orientation condition will help to promote efficiency and sustainable competition.

Communications Act tests

5.84 The Director considers that the proposed condition (Condition I3 in Annex D) meets the tests set out in the Act. The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition protects business consumers by ensuring that the product they are purchasing is cost oriented.

Low bandwidth traditional interface retail leased lines proposed regulation 4:

Requirement to publish a reference offer

- 5.85 Annex VII of the Universal Service Directive states that NRAs must ensure that information on "technical characteristics", "tariffs" and "supply conditions" is easily accessible for the set of leased lines defined. As BT has been found to have SMP, the Director must impose a transparency obligation. BT will be obliged to publish its prices, terms and conditions for all retail low bandwidth traditional interface leased lines (ie including 8Mbit/s).
- 5.86 BT will be obliged to publish information on technical characteristics which includes physical and electrical characteristics as well as the detailed technical and performance specifications which apply at the network termination point.
- 5.87 BT will be obliged to publish tariffs which include initial connection charges, periodic rental charges and other charges. Thus, for example, the individual connection and rental charges for a leased line must be unbundled. Where tariffs are differentiated, this must be indicated. Where BT considers it unreasonable to provide a leased line under its published tariff and supply conditions, it must seek the agreement of the Director to vary those conditions in that case.
- 5.88 In addition, as part of its transparency obligation, the Director considers that BT should be required to provide notification specifically to the Director, and in addition to all other parties by means of its website, of new products, their prices and terms and conditions, and changes to prices, terms and conditions of existing retail low bandwidth traditional interface leased lines products.
- 5.89 BT is currently required to give 28 days' notice of changes to the price, terms and conditions of retail traditional interface leased lines under Condition 55.4 of its licence (in line with the Leased Lines Directive).
- 5.90 The Universal Service Directive requires NRAs to ensure that information such as tariffs, charges, terms and conditions is published in an easily accessible

form. The Director considers that a requirement to notify prices terms and conditions for new products, and changes to prices terms and conditions for existing products, will make that information more easily accessible to the Director and allow him to take prompt action in the event of a complaint or own initiative investigation into the prices terms or conditions. It will also enable the Director to monitor BT's performance against its non discrimination obligation.

- 5.91 It could be argued that it would be unnecessarily onerous to require BT to provide advance notification of new products or changes to existing products. The Director agrees that it is unlikely to be of benefit to require BT to provide a short period of notice of such information. However, he considers that there are distinct advantages as set out above in requiring BT to provide same-day notification.
- 5.92 The Director has therefore concluded that it would be most appropriate to require BT to provide same-day notification of the prices, terms and conditions for new products and changes to the prices, terms and conditions of existing products, for its retail low bandwidth traditional interface leased lines. This is consistent with the Director's proposals for other retail markets where BT has been identified as having SMP, such as those falling within the retail PSTN price control market review.
- 5.93 The Director considers that it is necessary also to impose this obligation in respect of 8Mbit/s traditional interface leased lines. This will ensure that BT's terms and conditions of supply for existing leased lines continue to be transparent, and it will also protect customers for new leased lines by ensuring that they are supplied on a transparent basis, should BT choose to recommence supply of new leased lines.

Responses to previous consultation – reference offer and same day notification

- 5.94 The response from the communications provider group signalled disagreement with the Director's proposal for same day notification of changes to prices, terms and conditions. The communications providers requested a 28 day notification period, to allow them to identify anti-competitive behaviour before it could have a detrimental effect on consumers and competition.
- 5.95 The Director consulted extensively, in 2001, on the risks of price following presented by advance notification of changes to prices and published a Statement in March 2002. In the Statement, the Director announced that he would trial a reduction in the required notice period from 28 days to a nominal 1 day (European directives in force at the time required NRAs to impose some form of *advance* notice obligation on certain SMP communications providers). The Statement explained that if, during or after the trial, and having examined evidence available to him, the Director took the view that the reduced regulatory

notification period was disadvantaging customers, competition or competitors he would revert to a 28 day notice period. Otherwise the notice period would be more permanently changed to one day.

- 5.96 In the 14 months since the trial started, the Director has seen no evidence that the trial reduction to a nominal 1 day's notice of price changes has disadvantaged customers, competitors or competition. In the Director's view, there have been no instances where anti competitive behaviour has come to light later than would have been the case had BT been obliged to provide 28 days notice and where this has had an impact on the Director's ability to take action swiftly and effectively.
- 5.97 Given that advance notification of changes does facilitate price following, whether or not competitors chose to price follow, the Director believes the risks of advance notification outweigh any benefits. New European directives allow NRAs more discretion in deciding which obligations to impose on communications providers with SMP, and the Director is no longer obliged to impose an obligation to provide *advance* notice of changes. Responses to the April consultation document failed to identify any advantages offered by an obligation to provide 1 day's advance notice, compared with same day notification.
- 5.98 BT states in its response that requirements to publish prices are likely to lead to 'price following' which in turn will dilute price competition. The Director considers that the risks of this occurring in this market are outweighed by the benefits of imposing this obligation, and that the risks are in any case substantially minimised by requiring only same day notification.
- 5.99 BT also states that in its view, technical characteristics and provision and repair timescales should be published in the "General Conditions of Entitlement", rather than in its Reference Offer as originally proposed by the Director.
- 5.100 The Director agrees with BT that publication of provision and repair timescales should be carried out separately from its Reference Offer. The Director has therefore transferred those proposals that were previously in Condition I4.2(d) & I4.2(f), into a new condition, discussed in the next section. The Conditions of Entitlement are not, however, the appropriate vehicle to ensure publication since these publication requirements are being proposed specifically on BT, pursuant to Article 18 of the USD, in view of BT's position of SMP.

Conclusion on reference offer and same day notification

5.101 The Director proposes to require BT to publish and notify amendments and new charges, terms and conditions on the day that those amendments or new charges, terms and conditions come into force. This option provides a degree of certainty that all tariffs, terms and conditions will be published and

offers the benefits of notification for monitoring purposes without facilitating price following.

- 5.102 As the Director believes BT has SMP in this market, a price publication and notification obligation is needed to provide Oftel and competitors with visibility of possible anti competitive behaviour.
- 5.103 The Director proposes to include a power to disapply the condition by consent where, for example, BT has notified Oftel that for a limited period it is not making the services publicly available while it assesses the technical or commercial viability of the service.
- 5.104 The Director has also modified the proposed condition slightly so that it falls closer in line with the wording in Annex VII of the Universal Service Directive.

Communications Act tests

- 5.105 The Director considers that the proposed condition (Condition I4 in Annex D) meets the tests set out in the Act.
- 5.106 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition gives business consumers information, so that they can establish that the terms and conditions on which they are purchasing the services do not discriminate against them. This in turn assists the policing of compliance with the non discrimination obligation, allowing the Director to tell more easily if discrimination is taking place.
- 5.107 The condition also promotes competition in retail traditional interface leased lines. Clarity of the product makes it easier for switching to take place. In addition, the condition ensures that competitors know the specifications of BT's products and the terms and conditions to which it must adhere, thereby making it easier for them to offer competing services.
- 5.108 It is possible that transparency requirements can lead to price following, thereby discouraging vigorous price competition. However, the Director believes that BT's market power in this market is so extensive that the benefits of imposing this obligation are likely to outweigh any possible costs of this nature.

Low bandwidth traditional interface retail leased lines proposed regulation 5:

Requirement to publish information concerning delivery and repair times

5.109 As discussed in the previous section, BT will be obliged by this condition to publish supply conditions, including at least information concerning the ordering procedure, the typical delivery period, the contractual period, the typical

repair time, and any refund procedure. Justification against the Communications Act tests is set out in the previous section.

Low bandwidth traditional interface retail leased lines: Conclusion on proposed regulation

5.110 The Director has concluded that BT has SMP in this market, and that as a consequence the following conditions should be imposed:

- 1. obligation to supply the minimum set of retail leased lines, and to continue to supply existing 8Mbit/s traditional interface retail leased lines being provided on the date the conditions come into force;
- 2. requirement not to unduly discriminate;
- in respect of traditional interface analogue and 8Mbit/s retail leased lines, cost orientation and a cost accounting system to apply only if BT breaches its voluntary undertaking not to raise the combined prices of a basket of these services by more than RPI before June 2006 or the implementation of the next market review, whichever is the earlier;
- 4. for all leased lines in this market, requirement to publish a reference offer (obligation to publish current prices, terms and conditions; and same day price notification); and
- 5. requirement to publish information concerning delivery and repair times. Draft conditions of entitlement reflecting the preferred options are set out in Annex D.
- 5.111 The Director is, as noted above, not proposing to apply any regulation to the high bandwidth or very high bandwidth traditional interface retail markets. Thus there is a withdrawal of the regulation currently applying to leased lines in these markets. In addition, the Director is proposing less regulation for the retail low bandwidth traditional interface market than currently exists including withdrawal of the price control on traditional interface analogue retail leased lines. The Director's proposals for the retail markets reflect his intention to deal with problems at the retail level by means of regulation at the wholesale level, where possible and appropriate.

Chapter 6

Regulatory remedies – proposed SMP services conditions and Directions for BT's wholesale low and high bandwidth traditional interface symmetric broadband origination markets

Introduction

6.1 This chapter sets out the proposed remedies for the wholesale low and high bandwidth traditional interface symmetric broadband origination ("TISBO") markets in the UK excluding Hull. The more general comments on the structure of the analysis, the aims of regulation and CSH and ISH interconnection services at the beginning of this chapter apply equally to these markets and to the wholesale trunk segments market. This chapter then moves on to set out the effect of, and the Director's reasons for making, proposals to set SMP services conditions in these markets. It also explains how certain tests in the Act are satisfied.

6.2 The proposed conditions in respect of BT are attached to the Notification in Annex D of this document, while the proposed Directions are set out in Annex E.

Structure of the analysis

- 6.3 The Director has identified five distinct wholesale product markets for the UK excluding Kingston upon Hull. These are:
- wholesale low bandwidth traditional interface symmetric broadband origination (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination (above 8Mbit/s up to and including 155Mbit/s);
- wholesale very high bandwidth traditional interface symmetric broadband origination (above 155Mbit/s);
- wholesale alternative interface symmetric broadband origination ("AISBO");
 and
- wholesale trunk segments.
- 6.4 As discussed in Chapter 3, the Director has not identified SMP in the very high bandwidth TISBO market. Consequently, there is no need to consider any regulation to be applied in this market, and the PPC and LLU backhaul Directions currently relating to circuits of 622Mbit/s and above will no longer apply to those circuits.
- 6.5 The Director considers that this fits well with Recital 13 of the Access Directive, which notes that the aim of NRAs should be to reduce *ex ante* sector

specific rules progressively as competition in the market develops and delivers the desired results.

- 6.6 The Director's assessment of regulatory options is therefore restricted to the trunk segments, the AISBO market, and the low and high bandwidth TISBO markets. The majority of the regulation proposed for the latter two markets is identical, and the Director is therefore considering these markets together. Where any differences in regulation are necessitated by technical differences such as a product only being available over either low or high bandwidth, these differences are highlighted.
- 6.7 The Access Directive deals with wholesale relationships between providers of networks and services. It sets out the responsibilities of NRAs and the remedies that they can impose relating to access and interconnection. Certain specific remedies can only be imposed after a finding of SMP in a relevant market.
- 6.8 Section 87(1) of the Act provides that where Ofcom has made a determination that a person is dominant in the market reviewed, they shall set such SMP conditions as they consider are appropriate and as are authorised in the Act. This implements Article 8 of the Access Directive. At paragraphs 21 and 114 of the Commission's SMP Guidelines state that this means that the Director must impose one or more SMP conditions on a dominant provider. Furthermore, the European Commission states that the imposition of no SMP conditions on a dominant provider would be inconsistent with the new regime. Thus, Ofcom (or Oftel in the interim period) is under a mandatory obligation to impose at least one appropriate SMP condition on a dominant provider.
- 6.9 The SMP conditions which may be set can be summarised as follows:
- the provision of network access (Article 12 of the Access Directive, sections 87(3) and 87(5) of the Act);
- (b) no undue discrimination (Article 10 of the Access Directive, section 87(6)(a) of the Act);
- (c) transparency (Article 9 of the Access Directive sections 87(6)(b) and (c) of the Act);
- (d) accounting separation (Article 11 of the Access Directive, section 87(7) of the Act);
- (e) pricing, including, in particular, price controls (Article 13 of the Access Directive, section 87(9) of the Act);
- (f) regulatory controls on retail markets (Article 17 of the Universal Service Directive, section 91 of the Act);
- (g) regulatory controls with respect to leased lines (Article 18 of the Universal Service Directive, section 92 of the Act); and
- (h) conditions with respect to carrier selection and pre-selection (Article 19 of the Universal Service Directive, section 90 of the Act).

- 6.10 The conditions listed at (a) to (e) and (g) above are relevant to this review of wholesale markets. The Director is required to assess which of these obligations are appropriate.
- 6.11 Oftel has set out its intention to consider the appropriateness of SMP conditions in its regulatory option appraisal guidelines. However, the Director also notes Recital 27 of the Framework Directive which provides that *ex ante* regulation should only be imposed where there is not effective competition and where competition law remedies are not sufficient to address the problem. In this light, the Director considered this as part of his original assessment as to the appropriateness of SMP conditions, ie a situation whereby no regulation was imposed and whether it would be sufficient to rely on competition law alone.

Aims of regulation

- 6.12 In Chapter 3 and Annex B of this document, the Director explains how he has reached the conclusion that BT currently continues to hold a position of SMP in some of the UK (excluding Kingston upon Hull) product markets relating to leased lines covered by this review.
- 6.13 Article 16 of the Framework Directive provides that "where an NRA determines that the relevant market is not effectively competitive, it shall identify undertakings with SMP on that market...and...shall on such undertakings impose appropriate specific regulatory obligations...".
- 6.14 Regulation at the wholesale level is designed to address the problems which result from the existence of SMP in the relevant wholesale market. In particular it is designed to ensure that the SMP at the wholesale level does not restrict or distort competition in the relevant downstream markets or operate against the interests of consumers, for example through excessively high prices. Accordingly, the Director believes the wholesale regulation proposed in this chapter reflects his duties in section 4 of the Act. All of the conditions proposed by the Director will promote competition in the provision of retail leased lines and, as part of the implementation of the EC Directives referred to above, will assist with the development of the European internal market. In addition, each individual proposed condition fulfils one or more of the other duties set out in section 4, as well as the tests set out in section 47 of the Act, as described in the discussion of the conditions below.
- 6.15 The application of regulation at the wholesale level also fits with the requirements of the Framework Directive, that NRAs take measures which are proportionate to the objective of encouraging efficient investment in infrastructure and promoting innovation. The introduction of regulation in wholesale markets will encourage communications providers to purchase wholesale products and combine them with their own networks where possible to create retail products in competition with BT's retail leased lines products and other services. This is

preferable to retail regulation alone, which would by contrast tend to favour the purchase of BT's retail products and thereby lessen other communications providers' investment in infrastructure and, through less competition, innovation.

- 6.16 It will also help to ensure that another objective of the Framework Directive is met, namely that NRAs take measures which are proportionate to the objective of "ensuring that users...derive maximum benefit in terms of choice, price and quality". Regulation at the wholesale level will, as noted above, help to increase the number of retail products available, and by increasing competition will help to ensure that price and quality are optimised.
- 6.17 In assessing the level of regulation to be applied in this market, the Director has also taken into account the Commission's SMP Guidelines which state at paragraph 15 that regulation should aim to promote an open and competitive market, and at paragraph 16 that *ex ante* regulations should be imposed to ensure that an SMP communications provider cannot use its market power to restrict or distort competition on the relevant market or leverage market power on to adjacent markets.
- 6.18 The Director has also taken full account of Oftel's guidelines on the imposition of access obligations under the new EU Directives (*Imposing access obligations under the new EU Directives*,

www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm, referred to in this document as 'Oftel's access guidelines'). These describe the circumstances in which the Director would consider the imposition of wholesale access obligations to be appropriate, give guidance on the nature of the wholesale products the Director would expect to be supplied as a result of an obligation to provide access, and describe the conditions under which products should be made available.

CSH and ISH interconnection services

6.19 The Commission has not identified a market for CSH and ISH POC services in its Recommendation. However, paragraph 3 of section 3.3 of the explanatory memorandum to the Recommendation states that:

"In dealing with lack of effective competition in an identified market, it may be necessary to impose several obligations to achieve an overall solution. For instance, it may often be the case that adjacent or related remedies are applied to technical areas as part of the overall obligation that addresses SMP on the analysed market. If specific remedies are thought to be necessary in a specific narrow technical area, it is not necessary or appropriate to identify each technical area as a relevant market in order to place obligations in that area."

- 6.20 As noted above, the Director has assessed the relevant markets and come to the initial conclusion that BT has SMP in the following wholesale markets in the UK excluding Kingston upon Hull Area:
- wholesale low bandwidth TISBO (up to and including 8Mbit/s);
- wholesale high bandwidth TISBO (above 8Mbit/s up to and including 155Mbit/s);
- · wholesale AISBO; and
- wholesale trunk segments.
- 6.21 Accordingly, the Director considers it necessary and appropriate to impose certain obligations in these markets in order to remedy the problems identified. These are discussed below and in Chapters 7 and 8. However, the Director is of the view that these obligations and their likely consequences are not sufficient to address the problems in the markets identified. Therefore, the Director considers that in order to ensure that regulation in these markets is effective, it is necessary to consider whether additional obligations are required in relation to CSH and ISH services. The Director therefore considers that CSH and ISH services should properly be considered as a technical area as set out by the Commission.
- 6.22 In its response to the first consultation, Energis notes its agreement that CSH and ISH interconnection services should be considered as technical areas related to the markets where the Director has found SMP.

Services involved

- 6.23 A POC is the point at which another communications provider's network interconnects with BT's network. The relevant services provided at a POC can broadly be divided into equipment and links. Equipment is provided at a POC in the form of multiplexers which are used for the aggregation and disaggregation of circuits ready for onward transmission. Links are circuits which link the premises of two interconnecting communications providers in order to allow transmission between the networks of these two communications providers.
- 6.24 BT provides the following broad types of POC equipment and links:
 - Customer-sited handover (CSH): CSH is when BT provides a point of interconnection at the site of the interconnecting communications provider. In order to do so, BT has to extend its network out to the point of interconnection and provide a CSH link along with CSH POC equipment; and
 - In-span handover (ISH): ISH is when two communications providers build out their networks to a handover point located between their premises.
 The handover point is close to the BT exchange and therefore most of the build is the responsibility of the interconnecting communications provider.
 BT provides the part of the ISH link running from the handover point to its POC, along with ISH equipment at the POC.

Rationale

- 6.25 Those communications providers that wish to interconnect with BT and purchase wholesale TISBO services or PPCs must purchase the relevant interconnection links and equipment from them. In order to remedy BT's SMP in the TISBO and trunk segments markets, the Director has proposed remedies later in this chapter and in Chapter 8. However, regulation of these markets is insufficient to achieve an overall solution to BT's market power in these markets.
- 6.26 To achieve an overall solution, the Director considers that it is also necessary to regulate BT's provision of interconnection links and equipment, in the absence of which, BT would have an incentive to charge prices well above the cost of provision. As communications providers must purchase these links and equipment to interconnect and purchase interconnection services, this would have the same effect as charging excessive prices for the regulated interconnection services in each SMP market, and would undermine the remedies that are being proposed by the Director.
- 6.27 The Director considers that it would be insufficient to regulate only one type of interconnection product as they each perform very different functions.

CSH

6.28 CSH does not involve building out to BT exchanges and the significant costs of doing so. Therefore, it is the normal mode of interconnection for a new communications provider or where an interconnection route is expected to carry a limited volume of traffic. Regulation of CSH is essential to ensure that barriers to entry for new interconnecting communications providers are low. If communications providers can only interconnect using ISH links and equipment and the significant costs of building their links up to the BT exchange, this could deter market entry and therefore affect the development of competition in these markets.

ISH

6.29 ISH is the preferred method of interconnection between two communications providers who have reasonably extensive network infrastructure. An interconnecting communications provider will aim to interconnect as close as possible to BT, in order to minimise the charges payable to BT. Regulation of ISH (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) is necessary to ensure that communications providers have the option of building out their own networks and connecting closer to BT's exchange. This therefore assists a communications provider's ability to extend their own infrastructure and reduces their reliance on BT's.

Remedies

6.30 The proposed remedies in relation to BT's provision of CSH and ISH services are set out in the regulatory option appraisal sections below and in Chapter 8. Note that no such remedies are proposed in respect of the AISBO market at this stage, as the relevant CSH and ISH services have not to date been determined as being applicable to that market. However, while he is not proposing any particular handover solutions at this stage, the Director does of course recognise that efficient solutions will need to be found for any product which is supplied.

Regulatory option appraisal for traditional interface symmetric broadband origination

Existing obligations for traditional interface symmetric broadband origination

6.31 The existing obligations applying in relation to the wholesale TISBO markets are as follows:

- obligation to offer leased line interconnection;
- non discrimination;
- cost orientation;
- cost accounting;
- price control;
- accounting separation;
- publication of prices, terms and conditions;
- advance notification of prices, terms and conditions for new products;
- advance notification of changes to prices of existing products;
- requirement to provide quality of service information; and
- requirement to publish technical information.

6.32 In addition, these markets are subject to detailed regulation following these Directions:

- PPCs Phase I;
- PPCs Phase II;
- RBS backhaul; and
- LLU backhaul.

Remedies considered

6.33 In his assessment of the wholesale low and high bandwidth TISBO markets set out in Chapter 3 and Annex B, the Director has concluded that the markets are not effectively competitive and proposed that BT should be designated with SMP.

- 6.34 In the light of the above considerations, the Director examined in the previous consultation the following options for future regulation in the markets for TISBO:
- 1. no *ex ante* regulation;
- 2. a general obligation to provide access on reasonable request;
- 3. requirement not to unduly discriminate;
- 4. basis of charges obligations (cost orientation and a cost accounting system);
- 5. price control;
- 6. accounting separation obligations;
- 7. requirement to publish a reference offer;
- 8. an obligation to give notice of changes to prices, terms and conditions;
- 9. requirement to provide quality of service information;
- 10. requirement to publish technical information with 90 days' notice; and
- 11. obligations relating to requests for new network access.
- 6.35 In addition to the above conditions, the Director considered making the following Directions under appropriate conditions:
- 12. Direction under the general access condition to provide PPCs at a range of bandwidths subject to specific terms and conditions;
- 13. Direction under the cost orientation condition covering pricing matters relating to PPCs and LLU backhaul;
- 14. Direction under the quality of service condition to require specific information in respect of PPCs;
- 15. Direction under the general access condition to provide RBS backhaul link products; and
- 16. Direction under the general access condition to provide LLU backhaul products.
- 6.36 The Director undertook a regulatory option appraisal of these options, concluding that option 1 (see paragraphs 6.50 to 6.53 in first consultation document) was an inappropriate response to the degree of SMP existing in this market. Responses to the first consultation have confirmed the Director's opinion on the appropriate regulation for this market, and consequently this document discusses only the remaining options.

Wholesale traditional interface symmetric broadband origination proposed regulation 1:

Requirement to provide network access on reasonable request

6.37 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant provider to provide network access as the Director 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 for securing that the

obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, the Director must have regard to the 6 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.

- 6.38 Under a general access obligation, BT would be obliged to supply, on fair and reasonable terms, any products falling within the market for the provision of TISBO, upon reasonable request. Specific existing examples of these include PPCs, LLU backhaul products and RBS backhaul links. As explained in Chapter 3 and Annex B, the market also includes services provided using SDSL technology, be they contended or uncontended, and therefore in the future if a reasonable request were made, such services could also be required to be supplied.
- 6.39 BT has been found to have SMP in this market. This regulation would allow communications providers to make reasonable requests to negotiate innovative low and high bandwidth products which will enable them to compete in the retail markets, encouraging competition at the retail level. If the obligation were not imposed, BT would be able to deny access or impose unreasonable terms having a similar effect, thereby hindering the emergence of a competitive retail market for leased lines and other services which rely on these inputs. The Access Directive states in Article 12 that an NRA may impose access obligations where the denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end users' interest.
- 6.40 While formulation of specific obligations may from time to time be appropriate, either for the avoidance of doubt or in resolving a dispute, the Director proposes to rely as far as possible on the general obligation. This removes the need for the Director to specify the details of products to be supplied (which he is often not best placed to do), and provides a regime which is responsive to future market and technical developments. While the scope is broad, it is appropriately limited by the ability of BT to refuse any request which is unreasonable. (The Director's views on reasonableness in this context are set out in his Access Guidelines.)
- 6.41 Reliance on the Competition Act for communications providers' general access requirements will, in the Director's view, be insufficient because of the network-based nature of the industry, and would be inconsistent with the Director's objective of promoting competition.
- 6.42 The Director therefore considers that it is necessary to introduce a general access obligation to deal with not only the continuation of supply of existing

products but also the supply of new TISBO products that may be introduced in the future.

- 6.43 The words "fair and reasonable terms" would be interpreted by the Director as meaning, amongst other things, terms which did not lead to any sort of margin squeeze between wholesale and retail markets, since a margin squeeze is in effect a constructive refusal to supply, ie a refusal to supply on commercially viable terms. Thus there will be no need to introduce a specific condition to deal with such an eventuality. The condition will also through these words, incorporate a requirement to provide service level agreements and compensation for performance below standard.
- 6.44 The scope of the proposed general access obligation is defined by reference to the scope of the wholesale markets. The Director recognises that services within this market can potentially be used to provide a wide range of final services, ie the end use of the wholesale services could differ significantly. However, the Director does not consider it to be a practical regulatory approach to tie BT's obligation to particular end uses. In the Director's experience, such an approach leads to boundary disputes and arbitrage opportunities which have the effect of restricting consumer choice and/or distorting competition. Nor is there generally any public policy argument in favour of allowing a dominant provider to exploit its dominance in relation to one group of customers when it is prohibited from doing so in relation to others.
- 6.45 Therefore, in assessing whether a request is reasonable, depending on the facts of the case, the Director may consider that it might not be reasonable of BT to refuse to supply a certain class of product solely on the grounds that their use of the access product differed from that for which the product was originally developed.
- 6.46 As explained above, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.
- 6.47 Recital 6 of the Access Directive states that in markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to secure...adequate access and interconnection and interoperability of services in the interests of end users. The Director considers the markets for TISBO to be of this type, and in accordance with the Access Directive considers it necessary to ensure connectivity by imposing proportionate obligations on undertakings that control access to end users.

6.48 Implementation of this obligation also fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. Communications providers will be able to use BT's wholesale TISBO products to provide services of their choice. Thus this measure is not linked to the activities of the party seeking access of the degree of its investment in network infrastructure, and it consequently accords also with Recital 7 of the Access Directive.

Responses to previous consultation – obligation to provide network access

- 6.49 In its response, BT questions the Director's proposal to require it to provide access to "Third Parties" who reasonably request such access, and suggests amending the wording of the definition of "Third Party" so that access is restricted only to public electronic communications network operators and the like. The Director's views on this are set out below.
- 6.50 Cable & Wireless suggests that the Director should expressly state that "fair and reasonable terms" includes a requirement to offer a minimum quality of service guaranteed by an SLA.
- 6.51 The Director does not consider that it is necessary to add this provision. The requirement to offer on fair and reasonable terms means that terms which would normally be offered in a competitive market should be offered. In the Director's view, this includes SLAs. Should BT bring forward an argument that a reasonable SLA is not required in the circumstances under consideration, the Director will consider the case on its merits.

Conclusion on obligation to provide network access

6.52 Having considered all the responses, the Director is of the view that it is appropriate to amend slightly both the Network Access condition and the definition of "Third Party" proposed in the April consultation document, to clarify the nature and extent of this obligation. Accordingly, the condition has been amended to read:

"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 the Director may from time to time direct".

6.53 The amendment is intended to make it clearer that the Dominant Provider must comply with the condition by providing Network Access that is the same as that which has been (reasonably) requested by the Third Party. The condition continues to include the power to make a direction about the provision of Network Access and the terms and conditions on which it is provided.

- 6.54 The Director does not propose to replicate the Annex II list to define entitlement to Network Access. This is because Annex II status flows from the Interconnection Directive 97/33/EC. The provisions of that Directive including the concept of Annex II status will fall. The concept of Annex II status will continue to exist for the purposes of any licence conditions continued for an interim period until the market reviews are completed and these new obligations are imposed. However, once these new obligations are imposed, Annex II status will not be relevant.
- 6.55 For the purposes of the Network Access condition, the definition of Third Party has been amended to the provider of a **public** electronic communications network or **public** electronic communications service (i.e. electronic communications networks which are provided wholly or mainly for the purpose of making electronic communications services available to members of the public; and electronic communications services that are provided so as to be available for use by members of the public). Accordingly, providers of non-public electronic communications networks or non-public electronic communications services will not be entitled to Network Access under the proposed condition. This maintains the status quo existing prior to these consultations.
- 6.56 Further guidance as to how the Director proposes to apply the Network Access obligation can be found in the Director's guidelines on imposing access obligations under the new EU Directives, dated 13 September 2002 (the "Access Guidelines") and the Directors guidelines for the interconnection of public electronic communications networks, dated 23 May 2003 (the "Interconnection Guidelines"). These guidelines can be found at www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm and www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm respectively.
- 6.57 Having considered the consultation responses the Director's current view is that a network access condition should be imposed in these markets in the form set out at Annex D.

Communications Act tests

- 6.58 The Director considers that the proposed conditions (Conditions G1 and GG1 in Annex D) meet the tests set out in the Act.
- 6.59 In the Director's view, this condition meets the tests set out in Section 47 of the Act. The proposed condition is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. It is proportionate, since it is targeted at addressing the market power that BT holds in these markets and does not require it to provide access if it is not technically feasible or reasonable. Finally, it

is transparent in that it is clear in its intention to ensure that BT provides access to its network in order to facilitate competition.

- 6.60 The Director has considered all the Community requirements set out in section 4 of the Act. In particular, because it requires BT to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of ensuring efficiency and promoting competition in the downstream markets. As BT has market power in the provision of wholesale TISBO, it controls a key input into a range of downstream services principally traditional interface retail leased lines but also virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 6.61 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director recognises that in many circumstances it will not be feasible for other communications providers to build out their networks to achieve a degree of coverage comparable to BT. Since this would restrict the potential development of alternative facilities in the current market, the Director considers that this condition is fair and reasonable. The Director is satisfied that this condition is feasible and technically and economically viable. In respect of existing products supplied by BT such as PPCs, it is clearly feasible and viable for it to continue to provide. In relation to new products, as BT will only be required to provide these on reasonable request and in line with the Access Guidelines, the condition will not require BT to do anything which is not feasible or viable.
- 6.62 The Director also believes that this condition is fair and reasonable taking into account the investment made by BT in its network, and bearing in mind that BT will only be required to supply upon a reasonable request that enables it to recover its costs, in line with Oftel's Access Guidelines referred to above. The Director believes that by enabling other communications providers to make effective use of wholesale inputs and to make optimal use of their own networks, this condition addresses the need to secure effective competition in the long term and the goal of ensuring that services based on leased line components are provided throughout the UK (excluding Kingston upon Hull).

Wholesale traditional interface symmetric broadband origination proposed regulation 2:

Requirement not to unduly discriminate

6.63 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access.

- 6.64 The requirement not to unduly discriminate is intended, principally, to prevent dominant providers from discriminating in favour of their own retail activities and to ensure that competing providers purchasing wholesale products from the dominant provider are placed in an equivalent position to the dominant provider's retail arm.
- 6.65 Where dominant providers are vertically integrated, like BT, they may have an incentive to provide wholesale services on terms and conditions that favour their own retail activities, in a way that would have a material adverse effect on competition. In particular, they may charge competing providers more than the amount charged (through transfer charging) to their own retail activities for wholesale services, thereby increasing the costs of competing providers and giving themselves an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery timescales, which would disadvantage their retail competitors and in turn consumers.
- 6.66 In the absence of a non discrimination condition, the Director could be called upon to investigate alleged breaches of the Competition Act prohibition on anti-competitive agreements and abuse of a dominant position, and might be required to resolve successive complaints. Imposing an *ex ante* condition in this instance will reduce the potential regulatory costs emanating from multiple or successive complaints related to discrimination.
- 6.67 It might be argued that the Competition Act might provides adequate provision to address allegations or evidence of discriminatory behaviour. However, the Director considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations. In addition, it allows the Director to place a greater emphasis on promoting competition (for example by restricting the ability of an SMP communications provider to foreclose segments of the retail market).
- 6.68 It might also be argued that a requirement not to unduly discriminate prevents BT from fully exploiting its economies of scale. If BT were able to discriminate, it would be able, when needed, to quote a lower price in order to attract sufficient numbers of customers to ensure that its infrastructure is utilised at full capacity. Although this is a valid consideration, the Director considers that it is far outweighed by the fact that in view of BT's position of SMP, it would also be able to use discrimination for other purposes less constructive than maximisation of capacity utilisation (such as predatory pricing), and that this would have a harmful effect on competition.
- 6.69 The Director therefore considers that it is necessary to apply a non discrimination obligation in this market. This accords with Recital 17 of the Access Directive, which states that non discrimination obligations ensure that undertakings with market power do not distort competition, in particular where

they are vertically integrated undertakings that supply services to undertakings with whom they compete on downstream markets. This is clearly the case with respect to the wholesale and retail leased lines markets.

- 6.70 As explained above, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.
- 6.71 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no *undue* discrimination. Oftel has considered how it might treat undue discrimination in its Access Guidelines. The Guidelines note that any obligation with respect to undue discrimination has the objective of preventing behaviour that has a material adverse effect on competition. This does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Guidelines also note that in the Director's view, there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own retail activities or between others of its own activities would have a material adverse effect on competition (paragraph 3.9). This view would also apply to discrimination in relation to the underlying components of services.

Responses to previous consultation – no undue discrimination

- 6.72 In their responses, a number of communications providers suggested that the Director should remove the word "undue" from this condition. Those communications providers took some comfort, however, that Oftel had stated in its Access Guidelines and elsewhere that there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own downstream business would have a material adverse effect on competition, and that such discrimination would be deemed undue unless the SMP communications provider proved the case otherwise. Non dominant communications providers asked the Director to include this interpretation in the condition which prohibits undue discrimination.
- 6.73 While the Director understands the concerns of BT's competitors, and recognises that effective control of anti competitive discrimination is an essential part of the ex ante regulatory framework, the Director does not believe it is appropriate or necessary to amend the condition to make reference to this interpretation. The Act, in transposing the requirements of Article 10 of the Access Directive, provides for the Director to impose conditions which, amongst

others, prevent the dominant provider from discriminating "unduly". Oftel's Access Guidelines make plain the Director's interpretation of this concept, and this view is supported by the Access directive which states that obligations of non discrimination "shall ensure that the communications provider applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners".

Conclusion on no undue discrimination

6.74 Having considered the consultation responses the Director proposes to impose conditions G2 and GG2 in Annex D, which prohibit *undue* discrimination. The conditions remain in the same terms as the condition previously consulted on.

Communications Act tests

- 6.75 The Director considers that the proposed condition meets the tests set out in the Act.
- 6.76 The Director has considered all the Community requirements set out in section 4. In particular, because it requires BT to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the downstream markets. As BT has market power in the provision of wholesale TISBO, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 6.77 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that this proposed condition is objectively justifiable, in that it provides safeguards to ensure that competitors, and hence consumers, are not disadvantaged by BT discriminating in favour of its own retail activities or between its own different activities. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. It is proportionate since it only prevents discriminatory behaviour that has a material adverse effect on competition. Finally, it is transparent in that it is clear in its intention to ensure that BT does not unduly discriminate. In addition, Oftel has given guidance as to how it might treat undue discrimination in its Access Guidelines.

6.78 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition, as it will ensure that other communications providers are able to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby addressing the goal of ensuring that services based on leased line components are provided throughout the UK (excluding Kingston upon Hull).

Wholesale traditional interface symmetric broadband origination proposed regulation 3:

Basis of charges obligations (cost orientation and a cost accounting system)

- 6.79 Section 87(9) authorises the setting of SMP services conditions imposing on the dominant provider rules concerning the recovery of costs and cost orientation.
- 6.80 BT is currently required to provide certain wholesale interconnection services, including PPCs, at cost oriented prices. Under the proposed cost orientation obligation, BT would be required to provide wholesale TISBO services at cost oriented prices, calculated on the basis of Long Run Incremental Cost (LRIC) and allowing an appropriate mark-up for the recovery of common costs. In other words, this obligation would add a requirement for cost orientation to BT's requirement to provide access.
- 6.81 The proposed cost accounting obligation is discussed in Chapter 10, along with justification for the obligation against the various regulatory tests.
- 6.82 As BT has been identified as having SMP in this market, the availability of wholesale TISBO services at cost oriented prices would help to ensure that the resulting competition in the retail leased lines markets and other downstream markets should lead to lower prices. With this in mind, the proposals for a price control for PPCs to be imposed in addition to a cost orientation condition are discussed below.
- 6.83 It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, the Director considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers.
- 6.84 The Director therefore considers that it is necessary to apply a cost orientation obligation. The proposed condition sets out that the charges for

services should be reasonably derived from the costs of providing those services. It further states that the costs must be calculated on a forward looking long run incremental cost approach, and allowing an appropriate mark-up for the recovery of common costs including an appropriate return on capital employed.

- 6.85 The condition will apply across all services within this market. This means that the price of all services provided by BT in the market should be based on LRIC and allowing an appropriate mark-up for the recovery of common costs.
- 6.86 The Director confirms that all new services (eg SDSL) that are introduced into this market will also be covered by the same pricing rule. This is because new services in the same market would be expected to be subject to the same competitive conditions as existing services. This does not however mean that BT cannot recover costs appropriate to new wholesale services. The recovery of efficiently incurred costs for new wholesale services was discussed in paragraphs 2.23 2.25 of Oftel's access guidelines.
- 6.87 Although this condition will apply to all services in this market, and the expectation is that the treatment of new services under the condition will be the same as for existing services, there may be occasional exceptions to this rule. This may arise where the new service is innovative and thus warrants a different regulatory approach. There are three ways in which such services can be dealt with.
- i) The service may be so innovative that it falls in a completely new and separate market. In this case the appropriate regulatory obligations will be determined by the Director following analysis of this new market.
- ii) The new service falls within the market but the Director determines that an alternative charging basis is appropriate. For example, a different charging basis may be appropriate for services offered during a trial.
- iii) The new service falls within the market and the cost orientation obligation is applied, but there might be a range of prices which would be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost orientated, the Director would consider whether the expected or achieved return on capital was excessive. In making this assessment, the Director will need to take account of the risk of the new service failing and the lost investment that would result. This therefore maintains an appropriate incentive for the communications provider to invest in new services and technologies.
- 6.88 The proposed condition contains a clause enabling the Director to determine that a price need not be set on a forward-looking LRIC basis. This is particularly relevant to scenario ii) above where the Director determines that an alternative charging basis is appropriate. If BT wishes to set a price for a service in any of the markets on any other basis than forward-looking LRIC, it must apply

to the Director for permission to do this.

6.89 As explained above, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.

6.90 The Director considers that the proposed cost orientation condition is justifiable and a proportionate response to the extent of competition in the markets analysed. It enables competitors to purchase services at a rate which will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing BT a fair rate of return which it would expect in a competitive market. The potential for a degree of flexibility envisaged in the approach to the recovery of cost of capital recognises that some investments will carry a higher degree of risk than others and does not remove incentives for the development of new services.

Responses to previous consultation – basis of charges obligations

6.91 The Director noted in the April consultation in relation to the pricing of SDSL, that one of the key issues he would consider is whether the approach should vary between uncontended and contended services. Since the Director anticipates that uncontended SDSL would be used as an alternative means of supplying PPCs, he suggested that it would seem appropriate for the charges for such services to be similar to the equivalent PPC charges. However, where the SDSL service is contended the position is less clear and would require more careful consideration.

6.92 In their responses, communications providers outline their concern at this suggestion. They state that the technology used to deliver SDSL is cheaper and more efficient than that used to provide PPCs, and that this should be reflected in any cost orientation obligation. BT comments that it would not expect cost orientation principles applicable to PPCs to apply to SDSL as this could impact negatively on competitive entry and investment in that market. Energis asks the Director to make a pricing determination as part of the remedies under the market review.

6.93 The Director accepts communications providers' more general concerns. SDSL is not currently being provided as a form of PPC – the definition of PPCs in BT's PPC Handover Agreement does not appear to cover a situation where the circuit is being provided using SDSL. Furthermore, no such products were being provided by BT pursuant to the Agreement as at the date of publication of the PPC Phase II Direction.

- 6.94 The Director does recognise the importance of incentives to invest; and the balance to be struck between providing such incentives and allowing communications providers and consumers to benefit from lower costs of supply. A determination of prices has not, however, been made at present since SDSL is at an early stage of rollout. Nevertheless, the Director notes that any SDSL origination services supplied would be covered by the cost orientation requirement unless he determines otherwise. The Director considers that efficiencies associated with SDSL arise not so much from the technology itself as from its ability to offer cost savings associated with contention.
- 6.95 BT asks the Director to clarify the position on Tier 1 / main link pricing. The Director confirms that the words "the Dominant Provider shall apply the amounts set out in Annex B to this schedule in a manner to be agreed from time to time with the Director" in this condition do take account of and maintain the current approach to PPC main link pricing applying at 25 July 2003, where there is a split at the Tier 1 node level between the trunk and TISBO elements.
- 6.96 BT also asks the Director to clarify which condition would take precedence in a situation where the cost orientation condition is in conflict with the price control condition, so that compliance with one would entail a breach of the other.
- 6.97 In the proposed SMP conditions the Director states that BT's charges need to be between floors and ceilings (Conditions G3.2 and GG3.2). The Director also states in Condition G4.1 (price control) that "without prejudice to.....G3" BT shall be required to meet the price control.
- 6.98 It should be emphasised that these two conditions are intended to operate in a complementary way. In most situations, the Director expects that BT will be able to comply with the price control and keep individual service prices within floors and ceilings. However, there may be occasions when the requirements of the price control appear either to permit charges to be above ceilings or to require charges to be below floors.
- 6.99 It is clear that compliance with price cap is not sufficient in all circumstances to disapply the ceiling imposed by condition G3. Thus, where a charge is subject to a safeguard cap or a price cap which is relatively loose, to an extent which would otherwise allow the charge to exceed the ceiling determined under condition G3, then this ceiling will generally become the binding constraint on the charge.
- 6.100 Where the charge cap is relatively tight, to an extent that compliance with the cap might require a charge to be below cost floors, then the Director believes that a case-by-case approach should be taken. The key question is whether a charge below the cost floor is likely to be anti-competitive or not. If not, then compliance with the price control is likely to be judged to take precedence over the cost floor.

- 6.101 The following information is likely to be relevant to the consideration of whether a charge below the floor is anti-competitive or not. Firstly, it may be appropriate to consider the actual incremental costs of a service, which may differ from the cost floors provided in BT's Financial Statements (which are based on "Distributed LRIC"). Since the rationale for cost floors is to prevent predatory pricing, a second relevant consideration is whether predation is feasible in any particular case.
- 6.102 Another circumstance in which it may be appropriate to allow charges to breach floors or ceilings in any given year is where the apparent breach arises from volatility in the volumes purchased of the service in question. In such cases, the cost information in any one year may not be entirely reliable and so it may be appropriate to consider compliance with floors and ceilings over a number of years.
- 6.103 The wording of the conditions allows for the flexible interpretation outlined above. The meaning of "without prejudice" in condition G4.1 is simply that compliance with the price control alone does not render compliance with the floors and ceilings in condition G3.2 unnecessary. As condition G3.2 states that compliance with the floors and ceilings is required "unless the Director directs otherwise", then this allows the Director to require compliance with the price cap even in cases where the resulting charges breach floors or ceilings, if he deems this appropriate.
- 6.104 The Director is of the view that it is appropriate to amend slightly the condition proposed in the April consultation document to clarify the application of the forward looking long run incremental cost approach to each charge. In the Director's view, the wording proposed in the April consultation document left room for some confusion.
- 6.105 Accordingly, the first paragraph has been amended to read:
- "...based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.
- 6.106 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition G3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.
- 6.107 The third paragraph has been amended to read

".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.

Conclusion on basis of charges obligations

6.108 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.

Communications Act tests

- 6.109 The Director considers that the proposed conditions (Conditions G3 and GG3 in Annex D) meet the tests set out in the Act.
- 6.110 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. Excessively high pricing of wholesale inputs distorts allocation of resources and leads to inefficiency for retail competitors who may be forced into using less efficient alternative technologies. Ensuring that BT as the dominant provider is unable to charge excessive prices will therefore promote competition and thereby promote the interests of end users.
- 6.111 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that the proposed condition is an objectively justifiable and proportionate response to the extent of competition in the markets analysed, as it enables competitors to purchase services at charges that will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing BT a fair rate of return that it would expect in competitive markets. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. Finally, it is transparent in that it is clear in its intention to ensure that BT charges on a LRIC plus mark-up basis.
- 6.112 The Director considers that imposition of a cost orientation condition satisfies section 88 of the Act. Without it, there is a relevant risk of adverse effects arising from price distortion because BT, as it has SMP in this market, has the ability to price above the competitive level, so as to have adverse consequences for end users of public electronic communications services. In this market, this was clearly evidenced by the absence of cost orientation of the prices set by BT prior to the determination of prices by the Director in the Phase II PPC Direction. The Director further considers in this connection that the condition is appropriate for the purposes of promoting efficiency and sustainable

competition and conferring the greatest possible benefits on the end users of public electronic communications services.

Wholesale traditional interface symmetric broadband origination proposed regulation 4:

Price control on PPCs

- 6.113 Section 87(9)(a) of the Act authorises the setting of SMP services conditions imposing price controls in relation to matters connected with the provision of network access.
- 6.114 The Director has set starting charges for PPCs from 1 August 2001 as part of the PPC Phase II Direction, and applied (from 1 August 2002) and proposed (from 1 March 2004 see below) interim reductions to these prices. This obligation would set future prices for PPCs, in the longer term (see below) by means of an annual RPI-X% reduction.

Putting a long term price control into practice

- 6.115 The Director has commenced an analysis to assess how BT's costs of providing PPC TISBO services will change over the next few years. The conclusions of this analysis will be used to inform the Director's conclusions about the longer-term PPC price control to be imposed. However, this analysis will not be completed in time to implement a price control in conjunction with this market review and the other remedies being consulted on in this document. Therefore, the Director is proposing to implement an interim price control effective from 1 March 2004 or the earliest possible date thereafter. At this stage, it is envisaged that the longer term price control would be introduced in the second half of 2004, with a consultation document outlining in full the proposed form, scope, duration and level to be published in the first quarter of 2004. However, precise timetables for this work will be a matter for Ofcom.
- 6.116 The interim price control will be in place while Ofcom finalises the analysis for proposals for a longer-term PPC price control. The Director considers it appropriate to implement an interim price control to reflect the expected reduction in the costs of the provision of PPC TISBO over time. This will ensure that BT continues to offer PPC TISBO services on a broadly cost oriented basis.

Putting an interim price control into practice

Scope

6.117 The scope of the interim PPC price control would be limited to the products and equipment (as included in BT's PPC price list) related to the provision of PPC TISBO services, the price of which were determined as part of the Phase 2 Direction. This will ensure that BT is unable to set excessively high

prices for these products while placing incentives on BT to reduce its costs for the provision of these TISBO services.

Form

- 6.118 It is intended that the interim price control will take the form of an indexation of all of the current charges to update them for a further year's cost changes. A discussion of the Director's proposals for the value of the indexation takes place in the "Level" section below. The use of indexation means that the Director is not proposing to make any changes to the structure or relativity of the PPC charges, but limits adjustments to the level. Possible changes in the structure of the charges is an issue to be considered as part of the longer term price control.
- 6.119 The actual implementation will be carried out by means of a condition stating that BT shall charge the prices set out in the annex to that condition. A draft condition and draft prices (see below) are set out in Annex D. Subsequent implementation of the longer term price control will then in all probability be carried out by means of modification of this condition.

Duration

- 6.120 As explained above, the Director intends to continue with the work to assess the costs to BT of providing PPC TISBO and to assess the likely change in costs over time. This work will then inform Ofcom's proposals for a longer-term price control. Although the precise timetables are a matter for Ofcom, the Director envisages at this stage that the longer term price control will be implemented in the latter half of 2004. The Director intends that the timetable be confirmed later in the process.
- 6.121 The Director intends that the interim price control will take effect from 1 March 2004 to the implementation date of the longer term price control.

Level

- 6.122 As explained above, the Director expects that the costs of providing PPC TISBO services should decrease over time in real terms. Therefore, to account for this reduction in costs, it is appropriate to reduce the price that BT charges for its PPC TISBO services.
- 6.123 In the PPC Phase II Direction, the Director calculated BT's PPC charges from cost information provided by BT from 2000/01. The Director set initial charges from 1 August 2001, and amended the charges from 1 August 2002. To adjust the charges, the Director used the value of X from the Interconnection Specific Basket (ISB) from the network charge control adjusted to exclude excess profit. The ISB value of X after this adjustment is 7%.

- 6.124 The ISB is the basket in the network charge control that is relevant to the charges that BT can levy on services purchased by other communications providers to interconnect physically with BT at the tandem layer or local exchange layer. The main cost driver of these services is the number of circuits, rather than the volume of calls. Thus, the ISB value of X was in the Director's view the most suitable proxy for the value of X to be applied to PPCs when setting the charges to apply from 1 August 2001 and 1 August 2002.
- 6.125 The Director considers that the ISB value of X is likely again to be the most appropriate proxy to use for the interim adjustment to BT's PPC prices from 1 March 2004 for the same reasons as before. It will impose a real reduction in BT's charges for its PPC TISBO services and trunk segments which recognises that the costs of provision should decrease over time. As the ISB was used as the deflator in the December 2002 Phase II Direction, its use for calculation of the PPC TISBO service and trunk segment charges from 1 March 2004 would be consistent with the approach that has gone before.
- 6.126 The Director, as part of his work to determine starting charges and the value of X for the longer term price control, has undertaken some work to assess an updated PPC cost model supplied by BT which uses the latest data currently available (ie 2001/2002 cost data). However, the Director's analysis of this information is not yet complete and there are a number of issues that need to be resolved before he will be able to rely on the information provided by BT. Therefore, this data in its current form is not sufficiently reliable to constitute an alternative means of setting the indexation factor. Based on the best evidence currently available, the Director is therefore proposing to use the ISB proxy figure of 7% reduction in real terms per annum.
- 6.127 Because the interim price control will not be in effect until 1 March 2004 at the earliest, the Director has adjusted the value of X from the ISB by the appropriate amount. This means that if the interim price control comes into effect on 1 March 2004, regulated PPC prices that are subject to the interim price control will fall by 12.7% in real terms (see below for further explanation). If, for any reason, the price control comes into effect on a different date, the value of the percentage reduction will be adjusted accordingly. However, the methodology used to amend the value of X, set out in the "conclusion" section below, will not alter.
- 6.128 The Director will set out the revised PPC prices in an annex to the PPC price control condition in the final statement. The proposed prices, assuming introduction of the interim price control on 1 March 2004, are set out in an annex to the draft condition in Annex D of this document.

Justification for price control (interim and long term)

- 6.129 The arguments for and against a PPC price control are set out below. The Director has, in addition, carried out a quantitative analysis in order to illuminate the more rigorously assessed conclusion as to whether a price cap should be imposed on PPCs. The cost benefit analysis is discussed in detail in Annex C, and consists of two CBAs, one studying the obligation to supply (as opposed to no obligation to supply) and one looking at the imposition of an interim price control (as opposed to no price control being implemented). In summary, for both analyses there are similar conclusions, namely that the benefits associated with the PPC CBA outweigh the costs. The Director considers that for these reasons and those set out below, a PPC price control should be introduced. This will ensure that communications providers are able more effectively to compete in the retail traditional interface leased lines market and in the provision of other retail services which rely on PPCs as a wholesale input, in turn serving the best interests of consumers.
- 6.130 It might be argued that the Director's proposal for cost orientation in this market is sufficient and that it is therefore unnecessary to apply a price control in addition. However, in the absence of a price control, BT would have a greater incentive to overstate its costs and it would have little incentive to reduce or constrain increases in its PPC prices.
- 6.131 A price control, on the other hand, would give BT the incentive to be more efficient. One of the main benefits of RPI-X type price regulation is that it creates incentives for firms to increase their efficiency. By divorcing for a period of time the level of prices from the firm's incurred costs, the regulated firm has an incentive to increase its cost efficiency over and above the increase forecast when setting the price control, by reducing costs below the price cap ie unanticipated efficiency gains. The price controlled firm benefits from this efficiency through increased profits.
- 6.132 However, when setting the terms of the subsequent price control, the gap between price and cost is closed on a forward-looking basis (ie apart from exceptional circumstances the Director does not favour attempting to clawback the increased profits earned by the firm in the previous price control, since this would weaken the firm's incentives to make the cost reductions in the first place). So the unanticipated efficiency gains feed into a tighter price control going forward. In this way the gains from increased cost efficiency are shared between the firm and consumers, so that consumers benefit in the longer term.
- 6.133 When setting the terms of the price control the Director will bear in mind the potential consequences of setting the price control too tightly this could:
- impact on the ability of LLU communications providers to build a sustainable business since TISBO is one of the markets that LLU communications providers might wish to enter; and/or

- cause BT to price PPCs below cost, which in turn could act as a disincentive (both to BT and to other communications providers) to invest in infrastructure.
- 6.134 In addition, there are many common network components between the two types of services. If the effective transfer prices for utilisation of these components were lower for PPCs than for LLU communications providers' services it would mean that the services bought by LLU communications providers from BT would be offered at discriminatorily high prices.
- 6.135 As explained above, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to include these services within the price control.
- 6.136 This Direction fits with Recital 20 of the Access Directive which states that price control may be necessary when market analysis in a particular market reveals ineffective competition.
- 6.137 The Access Directive further states in Article 13 that an NRA may impose price controls "where a market analysis indicates that lack of effective competition means that the operator might sustain prices at an excessively high level, or apply a price squeeze, to the detriment of end users".

Responses to previous consultation – PPC price control

- 6.138 BT agrees that the appropriate value of X for the interim price adjustment is the ISB value of X ie 7%. However, BT states that the price of 'equipment' should not be reduced by the interim price adjustment since the Phase 2 PPC Direction has already taken the reduction in BT's equipment costs into account.
- 6.139 In a confidential response, BT provides evidence that a number of the prices proposed by the Director for the interim price control contained errors and that these should be amended.
- 6.140 On the longer term price control, BT argues that the proposals need to recognise that ISH/CSH prices are dependent largely on supplier input costs and that the value of X should be set accordingly. BT also indicates that it would support a form of price control that recognised the different cost dynamics that are present on different parts of the network.
- 6.141 BT also argues that it should be permitted to introduce geographically deaveraged prices for PPC terminating segments as part of the longer term price control.

- 6.142 Some communications providers agree that it is appropriate to maintain the interim price control until reliable information is available from which to develop proposals for a longer term price control. However, those communications providers are surprised that the Director does not suggest that service based charging should be considered when developing proposals for the longer term price control.
- 6.143 Energis argues that the transplantation of the ISB value of X is not an adequate long term solution. Energis also argues that as well as considering efficiency gains when setting the value of X for the longer term price control, the Director should consider cost savings derived from changes in technology. In addition, the price control should recognise cost dynamics in different parts of the network. Energis assumes that the longer term price control will apply to PPC trunk segments as well as TISBO.
- 6.144 Cable & Wireless argues that a full bottom-up review of BT's costs of providing PPCs is required in order to prevent BT from over-recovering costs.
- 6.145 The Director is pleased that BT agrees that the ISB value of X is an appropriate proxy by which to reduce the price of PPCs. The Director has reviewed BT's arguments about whether the reduction of equipment charges had already been taken into account in the Phase 2 Direction. The Director agrees that this is indeed the case, the effect of which is that equipment charges have been lower than they otherwise would have been. Therefore, in the revised charges set out in Annex D, the proposed equipment charges remain unaltered from current levels.
- 6.146 The Director has also reviewed BT's arguments setting out its view that some of the proposed prices for the interim price control set out in the consultation contained errors. Some of these arguments had merit, and the Director has made appropriate revisions to the prices to take effect from 1 March 2004, as set out in Annex D. The most significant revisions relate to the provision of KiloStream NTU 64-256k on existing copper or bearer and KiloStream NTU 64-256k on new copper. These significant increases are due to BT erroneously omitting some costs during the Phase 2 investigation. As a result, the charges for the provision of this equipment by BT have been set too low. These proposed revised charges now reflect the cost of provision.
- 6.147 For the longer term price control, the Director has yet to finalise his views on the appropriate form. However, the Director intends to set these out in a separate consultation document in due course. This will also address BT's suggestion of geographically de-averaged prices, and the appropriate treatment of input costs and discounts.
- 6.148 The Director intends that the interim price control should only be in place for as long as is necessary for longer term price control proposals to be

developed using reliable information from BT and other sources where this is available. However, at this time, the Director does not intend to review whether it is appropriate to introduce service based prices. As set out in the PPC Phase 2 Direction, the Director believes that service based prices are desirable in the longer term. However, the Director proposes to continue with capacity based prices for the time being to ensure stability and certainty in the market while this new market settles down. However, this issue will be revisited in subsequent price control reviews.

- 6.149 The Director agrees that the use of the ISB value of X is not an adequate long term remedy to ensure that PPC charges are cost oriented. The Director also agrees that changes in costs due to changes in technology must be considered alongside efficiency gains and that the price control must recognise cost dynamics in different parts of the network.
- 6.150 As part of the work to develop proposals for the longer term price control, the Director has considered whether it is necessary to conduct a bottom-up review of BT's costs of providing PPCs. The Director has concluded that while this may be desirable in the longer term, nevertheless due to information and resource constraints and a desire not to alter the current structure of PPC charges, from capacity based to service based, it is not necessary to conduct a bottom-up review at this time. However, the Director is using external resources in his formulation of proposals for the longer term price control to help ensure that BT's prices are cost oriented. This will involve using other sources of information as a benchmark against which to assess BT's cost information.

Conclusion on PPC price control

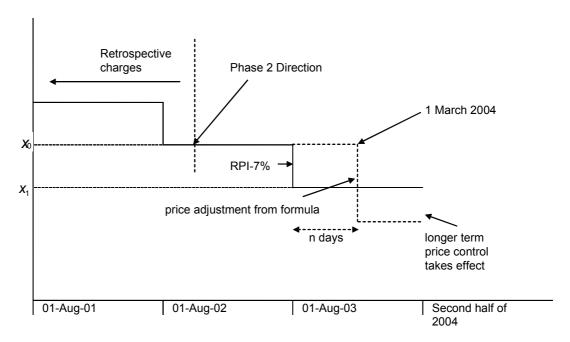
6.151 The Director considers that it is appropriate to implement an interim price control on BT's PPC charges, effective from 1 March 2004. The proposed charges for each of the regulated PPC products and equipment are set out in Annex D. The method of calculating these charges is set out below.

Calculation of *X* for the interim PPC price control

6.152 The leased lines market review consultation document published in April 2003 set out proposals for an interim PPC price control. This was to require BT to reduce its PPC charges by RPI-7% from 1 August 2003, 7% being the value of X applicable to the interconnect specific basket in the network charge control, adjusted to exclude excess profit. Since the interim price control will now not come into effect until 1 March 2004 at the earliest, the Director considers it appropriate to adjust the value of X to ensure that the benefits from a price reduction on 1 March 2004 are proportionate to the benefits that would have accrued from a price reduction on 1 August 2003. This is to avoid purchasers of PPCs, and ultimately consumers of downstream services, being disadvantaged

by the delay in implementation of the price reductions. This adjustment is relatively straight forward and is shown diagrammatically and algebraically below.

Diagrammatically



Algebraically

6.153 Since the new charges will not come into effect on 1 August 2003, but some number 'n' of days later, a lower charge in the remainder of the year will be required to achieve the same average charge over the 366 day period 1 August 2003 to 31 July 2004.

$$x_0 (1 + (RPI - 7\%)) = \frac{n}{366} (x_0) + \left(1 - \frac{n}{366}\right) x_1$$
$$\Rightarrow \left(1 - \frac{n}{366}\right) x_1 = x_0 \left(1 + RPI - 7\% - \frac{n}{366}\right)$$

$$\Rightarrow x_1 = x_0 \left(\frac{1 + RPI - 7\% - \frac{n}{366}}{1 - \frac{n}{366}} \right)$$

where:

 x_0 = the price from Phase 2 (ie the price prevailing on 31 July 2003);

 x_1 = the new price after the implementation of the interim price control;

n = the number of days after 1 August 2003 when the interim price control comes into effect; and

RPI = the rate of RPI inflation.

6.154 Therefore, if the interim price control comes into effect on 1 March 2004, n will be equal to 213.

$$x_1 = x_0 \frac{\left(\frac{92}{366} + RPI - 7\%\right)}{\frac{92}{366}}$$

$$\Rightarrow x_1 = x_0 [1 + \frac{366}{92} (RPI - 7\%)]$$

$$\Rightarrow x_1 = x_0 [1 + RPI - \left(\frac{366}{92} \frac{7\%}{92} - \frac{274}{92} RPI\right)]$$

- 6.155 Therefore, if the interim price control comes into effect on 1 March 2004 the value of X in the RPI-X formula is equal to 12.7%.
- 6.156 There is a possibility that the Commission will take the three months that it is allowed to assess Oftel's Notification to the Commission on the leased lines, symmetric broadband origination and wholesale trunk segments markets. If this occurs, the implementation date of the interim price control would be delayed beyond 1 March 2004. However, by applying the algebraic formula in its general form, below, an equivalent price reduction could be calculated.

$$x_1 = x_0 [1 + RPI - \left(\frac{366}{(366 - n)} 7\% - \frac{n}{(366 - n)} RPI\right)]$$

- 6.157 Based on an implementation date of 1 March 2004, the revised PPC charges will be as set out in Annex D. The Director has also inserted wording to ensure that BT does not raise its charges before implementation of these revised charges.
- 6.158 The Director considers it appropriate to implement a longer term price control in the latter half of 2004 using cost data from BT and other appropriate sources. The Director intends to set out a detailed approach to developing proposals for the longer term price control in a separate consultation document,

to be published in the first quarter of 2004. However, the exact timing of this will be an issue for Ofcom.

Communications Act tests

- 6.159 The Director considers that the proposed conditions (Conditions G4 and GG4 in Annex D) meet the tests set out in the Act.
- 6.160 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition, by preventing the fixing and maintaining of prices at an excessively high level, encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities.
- 6.161 The Director considers that the proposed condition satisfies the tests set out in section 47(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. The proposed condition is set out in a transparent form in Annex D. The Director therefore considers that the proposed obligation meets the requirement of transparency set out in the Act.
- 6.162 The Director considers that imposition of this condition satisfies section 88 of the Communications Act. Without it there is a risk of adverse effects arising from price distortion because BT, as it has SMP in this market, has the ability to price above the competitive level, so as to have adverse consequences for end users of public electronic communications services. By controlling BT's PPC prices in the manner set out above, the Director considers that the condition is appropriate for the purposes of promoting efficiency and sustainable competition by encouraging BT to be more efficient and enabling other communications providers to compete with BT at the retail level. This will result in the availability of a wider range of services at lower prices, thereby conferring the greatest possible benefits on the end users of public electronic communications services.

Wholesale traditional interface symmetric broadband origination proposed regulation 5:

Accounting separation obligation

6.163 The Director is proposing to impose an accounting separation obligation in this market. This is discussed in Chapter 10, along with justification against the various regulatory tests. The precise wording of the proposed condition is

discussed in more detail in the separate accounting consultation document *Financial reporting obligations in SMP markets* published by the Director.

Wholesale traditional interface symmetric broadband origination proposed regulation 6:

Requirement to publish a reference offer

6.164 Section 87(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. Section 87(6)(d) also permits the setting of conditions requiring the dominant provider to include specified terms and conditions into the reference offer.

6.165 BT is currently obliged to publish prices, terms and conditions for leased line interconnection in its Standard Interconnect Agreement. Under this proposed obligation, BT would have to publish in respect of its wholesale TISBO services the prices, terms and conditions in the form of a Reference Offer (RO) – the published RO must include:

- a clear description of the services on offer;
- terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable communications providers to make technical and commercial judgements such that there is no material adverse effect on competition;
- 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;
- conditions relating to maintenance and quality (service level agreement). 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; and
- terms and conditions that are fair and reasonable. This will help to ensure that
 products 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.

6.166 The proposed obligation prohibits BT from departing from the charges terms and conditions in the Reference Offer and requires BT to comply with any Directions the Director may make from time to time under the condition.

6.167 Requiring BT to publish prices, terms and conditions would help to create transparency in this market where BT has been identified as having SMP. Since wholesale TISBO services are an input for retail products, transparency is necessary to ensure competition in downstream (retail) markets.

- 6.168 An obligation to publish prices could lead to other communications providers following BT's prices, rather than being dynamic in setting prices at the true competitive level. However, this is less of a consideration than in the trunk market (see below) as there is likely to be more limited competition in the provision of TISBO services.
- 6.169 The proposed condition also requires BT to set out the allocation of cost to each network component used for the products and services supplied in this market. This will help the Director to monitor the effectiveness of the cost orientation and price control obligations, and to deal with any complaints about breaches of those obligations. This is discussed in more detail in Chapter 10.
- 6.170 The Director therefore considers that a price publication obligation should be put in place. This accords with Article 9 and with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.
- 6.171 This obligation will ensure that communications providers, end users and others are able to put to the Director fully justified and objectively reasoned complaints of anticompetitive behaviour by BT, and to obtain redress where appropriate.
- 6.172 As explained above, the Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.

Responses to previous consultation – publication of reference offer

- 6.173 Some communications providers suggest in a combined response that BT should be required to publish the equivalent of a reference offer for services provided to itself. They point out that this will provide transparency and allow the Director to determine whether BT is discriminating in favour of its own downstream businesses.
- 6.174 The Director notes that the proposed conditions G5 and GG5 do already require BT to publish a reference offer in relation to the network access that it provides to itself, where the manner of provision differs from that detailed in its reference offer for other communications providers. The Director would expect the former to contain, amongst other things, full details of the service provided, together with details of network components and usage factors, in equivalent language to that used in its reference offer to other communications providers, in order that proper comparisons can be made.

- 6.175 In addition, the Director has put in place several performance measures and reports in this market which, amongst other things, will provide information on BT's standards of service in delivery of PPCs to communications providers and equivalent circuits to its retail arm. The Director considers that these will be of additional benefit to communications providers in establishing whether any discrimination is taking place. In addition, the Director will of course give appropriate consideration to any allegations of anti-competitive behaviour in this area.
- 6.176 In its response, BT raises some questions about the list of network components attached at Annex A to the conditions in the first consultation document. This list is being considered in detail in the review of regulatory financial reporting obligations. The document *Financial reporting obligations in SMP markets* (dated 22 May 2003) consulted on that list of network components, and the list is subject to change. Therefore, the Annex containing the list of network components has been removed from the draft conditions for this second consultation, and the definition of network components has been amended to read "as specified in any Direction of the Director from time to time for the purpose of these conditions" (check).
- 6.177 The final notification and explanatory statement on regulatory financial reporting obligations will contain a draft direction to implement a new network component list based on the ongoing review. The draft direction will be subject to consultation and hence interested parties will have an opportunity to comment on the Director's proposals with respect to network components.
- 6.178 This means that, for present purposes, the dominant provider is not yet required to publish charges and transfer charges for network components as part of its reference offer, as no network components have yet been specified by the Director. However, once the anticipated direction setting out the list of network components is finalised, the obligation to publish this information will enter into effect.
- 6.179 BT also states that it is inappropriate for internal transfer charges to be published as part of the reference offer. The Director considers that this is necessary to ensure that BT's competitors have visibility of the prices BT Retail is paying for the services it receives on an ongoing basis, in order to ensure that the condition preventing undue discrimination is being adhered to. Retrospective publication in BT's statement of regulatory accounts would be insufficient in this context. The publication of transfer charges in BT's reference offer will impose little if any additional burden on BT, since the charges would otherwise have needed to be prepared (albeit at a later date) for publication in its regulatory accounts, and BT will need to be aware of them in order to ensure that it is complying with its obligations.

6.180 Finally, BT states that conditions G5.2(h), H4.2(h), G5.2(j), H4.2(j), G6.4(f) and H5.3(f) appear to be PSTN related conditions which it does not consider applicable to PPCs. The Director agrees that details of traffic and network management, measures to ensure compliance with requirements for network integrity, and the relevant network tariff gradient are not relevant for this review and they have been removed from the proposed condition.

Conclusion on requirement to publish a reference offer

- 6.181 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.
- 6.182 The text of the condition which the Director proposes to impose is substantially the same as that contained in the April consultation document. The numbering of what is now paragraph G5.3 has been changed, and the transitional arrangements specified in paragraphs G5.4 and G5.5, relating to the dates on which the new Reference Offer should be published and updated, have been changed to reflect the uncertainty about the actual date on which the condition will come into force.

Communications Act tests

- 6.183 The Director considers that the proposed conditions (Conditions G5 and GG5 in Annex D) meet the tests set out in the Act.
- 6.184 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with the requirement not to discriminate unduly, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers, by making BT's contractual terms more transparent. It promotes the interests of purchasers of wholesale TISBO services by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions. It also promotes competition in the TISBO market by allowing BT's competitors in the provision of TISBO services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, so ensuring competition in the downstream markets.
- 6.185 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it requires that terms and condition are published in order to encourage competition and provide stability in markets by providing transparency of BT's prices, terms and conditions, thereby allowing communications providers to better plan their businesses and customer relationships. It is proportionate, as only information that is necessary to ensure

that that there is no material adverse effect on competition is required to be provided. It does not unduly discriminate as it is applied to BT and no other provider has SMP in these markets. Finally, it is transparent in that it is clear in its intention to ensure that BT publishes details of its terms and conditions.

6.186 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale traditional interface symmetric broadband origination proposed regulation 7:

Requirement to provide advance notification of changes to prices, terms and conditions

- 6.187 Section 87(6)(b) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract (eg: by publication of a reference offer).
- 6.188 BT is currently required to give advance notification of price changes for certain products as part of its Standard Interconnect agreement (one day for competitive products, 28 days for prospectively competitive products and 90 days for non competitive products).
- 6.189 BT has been identified as having SMP in these markets. Advance notification will give communications providers the opportunity to respond to prices, creating a 'ripple effect' that passes price reductions down to end users. Customers may take the opportunity to consider changing suppliers.
- 6.190 It might be argued that an obligation to provide advance notification of prices could lead to a 'chilling' effect where other communications providers follow BT's prices rather than act dynamically to set competitive prices in the TISBO market. However, given that the Director's primary aim is to address the consequences for downstream markets of BT's market power in this market, he does not believe that this consideration will undermine imposition of this obligation.
- 6.191 The Director therefore considers that BT should be obliged to provide advance notice of changes to the prices terms and conditions of its wholesale TISBO services, which are an essential input for products in the retail markets. The Director originally indicated in the first consultation document that he

considered that the appropriate time for giving notice of price changes should vary according to the degree of market power. However, in light of responses to the first consultation (see below for the responses and the Director's reasoning), the Director has revised his opinion and considers that the notification period should vary according to whether the product is a new product or an existing product, as well as the degree of market power.

- 6.192 For existing wholesale low and high bandwidth TISBO products, the Director considers that 90 days would be an appropriate period for notice of changes to prices terms or conditions. The Director originally considered that a lower notification period of 28 days would be more appropriate for existing high bandwidth TISBO products but revised his opinion in the light of responses to the first consultation (see below). In the Director's view, this period of notice is necessary to give communications providers sufficient time to respond to changes to BT's wholesale products and allow them to plan and implement their reactions to those changes, for example they might wish to make similar changes to comparable products they offer, without the increased risk of incurring forecasting penalties that a 28 day notification period might incur. This will prevent them from being put at a competitive disadvantage in relation to BT's retail arm.
- 6.193 For new wholesale low and high bandwidth TISBO products, the Director considers that 28 days would be a more appropriate period of notice for changes to prices, terms or conditions. The Director originally considered that a higher notification period of 90 days would be more appropriate for new low bandwidth TISBO products but revised his opinion after further consideration and in light of the responses to the first consultation (see below). In the Director's view, this provides the appropriate balance between allowing communications providers sufficient time to react to the changes made by BT, and the potential competition 'chilling' effects described above. Forecasting penalties are unlikely to be an issue for new products.
- 6.194 As explained above, the Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.
- 6.195 As noted above, the Director considers that transparency obligations, which include notification of prices, accord with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.

Responses to previous consultation – notification of price changes etc

- 6.196 The communications providers commented in their combined response, on the Director's use of the phrase "degree of SMP" in the first consultation document, and asked for the legal basis for it.
- 6.197 The Director accepts that the phrase should have read "degree of market power". Whereas SMP is a legal designation, market power is an economic concept and there can exist different degrees of market power, as noted in the OFT's guideline "Assessment of Market Power" (OFT415) which states that "market power can exist in a variety of other contexts and in a variety of degrees".
- 6.198 Several communications providers argued that the period of notice should be 90 days for both low and high bandwidths. They pointed out that product lead times for LLU backhaul are 60 days or more and that PPC lead times for high bandwidths are 57 days.
- 6.199 The Director has reconsidered this issue in some detail. The communications providers are right to point out the potential impact of PPC lead times, which are 57 working days and therefore approximate closely to the 90 calendar day notification period proposed for low bandwidth TISBO.
- 6.200 Of potentially greater importance for changes to existing wholesale TISBO products is the impact of forecasting penalties. Revisions to the forecasting regime are restricted. Forecast revisions can only take place once every four months (ie about every 84 working days) and are limited in terms of percentage (10% below or 20% above for the nearest forecast period and 30% below or 30% above for the furthest forecast period).
- 6.201 Forecasting penalties are currently set at £143 per circuit for 34 and 45 Mbit/s circuits and £3,788 per circuit for 140 and 155 Mbit/s circuits. These penalties are imposed for circuits above the limits noted above that have been forecasted but are not ordered. This over-forecasting is more likely to occur if BT raises its prices. If too short a notification period is set for changes to existing products, communications providers will be faced in these circumstances with the choice of increased prices for circuits or incurring forecasting penalties.
- 6.202 If a communications provider under-forecasts, then it can still purchase additional circuits but it will be penalised in terms of longer lead time for delivery (50% longer). Such under-forecasting is more likely to occur if BT reduces its prices.
- 6.203 The Director considers that the combination of PPC lead times and the forecasting penalty regime would lead to an adverse impact on other communications providers if a 28 day price change notification period was

introduced for existing products. This is likely to be the case in particular where BT reduces its PPC charges. In such circumstances, if communications providers decide that more PPCs are needed, they will be constrained by their forecasts. (Almost) every ordered but non forecast circuit would be delivered within 80 to 105 working days - 4 to 5 times the period of notice.

6.204 Note that for low-bandwidth PPCs, the lead time varies between 10 and 30 working days while the proposed notice period is about 63 working days. Thus communications providers do have the time to order non-forecasted circuits and to get them delivered roughly within a 90 day notice period (if strategic and network planning are included).

6.205 BT argued that for low bandwidth TISBO, where the Director proposed a 90 day notification period, launch of new services should be subject to a reduced 28 day notification period to enable BT to respond more quickly to the needs of wholesale customers for new services. The Director considers, on balance, that BT's argument has merit and that the potential for communications providers to incur forecasting penalties is outweighed by the benefits of new products being made available more quickly and the reduced risk of potential competition 'chilling' effects. The Directors reasoning similarly applies to new high bandwidth services.

6.206 As a result of the above considerations, the Director has revised his proposals and is now proposing a 90 day notification period for changes to prices terms and conditions for existing low and high bandwidth TISBO products. He is further proposing a 28 day notification period for new low and high bandwidth TISBO products since the forecasting penalty point outlined above does not apply and the potential competition 'chilling' effects discussed in paragraph 6.190 above will therefore be proportionately more important.

6.207 In summary, therefore, the Director is proposing the following notification periods:

- Low bandwidth TISBO new products 28 days
- Low bandwidth TISBO changes to existing products 90 days
- High bandwidth TISBO new products 28 days
- High bandwidth TISBO changes to existing products 90 days.

Conclusion on notification of prices terms and conditions

6.208 Having considered the consultation responses the Director proposes to impose conditions G6 and GG6 in Annex D, which require advance notification periods of 90 days for changes to both existing low and high bandwidth TISBO products, and 28 days for new low and high bandwidth TISBO products.

Communications Act tests

6.209 The Director considers that the proposed condition meets the tests set out in Section 47 of the Act. The justification for imposing the condition is that general and reliable visibility of a dominant communications provider's prices is needed to enable the Director and competitors to monitor BT's prices for possible anti competitive behaviour. Imposition of this condition does not discriminate unduly against BT as it is the only communications provider in the market with SMP; the behaviour of other communications providers is not capable of having a materially adverse effect on competition as these communications providers do not have market power. The remedy is proportionate, as it is the least burdensome means of achieving the objective of transparency, and the requirement is made fully transparent in Annex D.

6.210 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with transparency, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers. It promotes the interests of purchasers of wholesale TISBO services by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions by informing them of when those changes are going to occur, thereby allowing them to better plan their businesses and relationships with their customers. It also promotes competition in the TISBO market by allowing BT's competitors in the provision of TISBO services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, thereby ensuring competition in the downstream markets.

6.211 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers have access to transparent information that enables them to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale traditional interface symmetric broadband origination proposed regulation 8:

Obligation to provide quality of service information

6.212 Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. The condition proposed by the Director in Annex D requires BT to publish such information in the manner and form required by the Director.

6.213 This obligation would require BT to publish certain information relating to the quality of the service it delivers in providing wholesale TISBO products. The

condition would have the potential to deliver benefits in a number of areas, most notably prevention of undue discrimination. Other benefits might include, for example, benchmarking with international comparators in situations where BT delivers a similar quality of service to all communications providers including itself, but this level of service falls short of the service generally offered in comparable countries, most notably within the EU.

- 6.214 The principle of no undue discrimination is intended to ensure that communications providers with SMP do not distort competition. As noted in Recital 17 of the AID, the application of this principle is particularly important where a vertically integrated communications provider, with market power in a particular wholesale market, supplies services to other communications providers with whom they compete in a downstream retail market.
- 6.215 Section 87(6)(a) of the Communications Act allows the Director to impose a no undue discrimination condition on a dominant provider where there has been an SMP determination in an identified market. The no undue discrimination condition set out in Annex D requires the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with network access.
- 6.216 It might be argued that a dominant communications provider should meet this condition by providing wholesale services to other communications providers using the same operational processes and interfaces it uses to supply itself.
- 6.217 However, the high cost of replacing legacy systems means that this will not always be practical. Instead, the Director considers that the most objectively justifiable and proportionate means of meeting this condition is to require that a dominant communications provider delivers the same operational performance to other communications providers as it delivers to itself. Specifically, this means that Key Performance Indicators (KPIs) such as ordering times and fault response times must be the same.
- 6.218 The Director believes that the only means of ensuring that there is no undue discrimination as to quality of service is by imposing a requirement to publish such information. Without such a requirement, the Director believes that it would be impossible to monitor that the different operational processes used by the dominant communications provider were delivering an equivalent quality of service. The Director also considers that this condition provides the necessary transparency to give him assurance that services are being supplied on fair and reasonable terms and in a timely manner.
- 6.219 The Director believes that it is insufficient to rely on requesting the necessary quality of service information each time it is required, as suggested in paragraph 3.51 of Oftel's Access Guidelines. In the absence of an *ex ante* obligation to do so, there is no guarantee that the necessary information will be

collected at the time of any given event. It is not in general possible to reconstruct data for operational performance retrospectively.

- 6.220 The Director therefore concludes that this obligation should be imposed. As explained above, the Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.
- 6.221 The specific condition set out in Annex D proposed by the Director would require BT to publish data on a specified set of KPIs, with a format and frequency to be determined by the Director. This condition follows section 87(6)(b)) which allows the Director to impose a condition of transparency whereby the Director can require a dominant provider to publish all such information as directed by him to secure transparency in relation to matters such as non-discrimination.
- 6.222 It is the Director's intention that the scope of publication should take account of the potential conflict between any obligation to publish performance data, in order to provide transparency, and the need to maintain commercial confidentiality.
- 6.223 For most market reviews, the Director set out his proposals for the specific KPIs to be covered by the proposed condition, as well as the publication process and frequency, in a separate Consultation Document issued on 11 July 2003 see www.oftel.gov.uk/publications/eu_directives/2003/kpis0703.htm. The Director intends to issue draft Directions for consultation later this year.
- 6.224 For this market, however, the issues have recently been addressed in some detail by the recently published PPC Phase 2 Direction, and the Director proposes to re-make the majority of those measures by means of a Direction under this condition. This is discussed in detail in the section "Direction under quality of service information condition requiring BT to provide specific information in respect of PPCs", below. The draft Direction made under this proposed transparency condition takes the Access Guidelines into consideration as appropriate.
- 6.225 Implementation of this regulation is in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective". It will enable the Director to make Directions requiring BT to publish specific quality of service information.

Responses to previous consultation – quality of service information

6.226 Some communications providers noted in their responses that they had observed asymmetries between the forecasting processes and SoR processes applicable to BT Retail and those applying for other communications providers.

6.227 The Director discusses the latter in the section below relating to requests for new network access. In general, however, he considers that if there are complaints in future from communications providers about discrepancies of this nature, it is likely to be appropriate to investigate them under the non discrimination condition.

Conclusion on provision of quality of service information

6.228 Having considered the consultation responses the Director proposes to impose conditions G7 and GG7 in Annex D. The conditions remain in the same terms as the condition previously consulted on.

Communications Act tests

6.229 The Director considers that the proposed condition meets the tests set out in the Act.

6.230 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of securing the maximum benefit for the persons who are customers of communications providers and of persons who make such facilities available. It promotes competition and thereby the interests of end users in downstream markets, by denying BT as the dominant provider in this market the opportunity to discriminate in the quality of service it provides to customers.

6.231 It is the Director's current view that the transparency condition proposed in this consultation satisfies the relevant requirements specified in section 47 of the Act. In particular, the Director has considered the duty to promote competition. In addition, the Director considers that

- The condition is objectively justifiable because it is the only means of
 ensuring that a dominant communications provider provides an equivalent
 quality of service to other communications providers as it provides to itself.
 This is necessary in order to prevent a vertically integrated communications
 provider, with market power in a particular wholesale market, leveraging this
 into a downstream market.
- The condition does not unduly discriminate against a particular person because it applies to the dominant provider in circumstances where there has been an SMP determination. In the case of the dominant provider, the supply of wholesale services must be in sufficient volume for the publication of KPI

- data to be statistically meaningful. The Director considers that this is not the case in relation to Kingston.
- The condition is proportionate to what it is intended to achieve because the
 dominant provider will only be required to publish data on a small number of
 KPIs representative of key business processes, rather than a complete set of
 KPIs, covering all aspects of operational performance.
- The condition provides transparency in relation to what it is intended to achieve because the objective of the condition relates to the problem identified in the market, and inter alia it is aimed at ensuring nondiscrimination specifically in relation to the quality of service provided by the dominant provider in respect of its key business processes.

6.232 In addition, the Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. Overall, given the potential for the development of alternative facilities in the current market, the Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on leased lines in competition with BT. It will also assist monitoring of BT's compliance with a non discrimination condition. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK by enabling communications providers to compete on comparable terms with BT at the retail level.

Wholesale traditional interface symmetric broadband origination proposed regulation 9:

Requirement to publish technical information

6.233 Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency.

6.234 Under the proposed Condition 'Requirement to publish a reference offer', BT will be obliged to publish a Reference Offer for Network Access, which amongst other things, contains a description of the Network Access to be provided, including technical characteristics; the location of the points of Network Access; and technical standards for Network Access. The Condition sets out the number of days within which a reference offer, or amendments to that reference offer, must be published. For example where BT amends its Reference Offer in respect of high bandwidth TISBO services it must publish an amended version 28 days before the amendment comes into effect. However, the proposed Condition 'Requirement to publish technical information' sets out additional

obligations to publish new technical information 90 days in advance of entering into a contract to provide the new Network Access, or amendments to existing technical terms and conditions 90 days before those amended terms and conditions come into effect.

- 6.235 As set out above, the information to be published under this Condition comprises new or amended technical characteristics (including information on network configuration where to necessary to make effective use of the Network Access), 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.
- 6.236 The proposals in this Condition are important to ensure that communications providers to whom Network Access is being provided by BT are able to make effective use of that Network Access. Changes to technical information must be published in advance so that communications providers have sufficient time to prepare. For example, a competing provider may have to introduce new equipment or modify existing equipment to support a new or changed technical interface. Similarly, a competing provider may need to make changes to their network in order to support changes in the points of network access or configuration.
- 6.237 The Director's view is that 90 days is the minimum time that competing providers will need to modify their network to support a new or changed technical interfaces or support a new point of access or network configuration. Therefore, the Director proposes that in the market for wholesale TISBO services, BT must publish any new or modified technical characteristics, points of network access and technical standards not less than 90 days in advance of either BT entering into a contract to provide new Network Access or making technical changes to existing Network Access, unless the Director consents otherwise.
- 6.238 As explained above, the Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.

Responses to previous consultation – provision of technical information

6.239 A number of communications providers commented that a blanket 90 days may not be appropriate in all circumstances. Some changes may need a longer period with proper consultation through the NICC, for example BT's current proposed roll out of Media Gateways and Telephony Servers. In addition, it was argued that 90 days is unlikely to be sufficient time for communications providers to make material changes to their network, particularly where they need to obtain

additional interconnect circuits from BT. As a solution, some communications providers proposed a pre-notification period of 30 days, during which objections could be raised and a full consultation and review instigated if necessary.

- 6.240 In the Condition 90 days is the minimum requirement. However, in order for BT to meet its obligations under SMP Condition 1 (Requirement to provide Network Access on reasonable request), the Director considers that longer periods of notification may be appropriate in certain circumstances. SMP Condition 1 would require BT to 'provide the Network Access requested' and 'on fair and reasonable terms'. Therefore, if there were a major change to BT's terms and conditions, for which the minimum 90 day notification was allowed but which had the consequence that communications providers were unable to make use of the Network Access provided, then BT might, depending on the circumstances, be in breach of its obligation to provide the Network Access.
- 6.241 The Director notes that the BT Interconnect Contract already provides for longer notification periods for major "System Alterations" and changes such as the closure or modification of a switch and agrees that BT should continue to use longer notification periods for these major changes.
- 6.242 For other major changes, the Director considers that consultation with industry through the NICC would continue to be the best way for BT to meet its obligations in relation to the provision of Network Access on fair and reasonable terms. Therefore, the Director considers that the onus is on BT to ensure that it provides longer notification and, where appropriate, consults on major changes so that it complies with its Network Access condition as well as the technical notification condition.
- 6.243 If communications providers considered that a technical change notified by BT was not consistent with its requirements to provide Network Access on fair and reasonable terms, then they would, as always, have the option of referring a dispute to the Director for resolution, or of making a complaint regarding breach of an SMP condition.
- 6.244 BT proposed that the minimum necessary notification period should be 28 days where the equipment is designed to international or industry standards and that 90 days should only apply in the rare cases where non-standard equipment is used. This was to reflect that proprietary, network communications provider specific specifications are a thing of the past and that the time to market for telecommunications services has been drastically reduced.
- 6.245 Although the Director agrees that standardised interfaces are now much more common, even where a standardised interface is used, the Director would consider it unusual for a period of 28 days to be appropriate. This is because even where standardised equipment is available, implementation of a new interface in 28 days is unlikely to be practicable and reasonable. For example,

even where standardised equipment is available, this would still require procurement, installation and testing. The Director does however retain the option of consenting to shorter notification periods in exceptional circumstances.

6.246 BT suggests that the wording of paragraphs G8.4(c) and H7.4(c) is not compatible with conditions G8 and H7 respectively. The Director confirms that the paragraphs are compatible. The phrase "at that person's written request" is designed to mean that any person can ask to be added to BT's mailing list for notification of technical information. It does not mean that such person can obtain the relevant information prior to the 90 day notification period, unless BT wishes to provide it earlier.

Conclusion on requirement to provide technical information

6.247 Having considered the consultation responses the Director proposes to impose conditions G8 and GG8 in Annex D, which require a minimum of 90 days for provision of technical information. The conditions remain in the same terms as the condition previously consulted on.

Communications Act tests

6.248 The Director considers that the Condition meets the tests set out in the Act. The Director in proposing the Condition has considered all the Community requirements in section 4 and in particular the requirement to promote competition and to encourage service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefits for consumers by ensuring that providers have sufficient notification of technical changes to BT's network to enable them compete.

6.249 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it enables competing communications providers to make full and effective use of Network Access. It does not unduly discriminate in that it is imposed on BT and no other communications provider has SMP in these markets. It is proportionate in that 90 days is the minimum necessary to allow competing providers to modify their networks. It is transparent in that it is clear in its intention that BT should notify technical information as set out above.

6.250 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK. By requiring BT to provide advance notification of technical changes,

communications providers will be able to better plan their businesses and relationships with their customers.

Consultation on interfaces

- 6.251 Current regulation on BT (licence condition 15) includes a requirement to consult on interfaces where so directed by the Director. This was to ensure that BT could not impose unnecessary costs on competing communications providers by specifying a proprietary interface.
- 6.252 However, the Director recognises that communications providers are constrained in their choice of interface by the standardised nature of most communications equipment. In addition, the Director believes that the scope for further modifications to traditional PSTN equipment, where BT was most likely to be able exert control over interface specifications, is likely to be limited in the future, as communications providers and equipment manufacturers increasingly look to other technologies.
- 6.253 Therefore, the Director now considers it unlikely that BT would be able to exert control over interfaces in a way that could have an adverse effect on competition. Consequently, the Director does not believe that imposing a condition requiring consultation on interfaces would be proportionate.

Wholesale traditional interface symmetric broadband origination proposed regulation 10:

Obligations relating to requests for new network access

- 6.254 This condition is set in accordance with sections 87(3) and 87(5) as detailed above in relation to the condition relating to the provision of network access.
- 6.255 The Director's previous consultation invited comments on his proposals for regulation of the statement of requirements ("SOR") process. The Director stated that if regulation of the SOR process were necessary, the following obligations would be worth considering:
- (a) the publication of reasonable guidelines on requesting a new product;
- (b) the provision of information for the purpose of making a request for a new product; and
- (c) a process for dealing with requests for new products.
- 6.256 The SOR process forms part of BT's obligation to provide Network Access in all markets in which it has SMP. The SOR process and associated timescales are the same in all of these markets. In revising the proposed condition, the Director has therefore taken account of comments provided in response to consultations on other markets, notably the Fixed narrowband wholesale exchange line, call origination, conveyance and transit markets review:

explanatory statement and notification, published 26 August 2003 ('the narrowband statement').

Responses to previous consultation – requests for new network access

Responses supporting the proposals

- 6.257 Respondents other than BT and Kingston, support the Director's proposal to regulate the SOR process, commenting that clarity is necessary to help identify when there is a dispute and to enable the Director to resolve disputes in four months. Respondents also comment that in order to reduce BT's incentive to delay there should be regulation of the process, which will allow for penalties under the new regime.
- 6.258 Cable & Wireless states that over the last three years, the major fixed line communications providers have submitted more than 100 SoRs, and estimates that out of these less than five have been accepted without Oftel involvement. Both Cable & Wireless and Energis refer to previous negotiations for PPCs as evidence to suggest that BT's current SOR process is not working.
- 6.259 In addition Cable & Wireless comments that with previous SORs submitted, BT has subsequently replied that the understanding of BT's network is incorrect. This has resulted in the need to amend the SOR and to start the process again from the beginning. Cable & Wireless and Energis also support the proposal for a timeline for the dominant provider to provide requested technical information.
- 6.260 Cable & Wireless and Fixed Alternative Networks state that in BT's current process there is sufficient latitude to allow BT to be able to introduce delays and to put other obstacles into the process. The following term in BT's current process is referred to "The Parties shall use their reasonable endeavours to ensure that BT shall be in a position to confirm the sufficiency of the statement of requirements (with clarification, if any) within such 30 calendar day period". There is also comment that BT will advise at the latest possible moment within this 30 day target, that an SOR cannot be considered because it is based on an incorrect understanding of the BT network or alternatively that the SOR needs further work.
- 6.261 Both Cable & Wireless and Energis also state that the same regulated process should apply to different markets, and that trying to manage different processes for different product sets would be likely to make the requirement unworkable.
- 6.262 Respondents also comment that a regulated SOR process should apply not just to new requests, but should also include product, pricing and billing modifications. Cable & Wireless states that BT already has a policy of requiring

communications providers to conform to BT's existing SOR process in cases where requests are made for minor amendments to terms and conditions or changes to the billing process.

- 6.263 Cable & Wireless and Energis also mention that the same process should apply equally to requests from BT Retail. In addition it is suggested that a register of SORs should be kept, and that there should be regular reporting on Key Performance Indicators.
- 6.264 Energis states in its response that the Director should make more widespread and consistent use of retrospection. The Director confirms that retrospection is a consideration factor in the resolution of disputes and is applied where the Director considers it appropriate.
- 6.265 No particular comments were received about SOR dealings with Kingston.

Responses against the proposals

- 6.266 Both BT and Kingston state that they already have internal SOR processes in place and that specific ex-ante regulation is not appropriate. Kingston confirms that its SOR process had never been used.
- 6.267 BT highlights that in September 2002, following feedback from communications providers about the SOR process, BT's internal processes were improved to ensure that responses are provided within agreed timescales. This process is found in the new services section of BT's standard interconnection agreement. BT states that out of 27 SORs received, between April 2002 and March 2003, approximately 92% were responded to within the 60-day timeframe. Of these 25% were accepted, and of the 75% rejected only 10% of these were referred to the Director as a dispute.
- 6.268 BT argues that the short timescales proposed are inadequate to allow for proper consideration of new requirements and that the time limits could lead to disputes in situations where a more considered discussion of the new requirement would be more productive.
- 6.269 BT's view is that the amount of time required does depend on the complexity of the issue and that this is relevant to all the proposed stages. BT expresses concern about reducing maximum timescales, but has put forward suggested average response times.

Responses to the narrowband statement

6.270 As noted at paragraph 6.256 above, the SOR process is the same for all markets. The Director has made further changes to the proposed condition following responses to the narrowband statement, as follows.

Feasibility studies

6.271 In its response to the narrowband statement, the UK Competitive Telecommunications Association (UKCTA) expressed concern that BT may use feasibility studies to delay the process up to the maximum target. It also asked for greater clarity about the circumstances in which BT will require a feasibility study and what is involved in such a study. In addition, UKCTA commented that as a general rule BT has not made available its feasibility studies to operators that have submitted SORs.

6.272 The Director considers that there is a cost implication for BT to conduct a feasibility study. In addition, BT can only carry out a feasibility study where one is reasonably required and will have to give objective reasons why it is needed. The Director proposed that BT should be required, in the event of a refusal, to provide the requesting operator with a non confidential version of the feasibility study and to provide Oftel with a copy of the feasibility study BT has commented that it would prefer this requirement to apply only where the refusal becomes the subject of a dispute.

6.273 The objectives of introducing regulation into the SOR process include the need to increase transparency and ensure that requests for access are not subject to unnecessary delay. The Director considers that in the event that BT has taken the extra time needed to complete a feasibility study and then has refused the request, it is reasonable for BT to provide a copy of the feasibility study to the requesting party. This should aid the requesting party to formulate any necessary dispute submission. The proposal that BT should be required to provide the feasibility study to Oftel would allow Oftel to monitor the reasons for refusal. This may be particularly important when much of the information in the feasibility study is withheld from the requesting parties on the grounds of confidentiality.

6.274 The Director considers that the completed version of the feasibility study should include the following:

- a breakdown of BT's estimated development, operational and other costs associated with the provision of the requested service;
- a description of the technical characteristics of the requested service including different technical options for meeting the request and the cost implications of these options; and
- a full description of the billing arrangement of the requested service.

6.275 The Director would also expect BT to include other relevant information on the scope of feasibility studies in its published guidelines.

6.276 UKCTA suggested that BT should inform the requesting party that it will be conducting a feasibility study at the 15 working day deadline, rather than at the 35 working day deadline, so that the requesting party is aware at an early stage how long the overall process is likely to take.

6.277 The Director considers that, generally, BT will have to decide whether to conduct a feasibility study earlier than 35 working days, in order to allow time to complete the feasibility study and other requirements within the overall target of 60 working days. Therefore, the Director does consider it appropriate to reduce the proposed target for BT to notify that it will be conducting a feasibility study, to 15 working days. However, there may be limited circumstances where BT, due to a genuine error of fact, decides at a later point in time that a feasibility study is required. In such limited circumstances, BT will have until 35 working days from date of receipt of request to notify the requesting party that a feasibility study is reasonably required and give objective reasons why this is the case. Accordingly, the Director has amended the draft Condition.. In such circumstances. BT must carry out the feasibility study within 45 days of informing the requesting communications provider of the need to do so. This may be extended up to 70 working days, if circumstances have arisen which prevent BT from completing the feasibility study, or if BT and the communications provider agree to such an extension, as set out in the Condition. Further, the period can be extended past 70 working days with the agreement of the Director or the requesting party.

Transparency, KPIs, and register of SORs

6.278 UKCTA expressed its view that discrimination is a key issue affecting markets in which alternative operators compete, and that lack of transparency means that alternative operators have no visibility as to whether BT's retail activities get preferential treatment in the SOR process over other communications providers. It added that applying the requirement to publish KPIs on the SOR process will give Oftel and alternative operators the transparency to determine whether any discrimination is taking place and will also act as a discipline on BT to avoid discrimination. UKCTA also recommended that BT be required to keep a register of SORs to enable it to track where each one is in the process. UKCTA would, however, expect this to be confidential to BT and Oftel only.

6.279 The Director agrees that visibility of BT's performance in handling requests from other communications providers and BT's retail activities would benefit all parties, including BT. Transparency is likely to lead to greater cooperation between BT and other communications providers and reduce the need for regular regulatory intervention. BT has indicated to the Director a willingness to publish KPIs on a voluntary basis. Should this fail to lead to a satisfactory outcome, the Director will consider extending regulation to cover KPIs on the SOR process. The Director expects BT to set out in its guidelines what information it will publish.

The Director's response

6.280 The Director's revised draft condition is set out at Annex D and is further described below.

6.281 The Director has taken into account comments received and has reviewed disputes referred to him since April 2002. The Director considers that there is evidence in the markets in this review that BT's current SOR process is not working sufficiently well and that there is a need to improve BT's response to requests for network access. There is evidence from disputes referred to the Director since April 2002 of instances where the introduction of new products and services has been delayed by the unavailability of feasibility studies and other information which the Director would normally expect to be collected during the SOR process. These disputes include, for example, *Software rearrangement - Energis Determination request*, Oftel case CW/00542/08/02; *Indirect access dispute between BT and Cable & Wireless*, CW/00590/01/03; *PPCs - request for Determination from Cable and Wireless*, CW/00514/04/02, *Dispute between THUS plc and BT about the IN dip retention charge for NTS and SurfTime calls to numbers on 1k blocks*, CW/00661/07/03.

6.282 Other communications providers need clarity and certainty about the SOR process. Clear guidelines from BT and the provision of necessary information for the purposes of making a request for Network Access should speed up the SOR process to the benefit of communications providers that require wholesale inputs from BT. An improved process will also enable BT to set a reasonable standard for requests and reject inadequate requests. It should also assist with the timely resolution of disputes, since the nature of the dispute should be clearer and it should be able to be brought in a more timely manner than at present. Accordingly, the Director considers that *ex ante* regulation of BT's SOR process is appropriate. The Director considers that this condition should also apply to the AISBO market and the wholesale trunk segments market.

6.283 The Director considers that the process should apply to modifications to existing Network Access as well as to completely new forms of Network Access. He would not however expect the process to apply to requests for standard Network Access products offered by BT where the requesting electronic communications provider does not already have the product. He also notes that requests for modifications on existing Network Access are likely to be less complex and should be able to be dealt with relatively quickly.

6.284 The regulated process set out is designed to accompany the obligation for BT to meet all reasonable requests for access in specific markets. The Director acknowledges that a request for a wholesale product could take the form of a request for a new pricing structure or amount to the provision of certain billing information. Therefore, for the avoidance of doubt, the Director considers that the

regulated SOR process does apply to modifications of this type where BT has an obligation to meet all reasonable requests. The process does not cover general requests, not associated with specific requests for access, such as requests to modify general contractual terms.

6.285 The Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined above.

Revisions to the proposed condition

A. Publication of reasonable guidelines on requesting a new product

6.286 Condition G9.1 would oblige BT to publish the required content and form of a request for new Network Access. In view of comments received, the Director considers that it is appropriate to require BT to produce reasonable guidelines on requesting new Network Access. The Director believes that such guidelines will contribute to an efficient process by ensuring that BT receives accurate product descriptions in the necessary detail and give requesting communications providers confidence that requests are handled in a fair and consistent manner. The Director considers that BT should consult with the Director and relevant third parties before finalising the initial version of these guidelines to ensure that the guidelines meet the reasonable needs of stakeholders. The Director would expect BT to make the proposed guidelines publicly available and to engage with stakeholders as appropriate to enable them to contribute to the development of the final guidelines. The Director also considers that BT should finalise the initial guidelines within two months of the date the condition enters into force. In addition. BT would be obliged to keep these guidelines under review and consult with relevant third parties and the Director before making any amendments.

B. Provision of information for the purpose of making a request for a new product

6.287 The Director proposes that BT, on receipt of a reasonable request, should be required to supply sufficient technical and network information to enable third parties to construct proposed product specifications that are efficient and meet their reasonable requirements (Condition G9.3). The Director would require that the information should be supplied within a "reasonable timescale". If a dispute were to arise about timescales, the Director would consider what is reasonable on a case-by-case basis, taking into account the complexity of the information request.

6.288 The Director considers that BT should not refuse access to any such information on the basis of confidentiality, although BT may require a nondisclosure agreement. BT has argued that it may be constrained in its ability

to supply information to requesting operators due to confidentiality agreements with its suppliers. While the Director appreciates that there may be certain circumstances where BT finds itself constrained, communications providers will obviously be concerned that by signing confidentiality agreements with suppliers, BT can effectively deny access to its network. The Director considers that in signing confidentiality agreements BT must consider its obligations to meet all reasonable requests for access and to provide information to requesting operators. If necessary, BT should review confidentiality agreements with its suppliers.

6.289 Section 87(4)(e) of the Communications Act requires the Director to take account of, inter alia, any relevant intellectual property ("IP") rights in considering whether it is proportionate to mandate or attach conditions to an access obligation. The Director recognises that IP rights will protect some types of information, but where that information is essential to allow BT's competitors to request and make use of reasonable access products, the Director would expect BT to explore whether such information could be made available and protected with nondisclosure agreements.

6.290 As set out in the Access Guidelines, in the event of a dispute about the provision of information, the Director will identify IP rights on a case-by-case basis. The Director notes, however, that:

- the information must be secret, identified (recorded) and substantial; and
- IP includes patents, know-how, and software copyright.

C. Process for dealing with requests for new products

6.291 Amendments have been made to the proposed condition in respect of the process for dealing with requests for new products. The following is a summary of the proposed process:

- BT must acknowledge receipt of the request within five working days (Condition G9.5).
- BT must give a first written response to the request at the latest within 15 working days of its receipt (Condition G9.6). At this stage, it is envisaged that the response will not be an initial offer of terms and conditions, although nothing would preclude such a response at this stage. If the request is not adequately formulated, the Director would expect BT and communications providers to be able to discuss constructively how a request should be formulated, and this should be covered in BT's guidelines. If the request is refused on the basis of specified objective criteria or the need to maintain network integrity, BT shall detail its reasons for refusal. If the request is sufficiently well formulated BT shall state either that the initial offer of terms and conditions will be prepared, or that a feasibility study will be required (and objective reasons why a feasibility study is required). BT should also at this stage confirm

preparation of a timetable for the agreement of technical issues (Condition G9.6).

- Rejection BT may reject a request on the grounds that it is not reasonable, is not technically feasible, requires BT to provide something which is not within its power to provide, or would compromise the integrity of BT's network. Oftel has set out, in the Access Guidelines (at paragraph 2.28), the procedure it intends to use to resolve disputes about what is a 'reasonable request' for Network Access. Oftel considers that a request is unreasonable if it imposes an undue burden on BT, ie BT would be unable to recover its costs of providing the requested access.
- Where no feasibility study At the latest, 35 working days after receipt of the request, BT must provide an initial offer of terms and conditions and timetable for new Network Access and the resolution of technical issues (Condition G9.7).
- Where, BT has said that no feasibility study is required but, due to a genuine error of fact, BT decides after 15 days that a feasibility study is reasonably required, it may inform the requesting party within 35 working days that a feasibility study is required (Condition G9.8) and give objective reasons why the study is required. The Director expects that this condition will apply in limited circumstances only, and generally BT will be required to decide whether a feasibility study is required within 15 working days.
- Where feasibility study is undertaken At the end of 60 working days, BT must be able to respond fully to the majority of requests for new Network Access (Condition G9.9). The condition allows provision for this time to be extended to 85 working days, where, despite using its best endeavours, BT is unable to complete the feasibility study within 60 working days or when BT and the requesting operator agree that more time is needed. The Director does however acknowledge that in certain circumstances, BT might reasonably require even more time to respond fully to a request. Such circumstances might include multiple or conflicting requests from different providers, extremely complex requests covering a number of different technologies areas or requests requiring wider industry consultation. The condition therefore includes provision for the overall deadline to be extended to over 85 working days, with the agreement of the requesting party, or with the Director (Condition AA1(b).11).

6.292 Where BT wishes to extend the 60 day deadline to 85 working days (Condition G9.10), it is for BT to show that circumstances exist which prevent it from responding to the request within 60 working days.

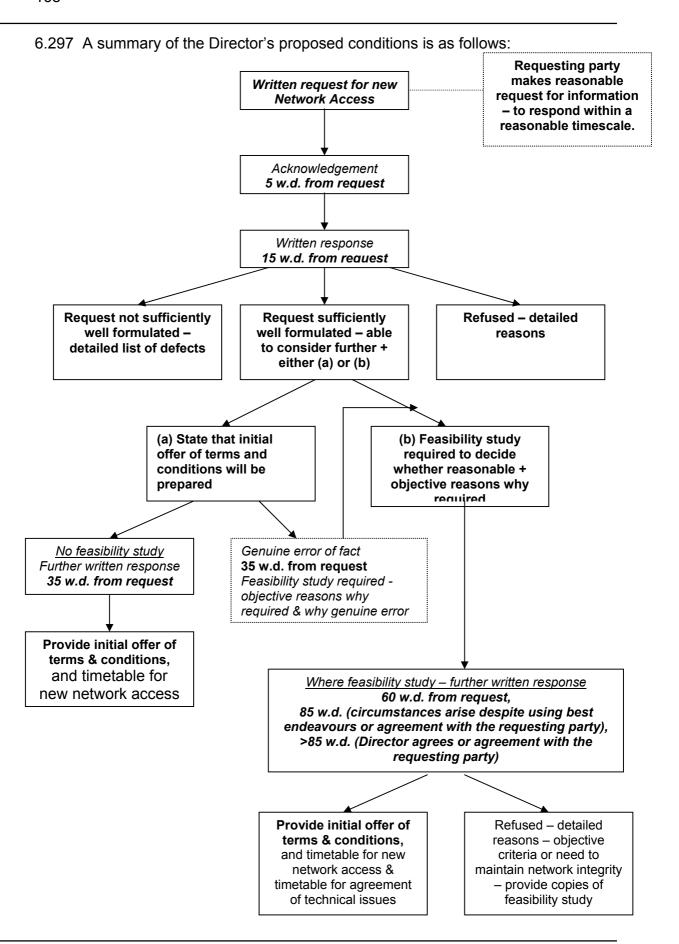
Communications Act tests

6.293 The Director proposes to impose this condition pursuant to section 87(3) and 87(5) of the Act. Specifically, under section 87(5)(a) the Director considers that the provisions of this condition will help to secure fairness and reasonableness in the way in which requests for Network Access are made and responded to, by adding clarity and robustness to the process. In addition, under section 87(5)(b) he considers that the proposed provisions will help to secure that the obligations contained within the condition are complied with, within the reasonable periods and at the times set out in the proposed condition.

6.294 The Director has considered the matters set out in section 87(4). In particular, under section 87(4)(d) he considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as reductions in delays in provision of new products will ensure that communications providers are able to make effective use of BT's network in competition with BT.

6.295 The Director has also considered the test for setting conditions set out in section 47 of the Act, namely that the condition is objectively justifiable, does not unduly discriminate, is proportionate and transparent. The Director considers that his proposed condition meets these tests. In particular, it is objectively justifiable in the light of the deficiencies in the current process which lead to the delays and lack of clarity discussed above. It would not discriminate unduly against BT because BT has been found to have a position of SMP in this market and is therefore able to exploit this position to the potential detriment of its competitors both in this market and in downstream markets. The condition is proportionate since without it being put in place, BT's competitors would continue to experience problems of the nature already described. Furthermore, it is transparent in its intention to ensure that BT has a reasonable process for dealing with requests for new Network Access.

6.296 Finally, the Director, in imposing this condition, has considered all the Community requirements set out in section 4 of the Communications Act. In particular, under section 4(8) the Director considers that the provisions help secure efficiency and sustainable competition in the markets in this review. They help to ensure efficiency and sustainable competition by enabling other communications providers to make effective use of BT's network in order to offer their own products.



Wholesale traditional interface symmetric broadband origination proposed regulation 11:

Direction under general access obligation to supply PPCs subject to specific terms and conditions

6.298 The Phase I PPC Direction implemented specific obligations which have led to changes in BT's contract for PPCs. BT is now providing PPCs at various bandwidths on specified terms and conditions in accordance with the PPC Directions. The conditions set out by the Director in these two Directions have been transposed into the contract between BT and other communications providers.

6.299 This proposed Direction would be made under the general access obligation for the wholesale TISBO markets, if imposed. The Direction would specify regulations for PPCs, which would carry forward the existing PPC requirements brought into force by the PPC Directions, as set out within subsections below. The imposition of price controls for PPCs is considered separately above.

6.300 BT has been found to have SMP in this market. The requirement to supply PPCs on specific terms will encourage competition in retail markets by enabling communications providers to supply end-to-end leased line products and value added business products in competition with BT. An obligation to provide PPCs on specified terms and conditions will provide more certainty than sole application of a more general obligation to provide low and high bandwidth TISBO services, as BT will be required to continue to provide products to a detailed specification agreed by communications providers.

6.301 Carrying forward this recently introduced regulation will add to the certainty in this market provided by continuity of the market conditions under which BT and other communications providers currently operate. This will help to encourage appropriate investment decisions which will maximise the level of competition in this and related retail markets. The Director recently considered the justification for requiring BT to supply a number of specific services and found them to be fully justified. There has been no subsequent material change in market conditions.

6.302 As explained above, the Director is minded to conclude that CSH and ISH interconnection services can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this Direction also to the technical areas outlined above. This will include the ISH extension and STM-1 point of handover ISH and CSH products discussed below.

6.303 Implementation of this PPC regulation is in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the

new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".

6.304 It could be argued that the Director should use his powers under the Competition Act to resolve complaints concerning provision of PPCs. However, the Director has very recently imposed fully justified rules and there has been no significant change in underlying market conditions to warrant their removal. If BT were to depart in any way from those rules, there would inevitably be a further complaint which would be bound to lead to their re-imposition. This would tend to destabilise the market and waste resources.

6.305 The Director therefore considers that it is necessary to carry forward the appropriate existing PPC-specific regulation. The Director is therefore consulting on a Direction under the proposed access obligations requiring the supply of PPCs subject to the terms and conditions set out in the PPC Directions, on the assumption that he confirms his proposals and sets such access obligations. The Director considers that PPCs should, as set out in the Phase 1 and Phase 2 PPC Directions, be supplied subject to the following requirements.

11A: Technical and paper migrations and migration issues

6.306 The Director is proposing to require BT to migrate any retail circuits to PPCs providing the retail circuits were installed before 23 December 2002. This includes retail circuits requiring technical modifications that may have been carried out after 1 August 2001.

11B: ISH extension

6.307 The Director is proposing to require BT to provide an ISH extension product as specified in the draft Direction set out in Annex E, on a non discriminatory and cost oriented basis.

11C: PPC variant of Genus circuits

6.308 The Director is proposing to require BT to provide a Genus variant 1 PPC.

11D: Forecasting requirements and revisions and forecasting penalties

6.309 The Director is proposing to require BT to set out its forecasting requirements and penalties as specified in the draft Direction set out in Annex E. this will ensure that appropriate penalties are imposed by BT and will maximise the flexibility for adjustment of forecasts from one period to the next.

11E: STM-1 ISH and CSH handover

6.310 The Director is proposing to require BT to provide STM-1 point of handover ISH and CSH products at non discriminatory and cost oriented prices.

11F: Service Level Agreement

- 6.311 The Director is proposing to require BT to offer a comprehensive service level agreement covering ordering, supply and repair of equipment and circuits, in order to ensure the following:
- lead times for delivery and repair which are in keeping with European best practice;
- adequate compensation payments which reflect potential losses and provide a proper incentive for BT to act efficiently;
- clarity in the processes for ordering and provisioning avoiding the scope for misunderstanding and inefficient behaviour;
- adequate measures for dealing with the disparities in market position between BT and other communications providers; and
- clauses which reduce ambiguity and strengthen certainty for communications providers.

Responses to previous consultation – PPC Direction

- 6.312 Communications providers suggest additional penalties for delays by BT in the processing of migration orders. They also recommend some changes to the detail of the service level agreement requirements.
- 6.313 The Director considers that the introduction of this regulation is too recent for amendments of this nature to be made at this stage. In the Director's view, the regulation should be allowed to "bed in" for a reasonable period of time before an objective assessment can be made of BT's performance and consideration can be given to whether any additional or amended measures are necessary. The regulation was drafted following careful and detailed consideration of opposing arguments, including those now being made by communications providers, on a range of highly complex issues, and the Director does not consider that the position has changed since the making of the Direction to the extent that such amendments are warranted.
- 6.314 Communications providers suggest the inclusion of an additional paragraph in relation to forecasting penalties. However, the provisions of this proposed paragraph will no longer be relevant by the time this consultation has concluded and the final statement has been published.
- 6.315 Communications providers suggest that the internal BT forecasting regime should be made visible to the Director. The Director notes that BT is subject to a proposed condition which prevents undue discrimination, and he would expect

BT to apply the same processes to internal requests from BT Retail as it does to those from communications providers. At this stage however, he does not consider it necessary to require visibility of BT's internal forecasting regime. Nevertheless, the Director would expect BT to have such information available, should there be the need to investigate a complaint.

6.316 Energis notes some differences between the wording of the proposed Direction and that of the "PPC Direction". However, in all the circumstances outlined by Energis there is no difference in the wording of the two Directions. Some confusion may have arisen from differences in nuance between the wording of the PPC Phase II Direction and the wording of the accompanying explanatory document. The Director is satisfied that the wording of the PPC Direction most closely matched his intentions in all these instances, and therefore does not propose to make any amendment to the proposed Direction.

6.317 In relation to 'Qualifying BT Retail Private Circuits' cited in paragraph 4 of the draft Direction, BT asks how the Director will treat the words 'Schedule 2 Public Operators' and 'non-Schedule 2 Public Operators' from the Phase 2 PPC Direction. The Director confirms that the effect of paragraph 4 is to carry forward the rights of migration given to communications providers who were, at the time of publication of the Phase 2 PPC Direction, Schedule 2 or non-Schedule 2 Public Operators, as appropriate.

6.318 BT suggests that the definition of a Partial Private Circuit should be amended to include the definition of PPCs set out in the Director's March 2001 Direction. The Director does not, however, propose to amend this definition at this time, for the reasons set out in paragraph 6.316 above.

6.319 BT suggests that the reference to 'High Bandwidth Quote on Line' should be removed, as it states the tool is used only for 622Mbit/s PPCs, which under the Director's original proposals BT would no longer be obliged to provide. However, as stated in the PPC Phase 2 Direction the Director understood from BT that the tool was used for circuits of 34Mbit/s or higher.

6.320 BT proposes amendments to the reduced requisite period and expedited order requirements, citing varied industry needs. However, as stated above, the Director considers that the introduction of this regulation is too recent for amendments of this nature to be made at this stage. In the Director's view, the regulation should be allowed to "bed in" for a reasonable period of time before an objective assessment can be made of BT's performance and consideration can be given to whether any additional or amended measures are necessary. The regulation was drafted following careful and detailed consideration of opposing arguments, including those now being made by BT, on a range of highly complex issues, and the Director does not consider that the position has changed since the making of the Direction to the extent that such amendments are warranted.

- 6.321 BT suggests a more practical measurement period for reduced requisite period, being BT's reporting periods rather than a three month billing period. The Director accepts the practicality of this suggestion and has amended the Direction accordingly.
- 6.322 BT states that 'Third Party Links' should not be included as network infrastructure, since it would pay compensation under circuit compensation for delays in delivery. The Director considers that it is to communications providers' advantage to implement this change, since if Third Party Links are to be treated as part of the associated circuit for the purposes of the Service Level Agreement then BT will be obliged to deliver them in the relevant circuit delivery times set by the Director, which are in all cases shorter than those previously proposed for Third Party Links. The Director therefore accepts BT's clarification.
- 6.323 Finally, the Director highlights that he has made slight adjustments to the forecasting bandwidth groupings in paragraph 11 of the proposed Direction, to take account of the fact that the regulation needs to be split between the low and high bandwidth TISBO markets. The bandwidth groupings for this purpose are now:

(low bandwidth TISBO)

- less than 1Mbit/s; and
- 1Mbit/s through to 2Mbit/s; and

(high bandwidth TISBO)

- above 8Mbit/s through to 45Mbit/s; and
- 155Mbit/s.
- 6.324 As a consequence of this, the requirements previously set out in paragraph 18 of the proposed Direction have been modified see Annex E for details.

Conclusion on PPC Direction

6.325 Having considered the consultation responses the Director proposes to impose the Direction under condition G1 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on, other than the changes outlined above.

Communications Act tests

- 6.326 The Director considers that the proposed Direction meets the tests set out in the Act.
- 6.327 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks,

electronic communications services and associated facilities. Ensuring that wholesale services are provided on reasonable terms will promote competition in downstream markets. The forecasting and forecasting penalty requirements will protect communications providers against excessive penalties and allow BT a sufficient level of certainty to ensure that it is able to continue to provide network access in an efficient manner. A service level agreement will promote the interests of business consumers by ensuring that products are supplied on reasonable, transparent and consistent terms and conditions.

6.328 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. It is proportionate, since its requirements are technically feasible. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed Direction meets the requirement of transparency set out in the Act.

Wholesale traditional interface symmetric broadband origination proposed regulation 12:

Direction under cost orientation condition covering certain pricing matters relating to PPCs and LLU backhaul

6.329 The Phase 1 PPC Direction implemented specific obligations which have led to changes in BT's contract for PPCs. BT is now providing PPCs at various bandwidths on specified terms and conditions in accordance with the PPC Directions. The conditions set out by the Director in these two Directions have been transposed into the contract between BT and other communications providers.

6.330 This proposed Direction would be made under the cost orientation condition for the wholesale TISBO market, if imposed. The Direction would require BT to provide certain PPC and LLU backhaul products and services according to certain pricing conditions. It would carry forward existing PPC requirements brought into force by the PPC Directions, as set out within subsections below. The imposition of price controls for PPCs is considered separately above.

6.331 BT has been found to have SMP in this market. The requirement to supply PPCs on specific terms will encourage competition in retail markets by enabling other communications providers to supply end-to-end leased line products and value added business products in competition with BT. Carrying forward this recently introduced regulation will add to the certainty in this market provided by

continuity of the market conditions under which BT and other communications providers operate. This will help to encourage appropriate investment decisions which will maximise the level of competition in this and related retail markets. The Director recently considered the justification for requiring BT to supply a number of specific services and found them to be fully justified. There has been no subsequent material change in market conditions.

- 6.332 Implementation of this PPC regulation is in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".
- 12A: Charges for capacity on third party customer infrastructure
- 6.333 The Director is proposing maximum charges for connection of subsequent PPCs where a third party already has a PPC connected to third party customer infrastructure which was in situ before 1 August 2001.
- 12B: Charge for change of speed or interface
- 6.334 The Director is proposing a maximum charge for changes of speed or interface at a wholesale level.
- 12C: Charges for reclassification of BT Retail Private Circuits
- 6.335 The Director is proposing a maximum reclassification charge in connection with migrated circuits.
- 12D: Charges for failed migration orders
- 6.336 The Director is proposing a maximum charge for failed migration orders.
- 12E: Infrastructure tariff conversion charges
- 6.337 The Director is proposing conditions and maximum charges relating to infrastructure tariff conversion.
- 12F: Equipment re-use
- 6.338 The Director is proposing to require BT to make equipment re-use at the third party customer end available to communications providers at cost oriented prices, so that they can re-use either their own or other providers' equipment, at the same or a different site, either immediately or after a reasonable period. This

will avoid unnecessary duplication of resources and reduce potential barriers to entry.

12G: Cost orientation of LLU backhaul prices

6.339 The Director is proposing that charges for LLU backhaul services should be consistent with the charges applicable to those elements which are common to LLU backhaul and PPCs.

Responses to previous consultation – Direction on cost orientation issues

6.340 Communications providers suggest that the Director should give consideration to the extension of equipment re-use to include re-use at the POC end.

6.341 The Director set out in the PPC Phase 2 Direction that in his view, it would not be proportionate to require BT to permit re-use of equipment at the POC end for four main reasons, namely:

- that re-use of POC equipment was likely only in the comparatively rare event of closure of a POC site;
- that end customer churn results in B end shifts or installation of new PPCs, thereby requiring only third party end re-use at most;
- that only one communications provider had requested re-use at the POC end; and
- that re-use of third party equipment would be much easier to implement as it happens more often, it does not often require physical shifting of equipment, and equipment requirements are more consistent.

6.342 The Director considers that the majority of these reasons still apply. He notes that a number of communications providers are now requesting POC equipment re-use to assist them with the reorganisation of their networks following the Tier 1 breakpoint decision, but does not consider that this is an indication of longer term demand for POC end re-use that is a necessary pre-requisite for development of this potentially comparatively expensive facility. The Director considers that appropriate investment decisions are more likely to be created by maintenance of the existing situation. Notwithstanding this, if communications providers provide BT with a persuasive and reasonable case for POC end re-use at some point in the future, the Director would expect BT to give the issue proper consideration in accordance with Oftel's Access Guidelines at that time.

6.343 BT suggests in relation to paragraph 6 that the migration date should not be extended to 24 July 2003 but should remain at 23 December 2002. The Director considers that this paragraph should be maintained on an open-ended basis in order to deal effectively with new wholesale products introduced by BT at some point in the future – third parties should, in the Director's opinion, be able to

migrate to such products within a reasonable period without incurring any penalty.

Conclusion on Direction under cost orientation condition

6.344 Having considered the consultation responses the Director proposes to impose the Direction under condition G3 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

6.345 The Director considers that the proposed Direction meets the tests set out in the Act.

6.346 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. Ensuring that wholesale services are provided on reasonable terms will promote competition in downstream markets. Equipment re-use will maximise efficiency and sustainable competition in this market.

6.347 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. It is proportionate, since its requirements are technically feasible. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed Direction meets the requirement of transparency set out in the Act.

Wholesale traditional interface symmetric broadband origination proposed regulation 13:

Direction under quality of service condition requiring BT to provide specific information in respect of PPCs

6.348 BT is obliged by the PPC Phase 2 Direction to provide various information in respect of PPC quality of service. This proposed Direction would be made under the proposed Quality of Service condition for the wholesale TISBO market discussed above and would carry forward the bulk of this regulation.

- 6.349 BT has been found to have SMP in this market. The requirement to publish specific information relating to the supply and repair of PPCs will encourage competition in retail markets for end-to-end leased line products by giving communications providers confidence in the quality of the wholesale input products supplied to them by BT. Putting this *ex ante* obligation in place will help to avoid the possibility of being required to resolve multiple and successive complaints, creating a large workload for the Director which would partially duplicate work already undertaken for the Phase 1 and 2 PPC Directions.
- 6.350 Carrying forward this recently introduced regulation will add to the certainty in this market provided by continuity of the market conditions under which BT and other communications providers currently operate. This will help to encourage appropriate investment decisions which will maximise the level of competition in this and related retail markets.
- 6.351 As explained above, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed above) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this Direction also to the technical areas outlined above.
- 6.352 Implementation of this PPC regulation is also in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".
- 6.353 BT would be obliged to publish on its website in an easily accessible form quarterly statistics on its performance with respect to Committed Delivery Dates, Requisite Periods, Reduced Requisite Periods, Firm Order Confirmation ("FOC") Receipt Intervals, repair, availability of service and reasons for "stopping the clock". These statistics shall include BT's performance with respect to its retail arm, and with respect to each customer. The information with respect to different communications providers shall be presented in such a way that the identity of a communications provider cannot easily be worked out from that information.
- 6.354 BT would also be obliged to publish quarterly statistics on its performance with respect to the list of information below, by reference to:
- all communications providers (aggregated); and
- each communications provider (separately). The information with respect to other communications providers shall be presented in such a way that the identity of a communications provider cannot easily be worked out from that information.

6.355 Order expedite related

 Percentage of a communications provider's previous month's orders having Committed Delivery Dates quoted within 50% of Requisite Periods, for applicable circuits only

6.356 Ordering and provisioning times

- number and percentage of instances where communications provider exceeds FOC Acceptance Interval for circuits, split by bandwidth;
- number and percentage of instances where communications provider exceeds FOC Acceptance Interval for network infrastructure;
- average amount by which communications provider exceeds FOC Acceptance Interval for circuits, split by bandwidth;
- average amount by which communications provider exceeds FOC Acceptance Interval for network infrastructure;
- number and percentage of order rejections for circuits;
- number and percentage of order rejections for network infrastructure;
- list of reasons for order rejection; and
- list of reasons for any Committed Delivery Dates being over 10 working days later than the relevant requisite periods.

6.357 Fault management

- mean response time for circuits and network infrastructure;
- new installation fault report rate for circuits; and
- list of reasons for faults.

Responses to previous consultation – Direction on service quality issues

6.358 BT notes that three reports previously identified as being required 'on request' have now been included as part of the regular reporting package. It suggests that the 'significant costs' involved in preparing them may not be justified by clear benefits. The Director does not consider that BT will incur significant additional cost in producing these reports on a regular basis compared with the cost involved in having the mechanisms in place to produce the reports upon request from the Director. The Director considers that the reports would be better published on a regular basis, than held in reserve. BT will presumably have noted that the Director, partly in the interests of balance, has removed altogether the previous requirement for having certain other reports available for production on request.

6.359 BT also notes that there may be confidentiality issues for communications providers, raised by the requirement to publish anonymised reports on its website. The Director notes BT's concerns and suggests that if communications providers also have concerns about this measure they should respond to this consultation accordingly.

Conclusion on Direction under quality of service condition

6.360 Having considered the consultation responses the Director proposes to impose the Direction under condition G7 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

6.361 The Director considers that the proposed Direction meets the tests set out in the Act.

6.362 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction will promote competition in relation to the provision of electronic communications networks and electronic communications services, and it will encourage the provision of service interoperability for the purpose of securing efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. It promotes competition and thereby the interests of end users in downstream markets, by making it easier to monitor any attempt by BT to discriminate in the quality of service it provides to customers.

6.363 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. It is proportionate, since it is feasible for BT to provide the information. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed Direction meets the requirement of transparency set out in the Act.

Wholesale traditional interface symmetric broadband origination proposed regulation 14:

Direction under general access condition requiring BT to provide RBS backhaul circuits

6.364 This would involve requiring BT to provide particular types of TISBO services, known as RBS backhaul circuits, upon request. Such links are used by mobile phone companies to connect their radio base stations to their networks. A RBS backhaul circuit provides transparent transmission capacity at a range of bandwidths, typically N*64kbit/s and 2Mbit/s between a mobile communications provider's premises and a point of connection with a communications provider's

applicable system connected to an appropriate BT Synchronous Digital Hierarchy node.

6.365 The Director considers that the provision of RBS backhaul circuits is crucial to the operation of mobile communications providers' networks. Provision of these circuits at wholesale prices could therefore promote greater network efficiency, and thus facilitate innovation and investment for the provision of mobile telephony. The Director also believes the reduction in mobile communications providers' costs in this area could bring resultant benefits to end users. The Director's proposed condition could provide multiple, additional benefits for end users in terms of price, products and service.

6.366 It might be argued that a general obligation on BT to supply TISBO services (see above) would give the Director the scope to require BT to provide these products if necessary. However, the Director believes it is essential to require BT specifically to provide these products for the following reasons:

- it will provide continuity by carrying forward recently introduced regulation;
- it will provide greater certainty and encourage appropriate investment decisions, since BT will be required to continue to provide these particular products as set out in the Direction; and
- it will help to avoid the possibility of multiple and successive complaints, thereby reducing the regulatory burden.

6.367 The Director therefore considers that it is necessary to put in place an obligation to supply RBS backhaul link products, in addition to the general access obligation (see above). The Director is therefore consulting on a Direction under the access obligation proposed for the wholesale TISBO market, requiring the supply of RBS backhaul link products, on the assumption that he confirms his proposals and sets such an obligation. It should be noted that these proposed requirements have been merged into a single draft Direction under the access obligation, along with requirements for BT to provide PPCs and LLU backhaul over TISBO.

6.368 Implementation of this regulation is also in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".

Responses to previous consultation – Direction on RBS backhaul circuits

6.369 BT suggests that the Director has not identified a relevant retail market or shown that the relevant retail market (BT cites mobile calls and/or access) is not effectively competitive and that the proposed measure is proportionate and

necessary to stimulate competition in the relevant market to the benefit of end users. BT notes the Director's proposed conclusion in the review of the mobile markets, that there is no SMP in the wholesale access and call origination markets. BT suggests that the Director has carried out insufficient analysis, and that the Director should not carry over a Direction that has not yet been finalised.

6.370 The Director notes that BT's argument does not address his framework of analysis. RBS backhaul circuits are within the wholesale market for TISBO, in which BT has been found to have SMP. Accordingly, they will be covered by the general access obligation and BT will be obliged to supply if the request is a reasonable one. The Director points out that, since the submission of BT's comments and prior to 25 July 2003, the Direction requiring supply of RBS backhaul circuits was finalised. The Director confirms that in his opinion, sufficient analysis has been carried out in relation to this proposed measure and that the request is indeed reasonable. The basis for intervention is concern about excessive charges and the potential for adverse effects on consumers, not a distortion of competition in mobile access/calls.

6.371 Finally, in splitting the conditions and Directions for TISBO into low and high bandwidth, the Director has inserted this Direction only into the low bandwidth TISBO market since no case has to date been made for a requirement for RBS backhaul circuits at high bandwidths. Notwithstanding this, the Director notes that the general access condition will enable operators to make reasonable requests to BT for such products, should the need arise at some point in the future.

Conclusion on Direction requiring provision of RBS backhaul circuits

6.372 Having considered the consultation responses the Director proposes to impose the Direction under condition G1 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

6.373 The Director considers that the proposed Direction meets the tests set out in the Act.

6.374 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction, by requiring BT to supply these products, encourages the provision of network access and service interoperability by allowing communications providers access to products that allow them to compete with BT at the retail level for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. In addition, as BT is a dominant communications provider in this market, requiring it to make this

product available will ensure that competition in downstream markets is promoted, which will in turn promote the interests of competitors and end users.

6.375 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. It is proportionate, since its requirements are technically feasible. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed obligation meets the requirement of transparency set out in the Act.

Wholesale traditional interface symmetric broadband origination proposed regulation 15:

Direction under general access condition requiring BT to supply LLU backhaul

- 6.376 Under the LLU backhaul Direction (*Final direction on LLU backhaul services*, 8 August 2002), BT is currently obliged to provide backhaul on reasonable terms (including service level agreements and compensation), at cost oriented prices and at prices consistent with PPCs.
- 6.377 As discussed in the backhaul Direction, backhaul is a similar product to PPCs and therefore consistency of approach is needed. The Director's market definitions have reflected the close links between backhaul and PPC products. Leased line backhaul links and PPC TISBO are also defined as being in the same market.
- 6.378 In order to carry over the full detail of the LLU backhaul Direction the Director will need to impose an obligation to provide SLAs and compensation arrangements.
- 6.379 BT has been identified as having SMP in this market. In the absence of an obligation to supply backhaul BT would not have any incentive to do so. This would reduce potential for competition by LLU communications providers.
- 6.380 Carrying forward this recently introduced piece of regulation will add to the certainty in this market provided by continuity of the market conditions under which BT and other communications providers currently operate. This will help to encourage appropriate investment decisions which will maximise the level of competition in this and related retail markets.

6.381 It might be argued that BT would be required to provide LLU backhaul under the terms of a general obligation to provide access (see above) so a specific obligation is not necessary. However, the Director believes it is essential to require BT specifically to provide these products for the following reasons:

- it will provide continuity by carrying forward recently introduced regulation;
- it will provide greater certainty and encourage appropriate investment decisions, since BT will be required to continue to provide these particular products as set out in the Direction; and
- it will help to avoid the possibility of multiple and successive complaints, thereby reducing the regulatory burden.

6.382 The Director therefore considers that it is necessary to put in place an obligation to supply LLU backhaul, in addition to the general access obligation (see above). The Director is therefore consulting on a Direction under the access obligation proposed for the wholesale TISBO market, requiring the supply of LLU backhaul, on the assumption that he confirms his proposals and sets such obligations. It should be noted that these proposed requirements have been merged into a single draft Direction under the access obligation, along with requirements for BT to provide PPCs and RBS backhaul.

6.383 Implementation of this regulation is also in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".

Communications Act tests

6.384 The Director considers that the proposed Direction (Direction under condition G1, set out in Annex E) meets the tests set out in the Act.

6.385 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction, by requiring BT to supply these products, encourages the provision of network access and service interoperability by allowing communications providers access to products that allow them to compete with BT at the retail level for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. In addition, as BT is a dominant communications provider in this market, requiring it to make this product available will ensure that competition in downstream markets is promoted, which will in turn promote the interests of competitors and end users.

6.386 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the

need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed obligation meets the requirement of transparency set out in the Act.

Wholesale traditional interface symmetric broadband origination markets: conclusion on proposed regulation

6.387 The Director has concluded that BT has SMP in the low and high bandwidth TISBO markets, and that as a consequence the following regulatory measures should be imposed in these markets:

6.388 Conditions

- 1. a general obligation to provide access on reasonable request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation and a cost accounting system);
- 4. price control;
- 5. accounting separation obligation;
- 6. requirement to publish a reference offer;
- 7. an obligation to give 90 days' notice of changes to prices, terms and conditions for existing products;
- 8. an obligation to give 28 days' notice of the introduction of prices, terms and conditions for new products;
- 9. requirement to provide quality of service information;
- 10. requirement to publish technical information with 90 days' notice; and
- 11. obligations relating to requests for new network access.

Draft conditions of entitlement reflecting these preferred options are primarily set out in Annex D. Draft cost accounting and accounting separation conditions will be set out in a separate consultation document on accounting issues, to be published in due course.

6.389 Directions

- a Direction under the general access condition to provide PPCs at a range of bandwidths, RBS backhaul link products, and LLU backhaul products, subject to specific terms and conditions;
- a Direction under the cost orientation condition covering pricing matters relating to PPCs and LLU backhaul; and
- a Direction under the quality of service condition to require specific information in respect of PPCs.

Draft Directions reflecting these preferred options are set out in Annex E.

6.390 The Director considers that the above measures are, both individually and taken as a whole, sufficient and proportionate given that there is minimal competition to BT in this market. The proposed obligations for these markets are broadly similar to those currently applying, other than additional obligations relating to requests for new network access. As wholesale low and high bandwidth TISBO are an input for products in downstream retail markets, the Director needs to ensure that wholesale low and high bandwidth TISBO are available to communications providers to enable them to compete at a retail level.

Chapter 7

Regulatory remedies – proposed SMP services conditions and Directions for BT's wholesale alternative interface symmetric broadband origination market

Introduction

- 7.1 This chapter sets out the proposed remedies for the wholesale alternative interface symmetric broadband origination ("AISBO") market in the UK excluding Hull. The chapter begins with more general comments on the structure of the analysis and the aims of regulation, then moves on to set out the effect of, and the Director's reasons for making, proposals to set SMP services conditions in this market. It also explains how certain tests in the Act are satisfied.
- 7.2 The proposed conditions in respect of BT are attached to the Notification in Annex D of this document, while the proposed Direction is set out in Annex E.

Structure of the analysis

- 7.3 The Access Directive deals with wholesale relationships between providers of networks and services. It sets out the responsibilities of NRAs and the remedies that they can impose relating to access and interconnection. Certain specific remedies can only be imposed after a finding of SMP in a relevant market.
- 7.4 Section 87(1) of the Act provides that where Ofcom has made a determination that a person is dominant in the market reviewed, they shall set such SMP conditions as they consider are appropriate and as are authorised in the Act. This implements Article 8 of the Access Directive. At paragraphs 21 and 114 of the Commission's SMP Guidelines state that this means that the Director must impose one or more SMP conditions on a dominant provider. Furthermore, the European Commission states that the imposition of no SMP conditions on a dominant provider would be inconsistent with the new regime. Thus, Ofcom (or Oftel in the interim period) is under a mandatory obligation to impose at least one appropriate SMP condition on a dominant provider.
- 7.5 The SMP conditions which may be set can be summarised as follows:
- (a) the provision of network access (Article 12 of the Access Directive, sections 87(3) and 87(5) of the Act);
- (b) no undue discrimination (Article 10 of the Access Directive, section 87(6)(a) of the Act);
- (c) transparency (Article 9 of the Access Directive sections 87(6)(b) and (c) of the Act);

- (d) accounting separation (Article 11 of the Access Directive, section 87(7) of the Act);
- (e) pricing, including, in particular, price controls (Article 13 of the Access Directive, section 87(9) of the Act);
- (f) regulatory controls on retail markets (Article 17 of the Universal Service Directive, section 91 of the Act);
- (g) regulatory controls with respect to leased lines (Article 18 of the Universal Service Directive, section 92 of the Act); and
- (h) conditions with respect to carrier selection and pre-selection (Article 19 of the Universal Service Directive, section 90 of the Act).
- 7.6 The conditions listed at (a) to (e) and (g) above are relevant to this review of a wholesale market. The Director is required to assess which of these obligations are appropriate.
- 7.7 Oftel has set out its intention to consider the appropriateness of SMP conditions in its regulatory option appraisal guidelines. However, the Director also notes Recital 27 of the Framework Directive which provides that *ex ante* regulation should only be imposed where there is not effective competition and where competition law remedies are not sufficient to address the problem. In this light, the Director considered this as part of his original assessment as to the appropriateness of SMP conditions, ie a situation whereby no regulation was imposed and whether it would be sufficient to rely on competition law alone.

Aims of regulation

- 7.8 In Chapter 3 and Annex B of this document, the Director explains how he has reached the conclusion that BT currently continues to hold a position of SMP in some of the UK (excluding Kingston upon Hull) markets relating to leased lines covered by this review.
- 7.9 Article 16 of the Framework Directive provides that "where an NRA determines that the relevant market is not effectively competitive, it shall identify undertakings with SMP on that market...and...shall on such undertakings impose appropriate specific regulatory obligations...".
- 7.10 Regulation at the wholesale level is designed to address the problems which result from the existence of SMP in the relevant wholesale market. In particular it is designed to ensure that the SMP at the wholesale level does not restrict or distort competition in the relevant downstream markets or operate against the interests of consumers, for example through excessively high prices. Accordingly, the Director believes the wholesale regulation proposed in this chapter reflects his duties in section 4 of the Act. All of the conditions proposed by the Director will promote competition in the provision of retail leased lines and, as part of the implementation of the EC Directives referred to above, will assist with the development of the European internal market. In addition, each

individual proposed condition fulfils one or more of the other duties set out in section 4, as well as the tests set out in section 47 of the Act, as described in the discussion of the conditions below.

- 7.11 The application of regulation at the wholesale level also fits with the requirements of the Framework Directive, that NRAs take measures which are proportionate to the objective of encouraging efficient investment in infrastructure and promoting innovation. The introduction of regulation in wholesale markets will encourage communications providers to purchase wholesale products and combine them with their own networks where possible to create retail products in competition with BT's retail leased lines products and other services. This is preferable to retail regulation alone, which would by contrast tend to favour the purchase of BT's retail products and thereby lessen other communications providers' investment in infrastructure and, through less competition, innovation.
- 7.12 It will also help to ensure that another objective of the Framework Directive is met, namely that NRAs take measures which are proportionate to the objective of ensuring users "derive maximum benefit in terms of choice, price and quality". Regulation at the wholesale level will, as noted above, help to increase the number of retail products available, and by increasing competition will help to ensure that price and quality are optimised.
- 7.13 In assessing the level of regulation to be applied in this market, the Director has also taken into account the Commission's SMP Guidelines which state at paragraph 15 that regulation should aim to promote an open and competitive market, and at paragraph 16 that *ex ante* regulations should be imposed to ensure that an SMP communications provider cannot use its market power to restrict or distort competition on the relevant market or leverage market power on to adjacent markets.
- 7.14 The Director has also taken full account of Oftel's guidelines on the imposition of access obligations under the new EU Directives (*Imposing access obligations under the new EU Directives*,

www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm, referred to in this document as 'Oftel's access guidelines'). These describe the circumstances in which Oftel would consider the imposition of wholesale access obligations to be appropriate, give guidance on the nature of the wholesale products the Director would expect to be supplied as a result of an obligation to provide access, and describe the conditions under which products should be made available.

Regulatory option appraisal for alternative interface symmetric broadband origination

Existing obligations for alternative interface symmetric broadband origination

7.15 There are no existing obligations applying in relation to the wholesale alternative interface symmetric broadband origination ("AISBO") market. The Director considers that going forward, it is necessary for regulation to be imposed in order to enable communications providers to compete effectively with BT, since the Director considers that BT has SMP in this market.

Remedies considered

- 7.16 In his assessment of the wholesale AISBO market set out in Chapter 3 and Annex B, the Director has concluded that the market is not effectively competitive and proposed that BT should be designated with SMP.
- 7.17 In the light of the above consideration, the Director is proposing the following future regulation for this market:
- 1. a general obligation to provide access on reasonable request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation and a cost accounting system);
- 4. accounting separation obligations;
- 5. requirement to publish a reference offer;
- 6. an obligation to give 90 days' notice of changes to prices, terms and conditions for existing products:
- 7. an obligation to give 28 days' notice of the introduction of prices, terms and conditions for new products;
- 8. requirement to provide quality of service information;
- 9. requirement to publish technical information with 90 days' notice; and
- 10. obligations relating to requests for new network access.
- 7.18 In addition to the above conditions, the Director is proposing the following Directions under appropriate conditions:
- 11. Direction under the general access condition to provide LES-based LLU backhaul products, subject to specific terms and conditions;
- 12. Direction under the cost orientation condition covering pricing matters relating to LES-based LLU backhaul.

Wholesale alternative interface symmetric broadband origination proposed regulation 1:

Requirement to provide network access on reasonable request

- 7.19 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant provider to provide network access as the Director 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 for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, the Director 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.
- 7.20 Under a general access obligation, BT would be obliged to supply, on fair and reasonable terms, any products falling within the market for the provision of AISBO, upon reasonable request.
- 7.21 BT has been found to have SMP in this market. This regulation would allow communications providers to make reasonable requests to negotiate innovative products which will enable them to compete in the retail markets, encouraging competition at the retail level. If the obligation were not imposed, BT would be able to deny access or impose unreasonable terms having a similar effect, thereby hindering the emergence of a competitive retail market for leased lines and other services which rely on these inputs. The Access Directive states in Article 12 that an NRA may impose access obligations where the denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end users' interest.
- 7.22 While formulation of specific obligations may from time to time be appropriate, either for the avoidance of doubt or in resolving a dispute, the Director proposes to rely as far as possible on the general obligation. This removes the need for the Director to specify the details of products to be supplied (which he is often not best placed to do), and provides a regime which is responsive to future market and technical developments. While the scope is broad, it is appropriately limited by the ability of BT to refuse any request which is unreasonable. (The Director's views on reasonableness in this context are set out in his Access Guidelines.)
- 7.23 Reliance on the Competition Act for communications providers' general access requirements will, in the Director's view, be insufficient because of the network-based nature of the industry, and would be inconsistent with the

Director's objective of promoting competition. The Director therefore considers that it is necessary to introduce a general access obligation.

- 7.24 The words "fair and reasonable terms" would be interpreted by the Director as meaning, amongst other things, terms which did not lead to any sort of margin squeeze between wholesale and retail markets, since a margin squeeze is in effect a constructive refusal to supply, ie a refusal to supply on commercially viable terms. Thus there will be no need to introduce a specific condition to deal with such an eventuality. The condition will also through these words, incorporate a requirement to provide service level agreements and compensation for performance below standard.
- 7.25 The scope of the proposed general access obligation is defined by reference to the scope of the wholesale markets. The Director recognises that services within this market can potentially be used to provide a wide range of final services, ie the end use of the wholesale services could differ significantly. However, the Director does not consider it to be a practical regulatory approach to tie BT's obligation to particular end uses. In the Director's experience, such an approach leads to boundary disputes and arbitrage opportunities which have the effect of restricting consumer choice and/or distorting competition. Nor is there generally any public policy argument in favour of allowing a dominant provider to exploit its dominance in relation to one group of customers when it is prohibited from doing so in relation to others.
- 7.26 Therefore, in assessing whether a request is reasonable, depending on the facts of the case, the Director may consider that it might not be reasonable of BT to refuse to supply a certain class of product solely on the grounds that their use of the access product differed from that for which the product was originally developed.
- 7.27 Recital 6 of the Access Directive states that in markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to secure...adequate access and interconnection and interoperability of services in the interests of end users. The Director considers the markets for AISBO to be of this type, and in accordance with the Access Directive considers it necessary to ensure connectivity by imposing proportionate obligations on undertakings that control access to end users.
- 7.28 Implementation of this obligation also fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. Communications providers will be able to use BT's wholesale AISBO products to provide services of their choice. Thus this measure is not linked to the activities of the party seeking access of the degree of its investment in network infrastructure, and it consequently accords also with Recital 7 of the Access Directive.

Responses to previous consultation – obligation to provide network access

- 7.29 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.30 In its response, BT questions the Director's proposal to require it to provide access to "Third Parties" who reasonably request such access, and suggests amending the wording of the definition of "Third Party" so that access is restricted only to public electronic communications network communications providers and the like. The Director's views on this are set out below.
- 7.31 Cable & Wireless suggests that the Director should expressly state that "fair and reasonable terms" includes a requirement to offer a minimum quality of service guaranteed by an SLA.
- 7.32 The Director does not consider that it is necessary to add this provision. The requirement to offer on fair and reasonable terms means that terms which would normally be offered in a competitive market should be offered. In the Director's view, this includes SLAs. Should BT bring forward an argument that a reasonable SLA is not required in the circumstances under consideration, the Director will consider the case on its merits.

Conclusion on obligation to provide network access

7.33 Having considered all the responses, the Director is of the view that it is appropriate to amend slightly both the Network Access condition and the definition of "Third Party" proposed for the symmetric broadband origination market in the April consultation document, to clarify the nature and extent of this obligation. Accordingly, the condition has been amended to read:

"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 the Director may from time to time direct".

7.34 The amendment is intended to make it clearer that the Dominant Provider must comply with the condition by providing Network Access that is the same as that which has been (reasonably) requested by the Third Party. The condition continues to include the power to make a direction about the provision of Network Access and the terms and conditions on which it is provided.

- 7.35 The Director does not propose to replicate the Annex II list to define entitlement to Network Access. This is because Annex II status flows from the Interconnection Directive 97/33/EC. The provisions of that Directive including the concept of Annex II status will fall. The concept of Annex II status will continue to exist for the purposes of any licence conditions continued for an interim period until the market reviews are completed and these new obligations are imposed. However, once these new obligations are imposed, Annex II status will not be relevant.
- 7.36 For the purposes of the Network Access condition, the definition of Third Party has been amended to the provider of a **public** electronic communications network or **public** electronic communications service (i.e. electronic communications networks which are provided wholly or mainly for the purpose of making electronic communications services available to members of the public; and electronic communications services that are provided so as to be available for use by members of the public). Accordingly, providers of non-public electronic communications networks or non-public electronic communications services will not be entitled to Network Access under the proposed condition. This maintains the status quo existing prior to these consultations.
- 7.37 Further guidance as to how the Director proposes to apply the Network Access obligation can be found in the Director's guidelines on imposing access obligations under the new EU Directives, dated 13 September 2002 (the "Access Guidelines") and the Directors guidelines for the interconnection of public electronic communications networks, dated 23 May 2003 (the "Interconnection Guidelines"). These guidelines can be found at www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm and www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm respectively.
- 7.38 Having considered the consultation responses the Director's current view is that a network access condition should be imposed in these markets in the form set out at Annex D.

Communications Act tests

- 7.39 The Director considers that the proposed condition (Condition HH1 in Annex D) meets the tests set out in the Act.
- 7.40 In the Director's view, this condition meets the tests set out in Section 47 of the Act. The proposed condition is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. It is proportionate, since it is targeted at addressing the market power that BT holds in these markets and does not require it to provide access if it is not technically feasible or reasonable. Finally, it

is transparent in that it is clear in its intention to ensure that BT provides access to its network in order to facilitate competition.

- 7.41 The Director has considered all the Community requirements set out in section 4 of the Act. In particular, because it requires BT to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of ensuring efficiency and promoting competition in the downstream markets. As BT has market power in the provision of wholesale AISBO, it controls a key input into a range of downstream services including virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 7.42 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director recognises that in many circumstances it will not be feasible for other communications providers to build out their networks to achieve a degree of coverage comparable to BT. Since this would restrict the potential development of alternative facilities in the current market, the Director considers that this condition is fair and reasonable. The Director is satisfied that this condition is feasible and technically and economically viable. In respect of existing products supplied by BT such as PPCs, it is clearly feasible and viable for it to continue to provide. In relation to new products, as BT will only be required to provide these on reasonable request and in line with the Access Guidelines, the condition will not require BT to do anything which is not feasible or viable.
- 7.43 The Director also believes that this condition is fair and reasonable taking into account the investment made by BT in its network, and bearing in mind that BT will only be required to supply upon a reasonable request that enables it to recover its costs, in line with Oftel's Access Guidelines referred to above. The Director believes that by enabling other communications providers to make effective use of wholesale inputs and to make optimal use of their own networks, this condition addresses the need to secure effective competition in the long term and the goal of ensuring that services based on leased line components are provided throughout the UK (excluding Kingston upon Hull).

Wholesale alternative interface symmetric broadband origination proposed regulation 2:

Requirement not to unduly discriminate

7.44 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access. The requirement not to unduly discriminate is intended, principally, to prevent dominant providers from

discriminating in favour of their own retail activities and to ensure that competing providers purchasing wholesale products from the dominant provider are placed in an equivalent position to the dominant provider's retail arm.

- 7.45 Where dominant providers are vertically integrated, like BT, they may have an incentive to provide wholesale services on terms and conditions that favour their own retail activities, in a way that would have a material adverse effect on competition. In particular, they may charge competing providers more than the amount charged (through transfer charging) to their own retail activities for wholesale services, thereby increasing the costs of competing providers and giving themselves an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery timescales, which would disadvantage their retail competitors and in turn consumers.
- 7.46 In the absence of a non discrimination condition, the Director could be called upon to investigate alleged breaches of the Competition Act prohibition on anti-competitive agreements and abuse of a dominant position, and might be required to resolve successive complaints. Imposing an *ex ante* condition in this instance will reduce the potential regulatory costs emanating from multiple or successive complaints related to discrimination.
- 7.47 It might be argued that the Competition Act provides adequate provision to address allegations or evidence of discriminatory behaviour. However, the Director considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations. In addition, it allows the Director to place a greater emphasis on promoting competition (for example by restricting the ability of an SMP communications provider to foreclose segments of the retail market).
- 7.48 It might also be argued that a requirement not to unduly discriminate prevents BT from fully exploiting its economies of scale. If BT were able to discriminate, it would be able, when needed, to quote a lower price in order to attract sufficient numbers of customers to ensure that its infrastructure is utilised at full capacity. Although this is a valid consideration, the Director considers that it is far outweighed by the fact that in view of BT's position of SMP, it would also be able to use discrimination for other purposes less constructive than maximisation of capacity utilisation (such as predatory pricing), and that this would have a harmful effect on competition.
- 7.49 The Director therefore considers that it is necessary to apply a non discrimination obligation in this market. This accords with Recital 17 of the Access Directive, which states that non discrimination obligations ensure that undertakings with market power do not distort competition, in particular where they are vertically integrated undertakings that supply services to undertakings

with whom they compete on downstream markets. This is clearly the case with respect to the wholesale and retail leased lines markets.

7.50 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no *undue* discrimination. Oftel has considered how it might treat undue discrimination in its Access Guidelines. The Guidelines note that any obligation with respect to undue discrimination has the objective of preventing behaviour that has a material adverse effect on competition. This does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Guidelines also note that in the Director's view, there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own retail activities or between others of its own activities would have a material adverse effect on competition (paragraph 3.9). This view would also apply to discrimination in relation to the underlying components of services.

Responses to previous consultation – no undue discrimination

- 7.51 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.52 In their responses, a number of communications providers suggested that the Director should remove the word "undue" from this condition. Those communications providers took some comfort, however, that Oftel had stated in its Access Guidelines and elsewhere that there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own downstream business would have a material adverse effect on competition, and that such discrimination would be deemed undue unless the SMP communications provider proved the case otherwise. Non dominant communications providers asked the Director to include this interpretation in the condition which prohibits undue discrimination.
- 7.53 While the Director understands the concerns of BT's competitors, and recognises that effective control of anti competitive discrimination is an essential part of the ex ante regulatory framework, the Director does not believe it is appropriate or necessary to amend the condition to make reference to this interpretation. The Act, in transposing the requirements of Article 10 of the Access Directive, provides for the Director to impose conditions which, amongst others, prevent the dominant provider from discriminating "unduly". Oftel's Access Guidelines make plain the Director's interpretation of this concept, and

this view is supported by the Access directive which states that obligations of non discrimination "shall ensure that ... the communications provider applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners".

Conclusion on no undue discrimination

7.54 Having considered the consultation responses the Director proposes to impose condition HH2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on for the symmetric broadband origination market.

Communications Act tests

- 7.55 The Director considers that the proposed condition meets the tests set out in the Act.
- 7.56 The Director has considered all the Community requirements set out in section 4. In particular, because it requires BT to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the downstream markets. As BT has market power in the provision of wholesale AISBO, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 7.57 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that this proposed condition is objectively justifiable, in that it provides safeguards to ensure that competitors, and hence consumers, are not disadvantaged by BT discriminating in favour of its own retail activities or between its own different activities. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. It is proportionate since it only prevents discriminatory behaviour that has a material adverse effect on competition. Finally, it is transparent in that it is clear in its intention to ensure that BT does not unduly discriminate. In addition, Oftel has given guidance as to how it might treat undue discrimination in its Access Guidelines.
- 7.58 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of

effective competition, as it will ensure that other communications providers are able to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby addressing the goal of ensuring that services based on leased line components are provided throughout the UK (excluding Kingston upon Hull).

Wholesale alternative interface symmetric broadband origination proposed regulation 3:

Basis of charges obligations (cost orientation and a cost accounting system)

- 7.59 Section 87(9) authorises the setting of SMP services conditions imposing on the dominant provider rules concerning the recovery of costs and cost orientation. BT is currently required to provide certain wholesale interconnection services, including PPCs, at cost oriented prices. Under the proposed cost orientation obligation, BT would be required to provide wholesale AISBO services at cost oriented prices, calculated on the basis of Long Run Incremental Cost (LRIC) and allowing an appropriate mark-up for the recovery of common costs. In other words, this obligation would add a requirement for cost orientation to BT's requirement to provide access.
- 7.60 The proposed cost accounting obligation is discussed in Chapter 10, along with justification for the obligation against the various regulatory tests.
- 7.61 As BT has been identified as having SMP in this market, the availability of wholesale AISBO services at cost oriented prices would help to ensure that the resulting competition in the retail leased lines markets and other downstream markets should lead to lower prices.
- 7.62 It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, the Director considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers.
- 7.63 The Director therefore considers that it is necessary to apply a cost orientation obligation. The proposed condition sets out that the charges for services should be reasonably derived from the costs of providing those services. It further states that the costs must be calculated on a forward looking incremental cost approach, and allowing an appropriate mark-up for the recovery of common costs including an appropriate return on capital employed.

- 7.64 The condition will apply across all services within this market. This means that the price of all services provided by BT in the market should be based on LRIC and allowing an appropriate mark-up for the recovery of common costs.
- 7.65 The Director confirms that all new services that are introduced into this market will also be covered by the same pricing rule. This is because new services in the same market would be expected to be subject to the same competitive conditions as existing services. This does not however mean that BT cannot recover costs appropriate to new wholesale services. The recovery of efficiently incurred costs for new wholesale services was discussed in paragraphs 2.23 2.25 of Oftel's access guidelines.
- 7.66 Although this condition will apply to all services in this market, and the expectation is that the treatment of new services under the condition will be the same as for existing services, there may be occasional exceptions to this rule. This may arise where the new service is innovative and thus warrants a different regulatory approach. There are three ways in which such services can be dealt with.
- i) The service may be so innovative that it falls in a completely new and separate market. In this case the appropriate regulatory obligations will be determined by the Director following analysis of this new market.
- ii) The new service falls within the market but the Director determines that an alternative charging basis is appropriate. For example, a different charging basis may be appropriate for services offered during a trial.
- iii) The new service falls within the market and the cost orientation obligation is applied, but there might be a range of prices which would be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost orientated, the Director would consider whether the expected or achieved return on capital was excessive. In making this assessment, the Director will need to take account of the risk of the new service failing and the lost investment that would result. This therefore maintains an appropriate incentive for the communications provider to invest in new services and technologies.
- 7.67 The proposed condition contains a clause enabling the Director to determine that a price need not be set on a forward-looking LRIC basis. This is particularly relevant to scenario ii) above where the Director determines that an alternative charging basis is appropriate. If BT wishes to set a price for a service in any of the markets on any other basis than forward-looking LRIC, it must apply to the Director for permission to do this.
- 7.68 The Director considers that the proposed cost orientation condition is justifiable and a proportionate response to the extent of competition in the markets analysed. It enables competitors to purchase services at a rate which will enable them to develop competitive services to the benefit of consumers,

whilst at the same time allowing BT a fair rate of return which it would expect in a competitive market. The potential for a degree of flexibility envisaged in the approach to the recovery of cost of capital recognises that some investments will carry a higher degree of risk than others and does not remove incentives for the development of new services.

Responses to previous consultation – basis of charges obligations

- 7.69 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.70 The Director is of the view that it is appropriate to amend slightly the condition proposed for the symmetric broadband origination market in the April consultation document to clarify the application of the forward looking long run incremental cost approach to each charge. In the Director's view, the wording proposed in the April consultation document left room for some confusion.
- 7.71 Accordingly, the first paragraph has been amended to read:
- "...based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.
- 7.72 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition HH3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.
- 7.73 The third paragraph has been amended to read
- ".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.

Conclusion on basis of charges obligations

7.74 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.

Communications Act tests

7.75 The Director considers that the proposed condition (Condition HH3 in Annex D) meets the tests set out in the Act.

7.76 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. Excessively high pricing of wholesale inputs distorts allocation of resources and leads to inefficiency for retail competitors who may be forced into using less efficient alternative technologies. Ensuring that BT as the dominant provider is unable to charge excessive prices will therefore promote competition and thereby promote the interests of end users.

7.77 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that the proposed condition is an objectively justifiable and proportionate response to the extent of competition in the markets analysed, as it enables competitors to purchase services at charges that will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing BT a fair rate of return that it would expect in competitive markets. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in these markets. Finally, it is transparent in that it is clear in its intention to ensure that BT charges on a LRIC plus mark-up basis.

7.78 The Director considers that imposition of a cost orientation condition satisfies section 88 of the Act. Without it, there is a relevant risk of adverse effects arising from price distortion because BT, as it has SMP in this market, has the ability to price above the competitive level, so as to have adverse consequences for end users of public electronic communications services. The Director further considers in this connection that the condition is appropriate for the purposes of promoting efficiency and sustainable competition and conferring the greatest possible benefits on the end users of public electronic communications services.

Wholesale alternative interface symmetric broadband origination proposed regulation 4:

Accounting separation obligation

7.79 The Director is proposing to impose an accounting separation obligation in this market. This is discussed in Chapter 10, along with justification against the various regulatory tests. The precise wording of the proposed condition is

discussed in more detail in the separate accounting consultation document *Financial reporting obligations in SMP markets* published by the Director.

Wholesale alternative interface symmetric broadband origination proposed regulation 5:

Requirement to publish a reference offer

7.80 Section 87(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. Section 87(6)(d) also permits the setting of conditions requiring the dominant provider to include specified terms and conditions into the reference offer.

7.81 BT is currently obliged to publish prices, terms and conditions for leased line interconnection in its Standard Interconnect Agreement. Under this proposed obligation, BT would have to publish in respect of its wholesale AISBO services the prices, terms and conditions in the form of a Reference Offer (RO) – the published RO must include:

- a clear description of the services on offer;
- terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable communications providers to make technical and commercial judgements such that there is no material adverse effect on competition;
- 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;
- conditions relating to maintenance and quality (service level agreement). 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; and
- terms and conditions that are fair and reasonable. This will help to ensure that
 products 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.

7.82 The proposed obligation prohibits BT from departing from the charges terms and conditions in the Reference Offer and requires BT to comply with any Directions the Director may make from time to time under the condition. Requiring BT to publish prices, terms and conditions would help to create transparency in this market where BT has been identified as having SMP. Since wholesale AISBO services are an input for retail products, transparency is necessary to ensure competition in downstream (retail) markets.

7.83 An obligation to publish prices could lead to other communications providers following BT's prices, rather than being dynamic in setting prices at the

true competitive level. However, this is less of a consideration than in the trunk market (see below) as there is likely to be more limited competition in the provision of AISBO services.

- 7.84 The proposed condition also requires BT to set out the allocation of cost to each network component used for the products and services supplied in this market. This will help the Director to monitor the effectiveness of the cost orientation and price control obligations, and to deal with any complaints about breaches of those obligations. This is discussed in more detail in Chapter 10.
- 7.85 The Director therefore considers that a price publication obligation should be put in place. This accords with Article 9 and with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.
- 7.86 This obligation will ensure that communications providers, end users and others are able to put to the Director fully justified and objectively reasoned complaints of anticompetitive behaviour by BT, and to obtain redress where appropriate.

Responses to previous consultation – publication of reference offer

- 7.87 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.88 Communications providers suggest in their combined response that BT should be required to publish the equivalent of a reference offer for services provided to itself. They point out that this will provide transparency and allow the Director to determine whether BT is discriminating in favour of its own downstream businesses.
- 7.89 The Director notes that the proposed condition HH4 does already require BT to publish a reference offer in relation to the network access that it provides to itself, where the manner of provision differs from that detailed in its reference offer for other communications providers. The Director would expect the former to contain, amongst other things, full details of the service provided, together with details of network components and usage factors, in equivalent language to that used in its reference offer to other communications providers, in order that proper comparisons can be made.

- 7.90 In addition, the Director has put in place several performance measures and reports in this market which, amongst other things, will provide information on BT's standards of service in delivery of PPCs to communications providers and equivalent circuits to its retail arm. The Director considers that these will be of additional benefit to communications providers in establishing whether any discrimination is taking place. In addition, the Director will of course give appropriate consideration to any allegations of anti-competitive behaviour in this area.
- 7.91 In its response, BT raises some questions about the list of network components attached at Annex A to the conditions in the first consultation document. This list is being considered in detail in the review of regulatory financial reporting obligations. The document *Financial reporting obligations in SMP markets* (dated 22 May 2003) consulted on that list of network components, and the list is subject to change. Therefore, the Annex containing the list of network components has been removed from the draft conditions for this second consultation, and the definition of network components has been amended to read "as specified in any Direction of the Director from time to time for the purpose of these conditions" (check).
- 7.92 The final notification and explanatory statement on regulatory financial reporting obligations will contain a draft direction to implement a new network component list based on the ongoing review. The draft direction will be subject to consultation and hence interested parties will have an opportunity to comment on the Director's proposals with respect to network components.
- 7.93 This means that, for present purposes, the dominant provider is not yet required to publish charges and transfer charges for network components as part of its reference offer, as no network components have yet been specified by the Director. However, once the anticipated direction setting out the list of network components is finalised, the obligation to publish this information will enter into effect.
- 7.94 BT also states that it is inappropriate for internal transfer charges to be published as part of the reference offer. The Director considers that this is necessary to ensure that BT's competitors have visibility of the prices BT Retail is paying for the services it receives on an ongoing basis, in order to ensure that the condition preventing undue discrimination is being adhered to. Retrospective publication in BT's statement of regulatory accounts would be insufficient in this context. The publication of transfer charges in BT's reference offer will impose little if any additional burden on BT, since the charges would otherwise have needed to be prepared (albeit at a later date) for publication in its regulatory accounts, and BT will need to be aware of them in order to ensure that it is complying with its obligations.

7.95 Finally, BT states that conditions G5.2(h), H4.2(h), G5.2(j), H4.2(j), G6.4(f) and H5.3(f) appear to be PSTN related conditions which it does not consider applicable to PPCs. The Director agrees that details of traffic and network management, measures to ensure compliance with requirements for network integrity, and the relevant network tariff gradient are not relevant for this review and they have been removed from the proposed condition.

Conclusion on requirement to publish a reference offer

7.96 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.

7.97 The text of the condition which the Director proposes to impose is substantially the same as that contained in the April consultation document for the symmetric broadband origination market. The numbering of what is now paragraph HH4.3 has been changed, and the transitional arrangements specified in paragraphs HH4.4 and HH4.5, relating to the dates on which the new Reference Offer should be published and updated, have been changed to reflect the uncertainty about the actual date on which the condition will come into force.

Communications Act tests

7.98 The Director considers that the proposed condition (Condition HH4 in Annex D) meets the tests set out in the Act.

7.99 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with the requirement not to discriminate unduly, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers, by making BT's contractual terms more transparent. It promotes the interests of purchasers of wholesale symmetric broadband origination services by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions. It also promotes competition in the AISBO market by allowing BT's competitors in the provision of symmetric broadband origination services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, so ensuring competition in the downstream markets.

7.100 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it requires that terms and condition are published in order to encourage competition and provide stability in markets by providing transparency of BT's prices, terms and conditions, thereby allowing communications providers to better plan their businesses and customer relationships. It is proportionate, as only information that is necessary to ensure

that that there is no material adverse effect on competition is required to be provided. It does not unduly discriminate as it is applied to BT and no other provider has SMP in these markets. Finally, it is transparent in that it is clear in its intention to ensure that BT publishes details of its terms and conditions.

7.101 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale alternative interface symmetric broadband origination proposed regulation 6:

Requirement to provide advance notification of changes to prices, terms and conditions

- 7.102 Section 87(6)(b) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract (eg: by publication of a reference offer).
- 7.103 BT is currently required to give advance notification of price changes for certain symmetric broadband origination products as part of its Standard Interconnect agreement (one day for competitive products, 28 days for prospectively competitive products and 90 days for non competitive products).
- 7.104 BT has been identified as having SMP in this market. Advance notification will give communications providers the opportunity to respond to prices, creating a 'ripple effect' that passes price reductions down to end users. Customers may take the opportunity to consider changing suppliers.
- 7.105 It might be argued that an obligation to provide advance notification of prices could lead to a 'chilling' effect where other communications providers follow BT's prices rather than act dynamically to set competitive prices in the symmetric broadband origination market. However, given that the Director's primary aim is to address the consequences for downstream markets of BT's market power in this market, he does not believe that this consideration will undermine imposition of this obligation.
- 7.106 The Director therefore considers that BT should be obliged to provide advance notice of changes to the prices, terms and conditions of its wholesale AISBO services, which are an essential input for products in the retail markets. The Director considers that 90 days would be an appropriate period for notice of

changes to the prices, terms or conditions of existing AISBO products. In the Director's view, this period of notice is necessary to give communications providers sufficient time to respond to changes to BT's wholesale products and allow them to plan and implement their reactions to those changes, for example they might wish to make similar changes to comparable products they offer, without the increased risk of incurring any forecasting penalties that are in place. This will prevent them from being put at a competitive disadvantage in relation to BT's retail arm.

7.107 The Director considers that a shorter notice period of 28 days is appropriate for the introduction of prices, terms and conditions for new AISBO products. In the Director's view, this provides the appropriate balance between allowing communications providers sufficient time to react to changes made by BT and the risk of potential competition 'chilling' effects described above. Forecasting penalties are unlikely to be an issue for new products.

7.108 As noted above, the Director considers that transparency obligations, which include notification of prices, accord with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.

Responses to previous consultation – notification of price changes etc

7.109 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.

7.110 The communications providers commented in their combined response, on the Director's use of the phrase "degree of SMP" in the first consultation document, and asked for the legal basis for it. The Director accepts that the phrase should have read "degree of market power". Whereas SMP is a legal designation, market power is an economic concept and there can exist different degrees of market power, as noted in the OFT's guideline "Assessment of Market Power" (OFT415) which states that "market power can exist in a variety of other contexts and in a variety of degrees".

Conclusion on notification of prices terms and conditions

7.111 Having considered the consultation responses the Director proposes to impose condition HH5 in Annex D, which requires an advance notification period of 90 days for changes to existing AISBO products and 28 days for the introduction of new products.

Communications Act tests

- 7.112 The Director considers that the proposed condition meets the tests set out in Section 47 of the Act. The justification for imposing the condition is that general and reliable visibility of a dominant communications provider's prices is needed to enable the Director and competitors to monitor BT's prices for possible anti competitive behaviour. Imposition of this condition does not discriminate unduly against BT as it is the only communications provider in the market with SMP; the behaviour of other communications providers is not capable of having a materially adverse effect on competition as these communications providers do not have market power. The remedy is proportionate, as it is the least burdensome means of achieving the objective of transparency, and the requirement is made fully transparent in Annex D.
- 7.113 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with transparency, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers. It promotes the interests of purchasers of wholesale AISBO by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions by informing them of when those changes are going to occur, thereby allowing them to better plan their businesses and relationships with their customers. It also promotes competition in the AISBO market by allowing BT's competitors in the provision of symmetric broadband origination services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, thereby ensuring competition in the downstream markets.
- 7.114 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers have access to transparent information that enables them to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale alternative interface symmetric broadband origination proposed regulation 7:

Obligation to provide quality of service information

7.115 Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing

transparency. The condition proposed by the Director in Annex D requires BT to publish such information in the manner and form required by the Director.

- 7.116 This obligation would require BT to publish certain information relating to the quality of the service it delivers in providing wholesale AISBO. The condition would have the potential to deliver benefits in a number of areas, most notably prevention of undue discrimination. Other benefits might include, for example, benchmarking with international comparators in situations where BT delivers a similar quality of service to all communications providers including itself, but this level of service falls short of the service generally offered in comparable countries, most notably within the EU.
- 7.117 The principle of no undue discrimination is intended to ensure that communications providers with SMP do not distort competition. As noted in Recital 17 of the AID, the application of this principle is particularly important where a vertically integrated communications provider, with market power in a particular wholesale market, supplies services to other communications providers with whom they compete in a downstream retail market.
- 7.118 Section 87(6)(a) of the Communications Act allows the Director to impose a no undue discrimination condition on a dominant provider where there has been an SMP determination in an identified market. The no undue discrimination condition set out in Annex D requires the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with network access.
- 7.119 It might be argued that a dominant communications provider should meet this condition by providing wholesale services to other communications providers using the same operational processes and interfaces it uses to supply itself. However, the high cost of replacing legacy systems means that this will not always be practical. Instead, the Director considers that the most objectively justifiable and proportionate means of meeting this condition is to require that a dominant communications provider delivers the same operational performance to other communications providers as it delivers to itself. Specifically, this means that Key Performance Indicators (KPIs) such as ordering times and fault response times must be the same.
- 7.120 The Director believes that the only means of ensuring that there is no undue discrimination as to quality of service is by imposing a requirement to publish such information. Without such a requirement, the Director believes that it would be impossible to monitor that the different operational processes used by the dominant communications provider were delivering an equivalent quality of service.
- 7.121 The Director believes that it is insufficient to rely on requesting the necessary quality of service information each time it is required, as suggested in

paragraph 3.51 of Oftel's Access Guidelines. In the absence of an *ex ante* obligation to do so, there is no guarantee that the necessary information will be collected at the time of any given event. It is not in general possible to reconstruct data for operational performance retrospectively.

- 7.122 The specific condition set out in Annex D proposed by the Director would require BT to publish data on a specified set of KPIs, with a format and frequency to be determined by the Director. This condition follows section 87(6)(b)) which allows the Director to impose a condition of transparency whereby the Director can require a dominant provider to publish all such information as directed by him to secure transparency in relation to matters such as non-discrimination. It is the Director's intention that the scope of publication should take account of the potential conflict between any obligation to publish performance data, in order to provide transparency, and the need to maintain commercial confidentiality.
- 7.123 Implementation of this regulation is in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective". It will enable the Director to make Directions requiring BT to publish specific quality of service information.

Responses to previous consultation – quality of service information

- 7.124 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.125 Some communications providers noted in their responses that they had observed asymmetries between the forecasting processes and SoR processes applicable to BT Retail and those applying for other communications providers. The Director discusses the latter in the section below relating to requests for new network access. In general, however, he considers that if there are complaints in future from communications providers about discrepancies of this nature, it is likely to be appropriate to investigate them under the non discrimination condition.

Conclusion on provision of quality of service information

7.126 Having considered the consultation responses the Director proposes to impose condition HH6 in Annex D. This condition remains in the same terms as

the condition previously consulted on for the symmetric broadband origination market.

Communications Act tests

7.127 The Director considers that the proposed condition meets the tests set out in the Act.

7.128 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of securing the maximum benefit for the persons who are customers of communications providers and of persons who make such facilities available. It promotes competition and thereby the interests of end users in downstream markets, by denying BT as the dominant provider in this market the opportunity to discriminate in the quality of service it provides to customers.

7.129 It is the Director's current view that the transparency condition proposed in this consultation satisfies the relevant requirements specified in section 47 of the Act. In particular, the Director has considered the duty to promote competition. In addition, the Director considers that

- The condition is objectively justifiable because it is the only means of
 ensuring that a dominant communications provider provides an equivalent
 quality of service to other communications providers as it provides to itself.
 This is necessary in order to prevent a vertically integrated communications
 provider, with market power in a particular wholesale market, leveraging this
 into a downstream market.
- The condition does not unduly discriminate against a particular person because it applies to the dominant provider in circumstances where there has been an SMP determination. In the case of the dominant provider, the supply of wholesale services must be in sufficient volume for the publication of KPI data to be statistically meaningful. The Director considers that this is not the case in relation to Kingston.
- The condition is proportionate to what it is intended to achieve because the
 dominant provider will only be required to publish data on a small number of
 KPIs representative of key business processes, rather than a complete set of
 KPIs, covering all aspects of operational performance.
- The condition provides transparency in relation to what it is intended to achieve because the objective of the condition relates to the problem identified in the market, and inter alia it is aimed at ensuring nondiscrimination specifically in relation to the quality of service provided by the dominant provider in respect of its key business processes.
- 7.130 In addition, the Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. Overall, given the potential for the development of alternative facilities in the current market, the

Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on leased lines in competition with BT. It will also assist monitoring of BT's compliance with a non discrimination condition. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK by enabling communications providers to compete on comparable terms with BT at the retail level.

Wholesale alternative interface symmetric broadband origination proposed regulation 8:

Requirement to publish technical information

- 7.131 Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency.
- 7.132 Under the proposed Condition 'Requirement to publish a reference offer', BT will be obliged to publish a Reference Offer for Network Access, which amongst other things, contains a description of the Network Access to be provided, including technical characteristics; the location of the points of Network Access; and technical standards for Network Access. The Condition sets out the number of days within which a reference offer, or amendments to that reference offer, must be published. For example where BT amends its Reference Offer in respect of high bandwidth symmetric broadband origination services it must publish an amended version 28 days before the amendment comes into effect. However, the proposed Condition 'Requirement to publish technical information' sets out additional obligations to publish new technical information 90 days in advance of entering into a contract to provide the new Network Access, or amendments to existing technical terms and conditions 90 days before those amended terms and conditions come into effect.
- 7.133 As set out above, the information to be published under this Condition comprises new or amended technical characteristics (including information on network configuration where to necessary to make effective use of the Network Access), 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.

- 7.134 The proposals in this Condition are important to ensure that communications providers to whom Network Access is being provided by BT are able to make effective use of that Network Access. Changes to technical information must be published in advance so that communications providers have sufficient time to prepare. For example, a competing provider may have to introduce new equipment or modify existing equipment to support a new or changed technical interface. Similarly, a competing provider may need to make changes to their network in order to support changes in the points of network access or configuration.
- 7.135 The Director's view is that 90 days is the minimum time that competing providers will need to modify their network to support a new or changed technical interfaces or support a new point of access or network configuration. Therefore, the Director proposes that in the market for wholesale symmetric broadband origination services, BT must publish any new or modified technical characteristics, points of network access and technical standards not less than 90 days in advance of either BT entering into a contract to provide new Network Access or making technical changes to existing Network Access, unless the Director consents otherwise.

Responses to previous consultation – provision of technical information

- 7.136 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 7.137 A number of communications providers commented that a blanket 90 days may not be appropriate in all circumstances. Some changes may need a longer period with proper consultation through the NICC, for example BT's current proposed roll out of Media Gateways and Telephony Servers. In addition, it was argued that 90 days is unlikely to be sufficient time for communications providers to make material changes to their network, particularly where they need to obtain additional interconnect circuits from BT. As a solution, some communications providers proposed a pre-notification period of 30 days, during which objections could be raised and a full consultation and review instigated if necessary.
- 7.138 In the Condition 90 days is the minimum requirement. However, in order for BT to meet its obligations under SMP Condition 1 (Requirement to provide Network Access on reasonable request), the Director considers that longer periods of notification may be appropriate in certain circumstances. SMP Condition 1 would require BT to 'provide the Network Access requested' and 'on fair and reasonable terms'. Therefore, if there were a major change to BT's terms and conditions, for which the minimum 90 day notification was allowed but which had the consequence that communications providers were unable to make use of

the Network Access provided, then BT might, depending on the circumstances, be in breach of its obligation to provide the Network Access.

- 7.139 The Director notes that the BT Interconnect Contract already provides for longer notification periods for major "System Alterations" and changes such as the closure or modification of a switch and agrees that BT should continue to use longer notification periods for these major changes. For other major changes, the Director considers that consultation with industry through the NICC would continue to be the best way for BT to meet its obligations in relation to the provision of Network Access on fair and reasonable terms. Therefore, the Director considers that the onus is on BT to ensure that it provides longer notification and, where appropriate, consults on major changes so that it complies with its Network Access condition as well as the technical notification condition.
- 7.140 If communications providers considered that a technical change notified by BT was not consistent with its requirements to provide Network Access on fair and reasonable terms, then they would, as always, have the option of referring a dispute to the Director for resolution, or of making a complaint regarding breach of an SMP condition.
- 7.141 BT proposed that the minimum necessary notification period should be 28 days where the equipment is designed to international or industry standards and that 90 days should only apply in the rare cases where non-standard equipment is used. This was to reflect that proprietary, network communications provider specific specifications are a thing of the past and that the time to market for telecommunications services has been drastically reduced.
- 7.142 Although the Director agrees that standardised interfaces are now much more common, even where a standardised interface is used, the Director would consider it unusual for a period of 28 days to be appropriate. This is because even where standardised equipment is available, implementation of a new interface in 28 days is unlikely to be practicable and reasonable. For example, even where standardised equipment is available, this would still require procurement, installation and testing. The Director does however retain the option of consenting to shorter notification periods in exceptional circumstances.
- 7.143 BT suggests that the wording of paragraphs G8.4(c) and H7.4(c) is not compatible with conditions G8 and H7 respectively. The Director confirms that the paragraphs are compatible. The phrase "at that person's written request" is designed to mean that any person can ask to be added to BT's mailing list for notification of technical information. It does not mean that such person can obtain the relevant information prior to the 90 day notification period, unless BT wishes to provide it earlier.

Conclusion on requirement to provide technical information

7.144 Having considered the consultation responses the Director proposes to impose condition HH7 in Annex D, which requires a minimum of 90 days for provision of technical information. This condition remains in the same terms as the condition previously consulted on for the symmetric broadband origination market.

Communications Act tests

- 7.145 The Director considers that the Condition meets the tests set out in the Act. The Director in proposing the Condition has considered all the Community requirements in section 4 and in particular the requirement to promote competition and to encourage service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefits for consumers by ensuring that providers have sufficient notification of technical changes to BT's network to enable them compete.
- 7.146 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it enables competing communications providers to make full and effective use of Network Access. It does not unduly discriminate in that it is imposed on BT and no other communications provider has SMP in this market. It is proportionate in that 90 days is the minimum necessary to allow competing providers to modify their networks. It is transparent in that it is clear in its intention that BT should notify technical information as set out above.
- 7.147 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK. By requiring BT to provide advance notification of technical changes, communications providers will be able to better plan their businesses and relationships with their customers.

Consultation on interfaces

7.148 Current regulation on BT (licence condition 15) includes a requirement to consult on interfaces where so directed by the Director. This was to ensure that BT could not impose unnecessary costs on competing communications providers by specifying a proprietary interface.

7.149 However, the Director recognises that communications providers are constrained in their choice of interface by the standardised nature of most communications equipment. In addition, the Director believes that the scope for further modifications to traditional PSTN equipment, where BT was most likely to be able exert control over interface specifications, is likely to be limited in the future, as communications providers and equipment manufacturers increasingly look to other technologies. Therefore, the Director now considers it unlikely that BT would be able to exert control over interfaces in a way that could have an adverse effect on competition. Consequently, the Director does not believe that imposing a condition requiring consultation on interfaces would be proportionate.

Wholesale alternative interface symmetric broadband origination proposed regulation 9:

Obligations relating to requests for new network access

- 7.150 This condition is set in accordance with sections 87(3) and 87(5) as detailed above in relation to the condition relating to the provision of network access.
- 7.151 The Director's previous consultation invited comments on his proposals for regulation of the statement of requirements ("SOR") process. The Director stated that if regulation of the SOR process were necessary, the following obligations would be worth considering:
- (a) the publication of reasonable guidelines on requesting a new product;
- (b) the provision of information for the purpose of making a request for a new product; and
- (c) a process for dealing with requests for new products.
- 7.152 The SOR process forms part of BT's obligation to provide Network Access in all markets in which it has SMP. The SOR process and associated timescales are the same in all of these markets. In revising the proposed condition, the Director has therefore taken account of comments provided in response to consultations on other markets, notably the Fixed narrowband wholesale exchange line, call origination, conveyance and transit markets review: explanatory statement and notification, published 26 August 2003 ('the narrowband statement').
- 7.153 Responses to the Director's proposals (and the Director's comments on those responses) in the April consultation document and those received in connection with the narrowband statement are set out in Chapter 6.

Revisions to the proposed condition

A. Publication of reasonable guidelines on requesting a new product

7.154 Condition HH8.1 would oblige BT to publish the required content and form of a request for new Network Access. In view of comments received, the Director considers that it is appropriate to require BT to produce reasonable guidelines on requesting new Network Access. The Director believes that such guidelines will contribute to an efficient process by ensuring that BT receives accurate product descriptions in the necessary detail and give requesting communications providers confidence that requests are handled in a fair and consistent manner. The Director considers that BT should consult with the Director and relevant third parties before finalising the initial version of these guidelines to ensure that the guidelines meet the reasonable needs of stakeholders. The Director would expect BT to make the proposed guidelines publicly available and to engage with stakeholders as appropriate to enable them to contribute to the development of the final guidelines. The Director also considers that BT should finalise the initial guidelines within two months of the date the condition enters into force. In addition, BT would be obliged to keep these guidelines under review and consult with relevant third parties and the Director before making any amendments.

B. Provision of information for the purpose of making a request for a new product

- 7.155 The Director proposes that BT, on receipt of a reasonable request, should be required to supply sufficient technical and network information to enable third parties to construct proposed product specifications that are efficient and meet their reasonable requirements. The Director would require that the information should be supplied within a "reasonable timescale". If a dispute were to arise about timescales, the Director would consider what is reasonable on a case-by-case basis, taking into account the complexity of the information request.
- 7.156 The Director considers that BT should not refuse access to any such information on the basis of confidentiality, although BT may require a nondisclosure agreement. BT has argued that it may be constrained in its ability to supply information to requesting operators due to confidentiality agreements with its suppliers. While the Director appreciates that there may be certain circumstances where BT finds itself constrained, communications providers will obviously be concerned that by signing confidentiality agreements with suppliers, BT can effectively deny access to its network. The Director considers that in signing confidentiality agreements BT must consider its obligations to meet all reasonable requests for access and to provide information to requesting operators. If necessary, BT should review confidentiality agreements with its suppliers.
- 7.157 Section 87(4)(e) of the Communications Act requires the Director to take account of, inter alia, any relevant intellectual property ("IP") rights in considering whether it is proportionate to mandate or attach conditions to an access obligation. The Director recognises that IP rights will protect some types of information, but where that information is essential to allow BT's competitors to

request and make use of reasonable access products, the Director would expect BT to explore whether such information could be made available and protected with nondisclosure agreements.

7.158 As set out in the Access Guidelines, in the event of a dispute about the provision of information, the Director will identify IP rights on a case-by-case basis. The Director notes, however, that:

- the information must be secret, identified (recorded) and substantial; and
- IP includes patents, know-how, and software copyright

C. Process for dealing with requests for new products

7.159 Amendments have been made to the proposed condition in respect of the process for dealing with requests for new products. The following is a summary of the proposed process:

- BT must acknowledge receipt of the request within five working days (Condition HH8.5).
- BT must give a first written response to the request at the latest within 15 working days of its receipt (Condition HH8.6). At this stage, it is envisaged that the response will not be an initial offer of terms and conditions, although nothing would preclude such a response at this stage. If the request is not adequately formulated, the Director would expect BT and communications providers to be able to discuss constructively how a request should be formulated, and this should be covered in BT's guidelines. If the request is refused on the basis of specified objective criteria or the need to maintain network integrity, BT shall detail its reasons for refusal. If the request is sufficiently well formulated BT shall state either that the initial offer of terms and conditions will be prepared, or that a feasibility study will be required (and objective reasons why a feasibility study is required). BT should also at this stage confirm preparation of a timetable for the agreement of technical issues (Condition HH8.6).
- Rejection BT may reject a request on the grounds that it is not reasonable, is not technically feasible, requires BT to provide something which is not within its power to provide, or would compromise the integrity of BT's network. Oftel has set out, in the Access Guidelines (at paragraph 2.28), the procedure it intends to use to resolve disputes about what is a 'reasonable request' for Network Access. Oftel considers that a request is unreasonable if it imposes an undue burden on BT, ie BT would be unable to recover its costs of providing the requested access.
- Where no feasibility study At the latest, 35 working days after receipt of the request, BT must provide an initial offer of terms and conditions and

timetable for new Network Access and the resolution of technical issues (Condition HH8.7).

- Where, BT has said that no feasibility study is required but, due to a
 genuine error of fact, BT decides after 15 days that a feasibility study is
 reasonably required, it may inform the requesting party within 35 working
 days that a feasibility study is required (Condition HH8.8) and give
 objective reasons why the study is required. The Director expects that this
 condition will apply in limited circumstances only, and generally BT will be
 required to decide whether a feasibility study is required within 15 working
 days.
- Where feasibility study is undertaken At the end of 60 working days, BT must be able to respond fully to the majority of requests for new Network Access (Condition HH8.9). The condition allows provision for this time to be extended to 85 working days, where, despite using its best endeavours, BT is unable to complete the feasibility study within 60 working days or when BT and the requesting operator agree that more time is needed. The Director does however acknowledge that in certain circumstances, BT might reasonably require even more time to respond fully to a request. Such circumstances might include multiple or conflicting requests from different providers, extremely complex requests covering a number of different technologies areas or requests requiring wider industry consultation. The condition therefore includes provision for the overall deadline to be extended to over 85 working days, with the agreement of the requesting party, or with the Director (Condition HH8.11).

7.160 Where BT wishes to extend the 60 day deadline to 85 working days (Condition HH8.10), it is for BT to show that circumstances exist which prevent it from responding to the request within 60 working days.

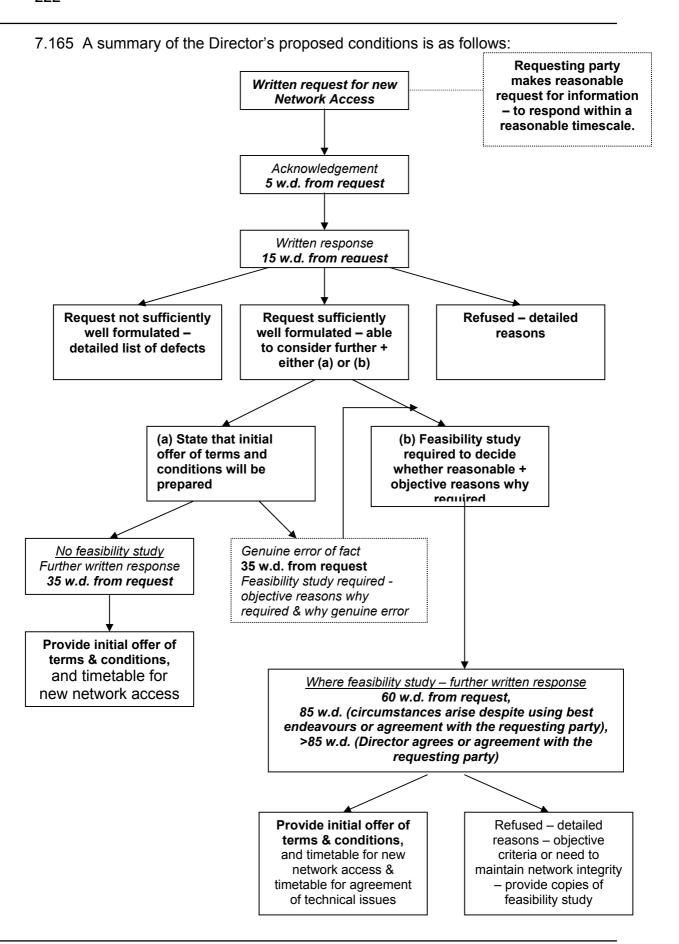
Communications Act tests

- 7.161 The Director proposes to impose this condition pursuant to section 87(3) and 87(5) of the Act. Specifically, under section 87(5)(a) the Director considers that the provisions of this condition will help to secure fairness and reasonableness in the way in which requests for Network Access are made and responded to, by adding clarity and robustness to the process. In addition, under section 87(5)(b) he considers that the proposed provisions will help to secure that the obligations contained within the condition are complied with, within the reasonable periods and at the times set out in the proposed condition.
- 7.162 The Director has considered the matters set out in section 87(4). In particular, under section 87(4)(d) he considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as

reductions in delays in provision of new products will ensure that communications providers are able to make effective use of BT's network in competition with BT.

7.163 The Director has also considered the test for setting conditions set out in section 47 of the Act, namely that the condition is objectively justifiable, does not unduly discriminate, is proportionate and transparent. The Director considers that his proposed condition meets these tests. In particular, it is objectively justifiable in the light of the deficiencies in the current process which lead to the delays and lack of clarity discussed above. It would not discriminate unduly against BT because BT has been found to have a position of SMP in this market and is therefore able to exploit this position to the potential detriment of its competitors both in this market and in downstream markets. The condition is proportionate since without it being put in place, BT's competitors would continue to experience problems of the nature already described. Furthermore, it is transparent in its intention to ensure that BT has a reasonable process for dealing with requests for new Network Access.

7.164 Finally, the Director, in imposing this condition, has considered all the Community requirements set out in section 4 of the Communications Act. In particular, under section 4(8) the Director considers that the provisions help secure efficiency and sustainable competition in the markets in this review. They help to ensure efficiency and sustainable competition by enabling other communications providers to make effective use of BT's network in order to offer their own products.



Wholesale alternative interface symmetric broadband origination proposed regulation 10:

Direction under general access condition requiring BT to supply backhaul links via Local Area Network extension services.

- 7.166 Under the LLU backhaul Direction (*Final direction on LLU backhaul services*, 8 August 2002), BT is currently obliged to provide backhaul on reasonable terms (including service level agreements and compensation), at cost oriented prices and at prices consistent with PPCs.
- 7.167 The backhaul Direction identified two separate means of providing backhaul, via leased lines (based on traditional interfaces) and via Local Area Network extension services (LES), and concluded that they formed separate markets. This proposed Direction relates only to backhaul links provided over LES, which is a form of AISBO. Backhaul provided via leased lines is discussed in proposed regulation 15 in Chapter 6 above.
- 7.168 In order to carry over the full detail of the LLU backhaul Direction, the Director will need to impose an obligation to provide SLAs and compensation arrangements.
- 7.169 BT has been identified as having SMP in this market. In the absence of an obligation to supply backhaul, BT would not have any incentive to do so. This would reduce potential for competition by LLU communications providers.
- 7.170 Carrying forward this recently introduced piece of regulation will add to the certainty in this market provided by continuity of the market conditions under which BT and other communications providers currently operate. This will help to encourage appropriate investment decisions which will maximise the level of competition in this and related retail markets.
- 7.171 It might be argued that BT would be required to provide LLU backhaul under the terms of a general obligation to provide access (see above) so a specific obligation is not necessary. However, the Director believes that it is essential to require BT specifically to provide these products for the following reasons:
- it will provide continuity by carrying forward recently introduced regulation;
- it will provide greater certainty and encourage appropriate investment decisions, since BT will be required to continue to provide these particular products as set out in the Direction; and
- it will help avoid the possibility of multiple and successive complaints, thereby reducing the regulatory burden.
- 7.172 The Director therefore considers that it is necessary to put in place an obligation to supply LLU backhaul using AISBO, in addition to the general access obligation (see above). The Director is therefore consulting on a Direction under

the access obligation proposed for the wholesale AISBO market, requiring the supply of LLU backhaul, on the assumption that he confirms his proposals and sets such obligations.

7.173 Implementation of this regulation is also in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective".

Communications Act tests

- 7.174 the Director considers that the proposed Direction (Direction under condition H1, set out in Annex E) meets the tests set out in the Act.
- 7.175 The Director has considered all the Community requirements set out in section 4. In particular, the proposed Direction, by requiring BT to supply these products, encourages the provision of network access and service interoperability by allowing communications providers access to products that allow them to compete with BT at the retail level for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. In addition, as BT is a dominant communications provider in this market, requiring it to make this product available will ensure that competition in downstream markets is promoted, which will in turn promote the interests of competitors and end users.
- 7.176 The Director considers that the proposed Direction satisfies the tests set out in section 49(2) of the Act. It is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not discriminate in that any provider of electronic communications networks, services or associated facilities can request access from a dominant provider. It does not discriminate against BT because BT has been found to hold a position of SMP in this market, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. The proposed Direction is set out in a transparent form in Annex E. The Director therefore considers that the proposed obligation meets the requirement of transparency set out in the Act.

Wholesale alternative interface symmetric broadband origination markets: conclusion on proposed regulation

7.177 The Director has concluded that BT has SMP in the AISBO market, and that as a consequence the following regulatory measures should be imposed in this market:

- 1. a general obligation to provide access on reasonable request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation and a cost accounting system);
- 4. accounting separation obligation;
- 5. requirement to publish a reference offer;
- 6. an obligation to give 90 days' notice of changes to prices, terms and conditions for existing products;
- 7. an obligation to give 28 days' notice of the introduction of prices, terms and conditions for new products;
- 8. requirement to provide quality of service information;
- 9. requirement to publish technical information with 90 days' notice; and
- 10. obligations relating to requests for new network access.

Draft conditions of entitlement reflecting these preferred options are primarily set out in Annex D. Draft cost accounting and accounting separation conditions will be set out in a separate consultation document on accounting issues, to be published in due course.

7.178 Directions

- A Direction under the general access condition to provide LES-based LLU backhaul products, subject to specific terms and conditions; and
- A Direction under the cost orientation condition covering pricing matters relating to provide LES-based LLU backhaul.

Draft Directions reflecting these preferred options are set out in Annex E.

7.179 The Director considers that the above measures are, both individually and taken as a whole, sufficient and proportionate given that there is minimal competition to BT in this market. The proposed obligations for this market are broadly similar to those currently applying in the symmetric broadband origination markets. As wholesale AISBO is an input for products in downstream retail markets, the Director needs to ensure that wholesale AISBO is available to communications providers to enable them to compete at a retail level.

Chapter 8

Regulatory remedies – proposed SMP services conditions and Directions for BT's wholesale trunk segments market

Introduction

- 8.1 This chapter sets out the proposed remedies for the wholesale trunk segments market for the UK. Note that this market extends to the whole of the UK including Hull, for the reasons set out in Chapter 2 and Annex A. However, as discussed in Chapter 2 the size of the Hull area means that the functionality provided by trunk segments is not warranted, and consequently the following proposed regulation will not "bite" on BT in that area.
- 8.2 More general comments on the structure of the analysis and the aims of regulation are set out at the beginning of Chapter 6 these comments apply equally to this market and to the wholesale symmetric broadband origination markets.
- 8.3 This chapter sets out the effect of, and the Director's reasons for making, proposals to set SMP services conditions in these markets. It also explains how certain tests in the Act are satisfied. The proposed conditions in respect of BT are attached to the Notification in Annex D of this document, while the proposed Directions are set out in Annex E.
- 8.4 The existing obligations applying in relation to the trunk segment market are as follows:
- obligation to offer wholesale trunk segments;
- non discrimination;
- cost orientation:
- cost accounting;
- accounting separation;
- publication of prices, terms and conditions;
- advance notification of prices, terms and conditions for new products;
- advance notification of changes to prices of existing products;
- requirement to provide quality of service information; and
- requirement to publish technical information.
- 8.5 In addition, these markets are subject to detailed regulation following these Directions:
- PPCs Phase I;
- PPCs Phase II:
- RBS backhaul; and

- LLU backhaul.
- 8.6 In his assessment of the wholesale trunk segment market set out in Chapter 3 and Annex B, the Director has concluded that the market is not effectively competitive and that BT should be designated as having SMP.
- 8.7 In the light of the above considerations, the Director examined in the previous consultation the following options for future regulation in the market for wholesale trunk segments:
- 1. no ex ante regulation;
- 2. obligation to provide access on reasonable request:
- 3. requirement not to unduly discriminate;
- 4. basis of charges obligations (cost orientation and a cost accounting system);
- 5. accounting separation obligations;
- 6. requirement to publish a reference offer;
- 7. same day notification of changes to prices, terms and conditions;
- 8. requirement to provide quality of service information;
- 9. requirement to publish technical information with 90 days' notice; and
- 10. obligations relating to requests for new network access.
- 8.8 In addition to the above conditions, the Director considered making the following Directions under appropriate conditions:
- 11. Direction under the general access condition to provide PPCs at a range of bandwidths subject to specific terms and conditions;
- 12. Direction under the cost orientation condition covering pricing matters relating to PPCs and LLU backhaul;
- 13. Direction under the quality of service condition to require specific information in respect of PPCs;
- 14. Direction under the general access condition to provide RBS backhaul link products; and
- 15. Direction under the general access condition to provide LLU backhaul products.
- 8.9 The Director undertook a regulatory option appraisal of these options, concluding that option 1 (see paragraphs 7.8 and 7.9 of first consultation document) was an inappropriate response to the degree of SMP existing in this market. Responses to the first consultation have confirmed the Director's opinion on the appropriate regulation for this market, and consequently this document discusses only the remaining options.

Wholesale trunk proposed regulation 1: Requirement to provide network access on reasonable request

8.10 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant provider to provide network access as the Director 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 for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, the Director must have regard to the 6 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.

- 8.11 BT is currently required to provide wholesale trunk segment services on reasonable request. It is also, as noted in Chapter 2, obliged to offer wholesale trunk services as part of some PPC products, under the terms of the PPC Directions.
- 8.12 BT has been found to have SMP in this market. A general obligation to provide access on reasonable request will enable communications providers to negotiate wholesale trunk segment products according to their needs, enabling them to compete in the retail market and leading to more competition and encouraging lower prices in the markets for retail leased lines and value added business solutions. If the obligation were not imposed, BT would be able to deny access or impose unreasonable terms having a similar effect, thereby hindering the emergence of a competitive retail market.
- 8.13 While formulation of specific obligations may from time to time be appropriate, either for the avoidance of doubt or in resolving a dispute, the Director proposes to rely as far as possible on the general obligation. This removes the need for the Director to specify the details of products to be supplied (which he is often not best placed to do), and provides a regime which is responsive to future market and technical developments. While the scope is broad, it is appropriately limited by the ability of BT to refuse any request which is unreasonable. (The Director's views on reasonableness in this context are set out in his Access Guidelines.) Without such an obligation, communications providers and customers could be forced to buy from a range of suppliers in order to supply one end-to-end leased line, which may not be as effective.
- 8.14 Reliance on the Competition Act for communications providers' general access requirements will, in the Director's view, be insufficient because of the network-based nature of the industry, and would be inconsistent with the Director's objective of promoting competition. The Director therefore considers that it is necessary to impose a general access obligation requiring BT to supply trunk products upon reasonable request.
- 8.15 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a

technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

Responses to previous consultation – obligation to provide network access

- 8.16 In its response, BT questions the Director's proposal to require it to provide access to "Third Parties" who reasonably request such access, and suggests amending the wording of the definition of "Third Party" so that access is restricted only to public electronic communications network communications providers and the like. The Director's views on this are set out below.
- 8.17 Cable & Wireless suggests that the Director should expressly state that "fair and reasonable terms" includes a requirement to offer a minimum quality of service guaranteed by an SLA.
- 8.18 The Director does not consider that it is necessary to add this provision. The requirement to offer on fair and reasonable terms means that terms which would normally be offered in a competitive market should be offered. In the Director's view, this includes SLAs. Should BT bring forward an argument that a reasonable SLA is not required in the circumstances under consideration, the Director will consider the case on its merits.

Conclusion on obligation to provide network access

8.19 Having considered all the responses, the Director is of the view that it is appropriate to amend slightly both the Network Access condition and the definition of "Third Party" proposed in the April consultation document, to clarify the nature and extent of this obligation. Accordingly, the condition has been amended to read:

"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 the Director may from time to time direct".

- 8.20 The amendment is intended to make it clearer that the Dominant Provider must comply with the condition by providing Network Access that is the same as that which has been (reasonably) requested by the Third Party. The condition continues to include the power to make a direction about the provision of Network Access and the terms and conditions on which it is provided.
- 8.21 The Director does not propose to replicate the Annex II list to define entitlement to Network Access. This is because Annex II status flows from the Interconnection Directive 97/33/EC. The provisions of that Directive including the concept of Annex II status will fall. The concept of Annex II status will

continue to exist for the purposes of any licence conditions continued for an interim period until the market reviews are completed and these new obligations are imposed. However, once these new obligations are imposed, Annex II status will not be relevant.

- 8.22 For the purposes of the Network Access condition, the definition of Third Party has been amended to the provider of a **public** electronic communications network or **public** electronic communications service (i.e. electronic communications networks which are provided wholly or mainly for the purpose of making electronic communications services available to members of the public; and electronic communications services that are provided so as to be available for use by members of the public). Accordingly, providers of non-public electronic communications networks or non-public electronic communications services will not be entitled to Network Access under the proposed condition. This maintains the status quo existing prior to these consultations.
- 8.23 Further guidance as to how the Director proposes to apply the Network Access obligation can be found in the Director's guidelines on imposing access obligations under the new EU Directives, dated 13 September 2002 (the "Access Guidelines") and the Directors guidelines for the interconnection of public electronic communications networks, dated 23 May 2003 (the "Interconnection Guidelines"). These guidelines can be found at www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm and www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm respectively.
- 8.24 Having considered the consultation responses the Director's current view is that a network access condition should be imposed in this market in the form set out at Annex D.

Communications Act tests

- 8.25 The Director considers that the proposed condition (Condition H1 in Annex D) meets the tests set out in the Act.
- 8.26 In the Director's view, this condition meets the tests set out in Section 47 of the Act. The proposed condition is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in this market. It is proportionate, since it is targeted at addressing the market power that BT holds in this market and does not require it to provide access if it is not technically feasible or reasonable. Finally, it is transparent in that it is clear in its intention to ensure that BT provides access to its network in order to facilitate competition.
- 8.27 The Director has considered all the Community requirements set out in section 4 of the Act. In particular, because it requires BT to provide the

necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of ensuring efficiency and promoting competition in the downstream markets. As BT has market power in the provision of wholesale trunk segments, it controls a key input into a range of downstream services – principally leased lines but also virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.

8.28 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. Given the limited potential for the development of alternative facilities in the current market, the Director considers that this condition is fair and reasonable. Since BT is currently required to provide trunk segments on request and offers trunk segment as part of some PPC products, the Director is satisfied that this condition is feasible. The Director believes that this condition is fair and reasonable taking into account the investment made by BT in its network, which means that it is in a position to provide access to wholesale trunk segment products on reasonable request. The Director considers that this condition, by ensuring that communications providers will be able to offer products based on leased lines in competition with BT, addresses the need to secure effective competition in the long term. In addition the Director considers that it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale trunk proposed regulation 2: Requirement not to unduly discriminate

- 8.29 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access.
- 8.30 The requirement not to unduly discriminate is intended, principally, to prevent dominant providers from discriminating in favour of their own retail activities and to ensure that competing providers purchasing wholesale products from the dominant provider are placed in an equivalent position to the dominant provider's retail arm.
- 8.31 Where dominant providers are vertically integrated, like BT, they may have an incentive to provide wholesale services on terms and conditions that favour their own retail activities, in a way that would have a material adverse effect on competition. In particular, they may charge competing providers more than the amount charged (through transfer charging) to their own retail activities for wholesale services, thereby increasing the costs of competing providers and giving themselves an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery

timescales, which would disadvantage their retail competitors and in turn consumers.

- 8.32 The Director's assessment of SMP in wholesale trunk segments has established that within this national market there is some variation in competitive pressures between trunk segment routes. The Director considers that this important feature should where possible be reflected in the regulatory remedies.
- 8.33 The Director notes that for some trunk segment routes, there is little choice available other than BT. In general, these routes run between the least accessible points, to which communications providers have to date found it uneconomic to build out their networks. There is a greater likelihood of BT being able to abuse its market power on these routes.
- 8.34 For other routes, however, where there is a choice of a few communications providers, the Director considers that there is more competition. These tend to be routes between the larger cities, where communications providers have found it economic to build out their networks.
- 8.35 Thus there is a significant geographical variation in the level of competition present on different routes. One approach would be to define different routes (or groups of routes) as separate markets and conduct an SMP assessment for each. However, it would be difficult if not impossible to ascertain the precise degree of competition on a route-by-route basis at any one time, and this will change each time there are alterations in market conditions. Such changes in market conditions may be difficult to identify. It is also the case that a very large number of trunk routes exist (in excess of 2,000). Implementation of route-by-route market definitions is therefore likely to be inflexible over time and it is certainly impractical. In the Director's view, the issue of varying competitive conditions on trunk segment routes is better addressed by identifying proportionate remedies.
- 8.36 The Director is therefore proposing that application of a no undue discrimination condition should not prevent BT from engaging in discrimination, in the form of geographically de-averaged tariffs, ie charging different prices for trunk segments at different locations within its network or on different routes, provided that in doing so it did not discriminate between communications providers at the same location or on the same route or have a material adverse effect on competition.
- 8.37 The Director considers this to be a flexible regulatory solution tailored to the specific conditions operating in this market. It will prevent BT from entering into agreements with particular communications providers that would put their competitors at a disadvantage, whilst giving it the flexibility to offer competitive deals to all communications providers in parts of the country where greater competition prevails.

- 8.38 It could be argued that the Competition Act provides adequate provision to address allegations or gather evidence of discriminatory behaviour. However, the Director considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations. In addition, it allows the Director to place a greater emphasis on promoting competition (for example by restricting the ability of an SMP communications provider to foreclose segments of the retail market).
- 8.39 It might also be argued that a requirement not to unduly discriminate prevents BT from fully exploiting its economies of scale. If BT were able to discriminate, it would be able, when needed, to quote a lower price in order to attract sufficient numbers of customers to ensure that its infrastructure is utilised at full capacity. Although this is a valid consideration, the Director considers that it is far outweighed by the fact that in view of BT's position of SMP, it would also be able to use discrimination for other purposes less constructive than maximisation of capacity utilisation, and that this would have a harmful effect on competition. Furthermore, the Director's recommendation that BT be allowed to discriminate geographically in this market does provide BT with considerable additional flexibility for utilising its capacity efficiently.
- 8.40 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no *undue* discrimination. The Director has considered how he might treat undue discrimination in his Access Guidelines. The Guidelines note that any obligation with respect to undue discrimination has the objective of preventing behaviour that has a material adverse effect on competition. This does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Guidelines also note that in the Director's view, there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own retail activities or between others of its own activities would have a material adverse effect on competition (paragraph 3.9). This view would also apply to discrimination in relation to the underlying components of services.
- 8.41 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

Responses to previous consultation – no undue discrimination

- 8.42 In their responses, a number of communications providers suggested that the Director should remove the word "undue" from this condition. Those communications providers took some comfort, however, that the Director had stated in his Access Guidelines and elsewhere that there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own downstream business would have a material adverse effect on competition, and that such discrimination would be deemed undue unless the SMP communications provider proved the case otherwise. Non dominant communications providers asked the Director to include this interpretation in the condition which prohibits undue discrimination.
- 8.43 While the Director understands the concerns of BT's competitors, and recognises that effective control of anti competitive discrimination is an essential part of the ex ante regulatory framework, the Director does not believe it is appropriate or necessary to amend the condition to make reference to this interpretation. The Act, in transposing the requirements of Article 10 of the Access Directive, provides for the Director to impose conditions which, amongst others, prevent the dominant provider from discriminating "unduly". The Director's Access Guidelines make plain his interpretation of this concept, and this view is supported by the Access directive which states that obligations of non discrimination "shall ensure that ... the communications provider applies equivalent conditions in equivalent circumstances to other undertakings providing equivalent services, and provides services and information to others under the same conditions and of the same quality as it provides for its own services, or those of its subsidiaries or partners".
- 8.44 Communications providers also expressed some concern at the lack of visibility of BT's charges to BT Retail for wholesale inputs, in particular the mainlink. The Director notes that while BT is free to set pricing for trunk subject to an overall cost orientation requirement (see below), in order to comply with the non discrimination condition it must charge the same price to BT Retail as competitors are paying for equivalent services. The Director is likely to take seriously any complaint in this regard, and notes that potential remedies are available under the quality of service condition as well as the non discrimination and cost orientation conditions.

Conclusion on no undue discrimination

8.45 Having considered the consultation responses the Director proposes to impose condition H2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

- 8.46 The Director considers that the proposed condition meets the tests set out in the Act.
- 8.47 The Director has considered all the Community requirements set out in section 4. In particular, because it requires BT to provide the necessary access products on a non discriminatory basis, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the downstream markets. As BT has market power in the provision of wholesale trunk segments, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 8.48 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that this proposed condition is objectively justifiable, in that it provides safeguards to ensure that competitors, and hence consumers, are not disadvantaged by BT discriminating in favour of its own retail activities or between its own different activities. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in this market. It is proportionate since it only prevents discriminatory behaviour that has a material adverse effect on competition. Finally, it is transparent in that it is clear in its intention to ensure that BT does not unduly discriminate. In addition, the Director has given guidance as to how it might treat undue discrimination in his Access Guidelines.
- 8.49 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition, as it will ensure that other communications providers are able to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby addressing the goal of ensuring that services based on leased line components are provided throughout the UK (excluding Kingston upon Hull).

Wholesale trunk proposed regulation 3: Basis of charges obligations (cost orientation and a cost accounting system)

- 8.50 Section 87(9) authorises the setting of SMP services conditions imposing on the dominant provider rules concerning the recovery of costs and cost orientation.
- 8.51 BT is currently required to provide wholesale trunk segments at cost oriented prices, and to have in place appropriate cost accounting systems. These proposed conditions would maintain those obligations. The proposed cost accounting obligation is discussed in Chapter 10, along with justification for that obligation against the various regulatory tests.
- 8.52 As BT has been identified as having SMP in this market, the availability of wholesale trunk segments at cost oriented prices would ensure that communications providers were able to compete in the retail leased lines markets in such a way that it results in downward pressure on retail prices and provides the benefits of competition to customers.
- 8.53 It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, the Director considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers.
- 8.54 One possibly valid argument against a cost orientation condition is that it could potentially have an adverse effect on competition from other providers of trunk segments. Furthermore, as BT's market power in this market is less on some routes than in the symmetric broadband origination markets, the Director is conscious of the need to ensure that the proposed obligation does not discourage either existing competitors or future entrants.
- 8.55 If the condition is imposed, the Director intends to balance this need against the requirement to ensure that the level of input prices does not impede his objective of reducing the current excessive pricing in the retail leased lines markets. However, the Director recognises that this 'case by case' approach might potentially be less effective and less certain than a more rigorous application of cost orientation and that this could in itself discourage competition.
- 8.56 The Director believes, on balance, that the proposed condition provides sufficient flexibility to allow this balance to be struck in an appropriate way. He would hope that the condition effectively becomes a power in reserve, and that the pricing structures and levels set by BT achieve these objectives.

- 8.57 Having considered all the arguments, the Director believes that it is necessary to apply this obligation.
- 8.58 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.
- 8.59 The proposed condition sets out that the charges for services should be reasonably derived from the costs of providing those services. It further states that the costs must be calculated on a forward looking long run incremental cost approach, allowing an appropriate mark-up for the recovery of common costs including an appropriate return on capital employed.
- 8.60 The condition will apply across all services within this market. This means that the price of all services provided by BT in the market should be based on LRIC and allowing an appropriate mark-up for the recovery of common costs.
- 8.61 The Director confirms that all new services that are introduced into this market will also be covered by the same pricing rule. This is because new services in the same market would be expected to be subject to the same competitive conditions as existing services. This does not however mean that BT cannot recover costs appropriate to new wholesale services. The recovery of efficiently incurred costs for new wholesale services is discussed in Oftel's access guidelines.
- 8.62 Although this condition will apply to all services in this market, and the expectation is that the treatment of new services under the condition will be the same as for existing services, there may be occasional exceptions to this rule. This may arise where the new service is innovative and thus warrants a different regulatory approach. There are three ways in which such services can be dealt with.
- i) The service may be so innovative that it falls in a completely new and separate market. In this case the appropriate regulatory obligations will be determined by the Director following analysis of this new market.
- ii) The new service falls within the market but the Director determines that an alternative charging basis is appropriate. For example, a different charging basis may be appropriate for services offered during a trial.
- iii) The new service falls within the market and the cost orientation obligation is applied, but there might be a range of prices which would be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost oriented, the Director would consider whether the expected or achieved return on capital was excessive. In making this assessment, the Director

will need to take account of the risk of the new service failing and the lost investment that would result. This therefore maintains an appropriate incentive for the communications provider to invest in new services and technologies.

- 8.63 The proposed condition contains a clause enabling the Director to determine that a price need not be set on a forward-looking LRIC basis. This is particularly relevant to scenario ii) above where the Director determines that an alternative charging basis is appropriate. If BT wishes to set a price for a service in any of the markets on any other basis than forward-looking LRIC, it must apply to the Director for permission to do this.
- 8.64 The Director considers that the proposed cost orientation condition is justifiable and a proportionate response to the extent of competition in the markets analysed. It enables competitors to purchase services at a rate which will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing BT a fair rate of return which it would expect in a competitive market. The potential for a degree of flexibility envisaged in the approach to the recovery of cost of capital recognises that some investments will carry a higher degree of risk than others and does not remove incentives for the development of new services.

Responses to previous consultation – basis of charges obligations

- 8.65 BT asks the Director to clarify the position on Tier 1 / main link pricing. The Director confirms that the words "the Dominant Provider shall apply the amounts set out in Annex B to this schedule in a manner to be agreed from time to time with the Director" in this condition do take account of and maintain the current approach to PPC main link pricing applying at 25 July 2003, where there is a split at the Tier 1 node level between the trunk and symmetric broadband origination elements.
- 8.66 The Director is of the view that it is appropriate to amend slightly the condition proposed in the April consultation document to clarify the application of the forward looking long run incremental cost approach to each charge. In the Director's view, the wording proposed in the April consultation document left room for some confusion.
- 8.67 Accordingly, the first paragraph has been amended to read:
- "...based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.

- 8.68 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition H3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.
- 8.69 The third paragraph has been amended to read
- ".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.
- 8.70 Communications providers do not believe prices should be de-averaged, for a number of reasons. Firstly, they state that BT will be able to raise prices in most areas, since no competition exists, leading to a loss of welfare for consumers in rural areas. The Director notes that BT will be subject to a cost orientation obligation which takes precedence. BT will not, therefore, be able to raise prices unless it is consistent with costs in that area.
- 8.71 Secondly, communications providers suggest that entry will be deterred by insufficient returns to justify expenditure of build, and by the belief that BT will engage in predatory pricing in response to entry. The Director notes that predatory pricing is illegal, and that Oftel/Ofcom has powers to address predatory pricing under the Competition Act.
- 8.72 Thirdly, communications providers suggest that the Director will find it impossible to determine whether BT's charges overall are cost oriented, and it will be difficult for individual routes. The Director points out that he has the necessary powers to obtain relevant cost information as and when required.
- 8.73 Fourth, communications providers state that wholesale trunk prices are too recent for there to be market stability de-averaging will create further uncertainty. They also state that the Tier 1 node pricing structure is too recent communications providers are only now altering their networks in response. The Director notes that the current trunk segment prices were set by BT, not the Director. Further, he has set out above the importance of not preventing de-averaging, if BT wishes to do so and can justify prices consistent with its obligations, given the potential for significant variations in competitive conditions between routes.
- 8.74 Fifth, communications providers state that geographically averaged prices encourage BT to be efficient on competitive routes, and spread this efficiency (together with prices) nationally. The Director acknowledges that geographically averaged prices in general can have the advantage referred to. However, in the circumstances of the trunk segments market the Director considers that it is more important to reflect in the remedies the potential for geographical variation in competitive conditions.

8.75 Finally, communications providers suggest that de-averaging will undermine the coherence of a national market definition. The Director responds that the market definition is not based on uniform national pricing. The market was defined absent regulation, so this argument is irrelevant.

Conclusion on basis of charges obligations

8.76 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D. The Director recognises the concern of communications providers that the condition gives too much freedom to BT and that the effect of this will be to dampen competition in downstream markets. There is a balance to be struck here. Giving more freedom to BT will have the effect of intensifying competition on certain routes, which is beneficial to the end user. The Director believes that he has struck the balance appropriately. Nevertheless, the Director will be alert for unwanted effects of this approach and will propose corrective measures, if it proves necessary.

Communications Act tests

- 8.77 The Director considers that the proposed condition (Condition H3 in Annex D) meets the tests set out in the Act.
- 8.78 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. This is because excessively high pricing of wholesale inputs distorts allocation of resources and leads to inefficiency for retail competitors who may be forced into using less efficient alternative technologies. Ensuring that BT as the dominant provider is unable to charge excessive prices will therefore promote competition and thereby promote the interests of end users.
- 8.79 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that the proposed condition is an objectively justifiable and proportionate response to the extent of competition in the markets analysed, as it enables competitors to purchase services at charges that will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing BT a fair rate of return that it would expect in competitive markets. It does not unduly discriminate, as it is imposed on BT and no other communications provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that BT charges on a LRIC plus mark-up basis.

8.80 The Director considers that imposition of this condition satisfies section 88 of the Act since without it there is a relevant risk of adverse effects arising from price distortion by BT, which has SMP in this market, fixing and maintaining some or all of its prices at an excessively high level, so as to have adverse consequences for end users of public electronic communications services. The Director further considers in this connection that the condition is appropriate for the purposes of promoting efficiency and sustainable competition and conferring the greatest possible benefits on the end users of public electronic communications services.

Wholesale trunk proposed regulation 4: Accounting separation obligation

8.81 The Director is proposing to impose an accounting separation obligation in this market. This is discussed in Chapter 10, along with justification against the various regulatory tests. The precise wording of the proposed condition will be discussed in more detail in the separate accounting consultation document to be published by the Director in due course.

Wholesale trunk proposed regulation 5: Requirement to publish a reference offer

8.82 Section 87(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. Section 87(6)(d) also permits the setting of conditions requiring the dominant provider to include specified terms and conditions into the reference offer.

8.83 BT is currently obliged to publish prices, terms and conditions for PPCs in its Standard Interconnect Agreement. Under this obligation, BT would have to publish in respect of its wholesale trunk segment services the prices, terms and conditions in the form of a Reference Offer (RO) – the published RO must include:

- a clear description of the services on offer;
- terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable communications providers to make technical and commercial judgements such that there is no material adverse effect on competition;
- 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;
- conditions relating to maintenance and quality (service level agreement). 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; and

- terms and conditions that are fair and reasonable. This will ensure that
 products 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.
- 8.84 The proposed obligation prohibits BT from departing from the charges terms and conditions in the Reference Offer and requires BT to comply with any Directions the Director may make from time to time under the condition.
- 8.85 Requiring BT to publish prices, terms and conditions would help to create transparency in this market where BT has been identified as having SMP. Since wholesale trunk segments are an input for retail products, transparency is necessary to ensure competition in downstream (retail) markets.
- 8.86 It could be argued that an obligation to publish prices could lead to communications providers following BT's prices, rather than being dynamic in setting prices at the true competitive level. Buyers would not be able to exert so much power in the market as BT would be unable to offer bespoke deals. If the Director did not impose this obligation then BT would have more opportunity to respond to competitive pressures on the routes where these are greater.
- 8.87 However, the Director considers that imposition of this obligation is necessary to assist with the policing of potential vertical discrimination between downstream communications providers, including BT. It does not prevent BT from engaging in geographic discrimination between routes, as described above.
- 8.88 The proposed condition also requires BT to set out the allocation of cost to each network component used for the products and services supplied in this market. This will help the Director to monitor the effectiveness of the cost orientation and price control obligations, and to deal with any complaints about breaches of those obligations. This is discussed in more detail in Chapter 10.
- 8.89 The Director therefore considers that a price publication obligation should be put in place. This accords with Article 9 and with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.
- 8.90 This obligation will ensure that communications providers, end users and others are able to put to the Director fully justified and objectively reasoned complaints of anti-competitive behaviour by BT, and to obtain redress where appropriate.
- 8.91 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of

handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

Responses to previous consultation – publication of reference offer

- 8.92 Communications providers suggest in their combined response that BT should be required to publish the equivalent of a reference offer for services provided to itself. They point out that this will provide transparency and allow the Director to determine whether BT is discriminating in favour of its own downstream businesses.
- 8.93 The Director notes that the proposed condition H4 does already require BT to publish a reference offer in relation to the network access that it provides to itself, where the manner of provision differs from that detailed in its reference offer for other communications providers. The Director would expect the former to contain, amongst other things, full details of the service provided, together with details of network components and usage factors, in equivalent language to that used in its reference offer to other communications providers, in order that proper comparisons can be made.
- 8.94 In addition, the Director has put in place several performance measures and reports in this market which, amongst other things, will provide information on BT's standards of service in delivery of PPCs to communications providers and equivalent circuits to its retail arm. The Director considers that these will be of additional benefit to communications providers in establishing whether any discrimination is taking place. In addition, the Director will of course give appropriate consideration to any allegations of anti-competitive behaviour in this area.
- 8.95 In its response, BT raises some questions about the list of network components attached at Annex A to the conditions in the first consultation document. This list is being considered in detail in the review of regulatory financial reporting obligations. The document *Financial reporting obligations in SMP markets* (dated 22 May 2003) consulted on that list of network components, and the list is subject to change. Therefore, the Annex containing the list of network components has been removed from the draft conditions for this second consultation, and the definition of network components has been amended to read "as specified in any Direction of the Director from time to time for the purpose of these conditions".
- 8.96 The final notification and explanatory statement on regulatory financial reporting obligations will contain a draft direction to implement a new network component list based on the ongoing review. The draft direction will be subject to

consultation and hence interested parties will have an opportunity to comment on the Director's proposals with respect to network components.

- 8.97 This means that, for present purposes, the dominant provider is not yet required to publish charges and transfer charges for network components as part of its reference offer, as no network components have yet been specified by the Director. However, once the anticipated direction setting out the list of network components is finalised, the obligation to publish this information will enter into effect.
- 8.98 BT also states that it is inappropriate for internal transfer charges to be published as part of the reference offer. The Director considers that this is necessary to ensure that BT's competitors have visibility of the prices BT Retail is paying for the services it receives on an ongoing basis, in order to ensure that the condition preventing undue discrimination is being adhered to. Retrospective publication in BT's statement of regulatory accounts would be insufficient in this context. The publication of transfer charges in BT's reference offer will impose little if any additional burden on BT, since the charges would otherwise have needed to be prepared (albeit at a later date) for publication in its regulatory accounts, and BT will need to be aware of them in order to ensure that it is complying with its obligations.
- 8.99 Finally, BT states that conditions G5.2(h), H4.2(h), G5.2(j), H4.2(j), G6.4(f) and H5.3(f) appear to be PSTN related conditions which it does not consider applicable to PPCs. The Director agrees that details of traffic and network management, measures to ensure compliance with requirements for network integrity, and the relevant network tariff gradient are not relevant for this review and they have been removed from the proposed condition.

Conclusion on requirement to publish a reference offer

- 8.100 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.
- 8.101 The text of the condition which the Director proposes to impose is substantially the same as that contained in the April consultation document. The numbering of what is now paragraph H4.3 has been changed, and the transitional arrangements specified in paragraphs H4.4 and H4.5, relating to the dates on which the new Reference Offer should be published and updated, have been changed to reflect the uncertainty about the actual date on which the condition will come into force.

Communications Act tests

- 8.102 The Director considers that the proposed condition (Condition H4 in Annex D) meets the tests set out in the Act.
- 8.103 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with the requirement not to discriminate unduly, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers, by making BT's contractual terms more transparent. It promotes the interests of purchasers of wholesale trunk segments services by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions. It also promotes competition in the wholesale trunk segments market by allowing BT's competitors in the provision of wholesale trunk segments services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, so ensuring competition in the downstream markets.
- 8.104 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it requires that terms and condition are published in order to encourage competition and provide stability in markets by providing transparency of BT's prices, terms and conditions, thereby allowing communications providers to better plan their businesses and customer relationships. It is proportionate, as only information that is necessary to ensure that that there is no material adverse effect on competition is required to be provided. It does not unduly discriminate as it is applied to BT and no other provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that BT publishes details of its terms and conditions.
- 8.105 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on leased lines in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale trunk proposed regulation 6: Requirement to provide notification of changes to prices, terms and conditions

8.106 Section 87(6)(b) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the

Director may direct, the terms and conditions on which it is willing to enter into an access contract (eg: by publication of a reference offer).

- 8.107 BT is currently required to give advance notification of price changes for certain products as part of its Standard Interconnect agreement (one day for competitive products, 28 days for prospectively competitive products and 90 days for non competitive products). This condition would maintain an obligation to provide notification of changes to prices, terms and conditions of wholesale trunk segments.
- 8.108 BT has been identified as having SMP in this market. The Director considers that a requirement to notify prices terms and conditions for new products, and changes to prices terms and conditions for existing products, will make that information more easily accessible to the Director and allow him to take prompt action in the event of a complaint or own initiative investigation into the prices terms or conditions. It will also enable the Director to monitor BT's performance against its non discrimination obligation.
- 8.109 It could be argued that it would be unnecessarily onerous to require BT to provide advance notification of new products or changes to existing products, leading to a 'chilling' effect where communications providers follow BT's prices rather act dynamically to set competitive prices. The Director agrees that for this market, where BT's market share is not as great as that in the symmetric broadband origination market, the costs of requiring BT to provide advance notice of such information are likely to outweigh the benefits.
- 8.110 However, the Director considers that there are distinct advantages in requiring BT to provide same-day notification. It will allow the Director to keep up to date with changes to BT's wholesale trunk segments products, and in addition it will give to those communications providers who use BT's trunk segments products as wholesale inputs the scope to make appropriate adjustments to their retail product range.
- 8.111 The Director has therefore concluded that it would be most appropriate to require BT to provide same-day notification of the prices, terms and conditions for new products and changes to the prices, terms and conditions of existing products, for its wholesale trunk segments.
- 8.112 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

8.113 As noted above, the Director considers that transparency obligations, which include notification of prices, accord with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.

Responses to previous consultation – same day notification

- 8.114 A number of responses from communications providers signalled disagreement with the Director's proposal for same day notification of changes to prices, terms and conditions. The group of communications providers requested a 28 day notification period, to allow them to identify anti-competitive behaviour before it could have a detrimental effect on consumers and competition. Energis requested a 90 day notification period, while Easynet was satisfied with same day notification for prices but requested longer notice for changes to terms and conditions.
- 8.115 As noted above, given that advance notification of changes does facilitate price following, whether or not competitors chose to price follow, the Director believes that in this market the risks of advance notification outweigh any benefits.

Conclusion on same day notification

- 8.116 The Director proposes to require BT to publish and notify amendments and new charges, terms and conditions on the day that those amendments or new charges, terms and conditions come into force. This option provides a degree of certainty that all tariffs, terms and conditions will be published and offers the benefits of notification for monitoring purposes without facilitating price following.
- 8.117 As the Director believes BT has SMP in this market, a price publication and notification obligation is needed to provide Oftel and competitors with visibility of possible anti competitive behaviour.
- 8.118 The Director proposes to include a power to disapply the condition by consent where, for example, BT has notified the Director that for a limited period it is not making the services publicly available while it assesses the technical or commercial viability of the service.

Communications Act tests

8.119 The Director considers that the proposed condition (Condition H5 in Annex D) meets the tests set out in Section 47 of the Act. The justification for imposing the condition is that general and reliable visibility of a dominant

communications provider's prices is needed to enable the Director and competitors to monitor BT's prices for possible anti competitive behaviour. Imposition of this condition does not discriminate unduly against BT as it is the only communications provider in the market with SMP; the behaviour of other communications providers is not capable of having a materially adverse effect on competition as these communications providers do not have market power. The remedy is proportionate, as it is the least burdensome means of achieving the objective of transparency, and the requirement is made fully transparent in Annex D.

- 8.120 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with transparency, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers. It promotes the interests of purchasers of wholesale trunk segments services by enabling them to adjust their downstream offerings in competition with BT, in response to changes in BT's terms and conditions by informing them of when those changes are going to occur, thereby allowing them to better plan their businesses and relationships with their customers. It also promotes competition in the wholesale trunk segments market by allowing BT's competitors in the provision of wholesale trunk segments services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, thereby ensuring competition in the downstream markets.
- 8.121 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers have access to transparent information that enables them to make effective use of wholesale inputs and offer products based on leased lines in competition with BT In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Wholesale trunk proposed regulation 7: Obligation to provide quality of service information

- 8.122 Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. The condition proposed by the Director in Annex D requires BT to publish such information in the manner and form required by the Director.
- 8.123 This obligation would require BT to publish certain information relating to the quality of the service it delivers in providing wholesale trunk segment products. The condition would have the potential to deliver benefits in a number of areas, most notably prevention of undue discrimination. Other benefits might

include, for example, benchmarking with international comparators in situations where BT delivers a similar quality of service to all communications providers including itself, but this level of service falls short of the service generally offered in comparable countries, most notably within the EU.

- 8.124 The principle of no undue discrimination is intended to ensure that communications providers with SMP do not distort competition. As noted in Recital 17 of the AID, the application of this principle is particularly important where a vertically integrated communications provider, with market power in a particular wholesale market, supplies services to other communications providers with whom they compete in a downstream retail market.
- 8.125 Section 87(6)(a) of the Communications Act allows the Director to impose a no undue discrimination condition on a dominant provider where there has been an SMP determination in an identified market. The no undue discrimination condition set out in Annex D requires the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with network access.
- 8.126 It might be argued that a dominant communications provider should meet a no undue discrimination condition by providing wholesale services to other communications providers using the same operational processes and interfaces it uses to supply itself. However, the high cost of replacing legacy systems means that this will not always be practical. Instead, the Director considers that the most objectively justifiable and proportionate means of meeting a no undue discrimination condition is to require that a dominant communications provider deliver the same operational performance to other communications providers as it delivers to itself. Specifically, this means that Key Performance Indicators (KPIs) such as ordering times and fault response times must be the same.
- 8.127 The Director believes that the only means of ensuring that there is no undue discrimination as to quality of service is by imposing a requirement to publish such information. Without such a requirement, the Director believes that it would be impossible to monitor that the different operational processes used by the dominant communications provider were delivering an equivalent quality of service.
- 8.128 The Director believes that it is insufficient to rely on requesting the necessary quality of service information each time it is required, as suggested in paragraph 3.51 of Oftel's Access Guidelines. In the absence of an *ex ante* obligation to do so, there is no guarantee that the necessary information will be collected at the time of any given event. It is not in general possible to reconstruct data for operational performance retrospectively.
- 8.129 The Director therefore concludes that this obligation should be imposed. As explained in Chapter 6, the Director is minded to conclude that CSH and ISH

interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

- 8.130 The specific condition set out in Annex D proposed by the Director would require BT to publish data on a specified set of KPIs, with a format and frequency to be determined by Oftel. This condition follows section 87(6)(b)) which allows the Director to impose a condition of transparency whereby the Director can require a dominant provider to publish all such information as directed by him to secure transparency in relation to matters such as non-discrimination.
- 8.131 It is the Director's intention that the scope of publication should take account of the potential conflict between any obligation to publish performance data, in order to provide transparency, and the need to maintain commercial confidentiality.
- 8.132 For most market reviews, the Director set out his proposals for the specific KPIs to be covered by the proposed condition, as well as the publication process and frequency, in a separate Consultation Document issued on 11 July 2003 see www.oftel.gov.uk/publications/eu_directives/2003/kpis0703.htm. The Director intends to issue draft Directions for consultation later this year.
- 8.133 For this market, however, the issues have recently been addressed in some detail by the recently published PPC Phase 2 Direction, and the Director proposes to re-make the majority of those measures by means of a Direction under this condition which will apply only to trunk segments where they form part of PPCs. This is discussed in detail in the section "Direction under quality of service information condition requiring BT to provide specific information in respect of PPCs", below. The draft Direction made under this proposed transparency condition takes the Access Guidelines into consideration as appropriate.
- 8.134 Implementation of this regulation is in line with the Commission's SMP Guidelines, which state at paragraph 119 that "in the early stages of the new framework, the Commission would not expect NRAs to withdraw existing regulatory obligations which have been designed to address legitimate regulatory needs which remain relevant, without presenting clear evidence that those obligations have achieved their purpose and are no longer required since competition is deemed to be effective". It will enable the Director to make Directions requiring BT to publish specific quality of service information.

Responses to previous consultation – quality of service information

- 8.135 Some communications providers noted in their responses that they had observed asymmetries between the forecasting processes and SoR processes applicable to BT Retail and those applying for other communications providers.
- 8.136 The Director discusses the latter in the section below relating to requests for new network access. In general, however, he considers that if there are complaints in future from communications providers about discrepancies of this nature, it is likely to be appropriate to investigate them under the non discrimination condition.

Conclusion on provision of quality of service information

8.137 Having considered the consultation responses the Director proposes to impose condition H6 in Annex D. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

- 8.138 The Director considers that the proposed condition meets the tests set out in the Act.
- 8.139 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of securing the maximum benefit for the persons who are customers of communications providers and of persons who make such facilities available. It promotes competition and thereby the interests of end users in downstream markets, by denying BT as the dominant provider in this market the opportunity to discriminate in the quality of service it provides to customers.
- 8.140 It is the Director's current view that the transparency condition proposed in this consultation satisfies the relevant requirements specified in the Act (as referred to above). In particular, the Director has considered the duty to promote competition. In addition, the Director considers that
- The condition is objectively justifiable because it is the only means of
 ensuring that a dominant communications provider provides an equivalent
 quality of service to other communications providers as it provides to itself.
 This is necessary in order to prevent a vertically integrated communications
 provider, with market power in a particular wholesale market, leveraging this
 into a downstream market.
- The condition does not unduly discriminate against a particular person because it applies to the dominant provider in circumstances where there has been an SMP determination. In the case of the dominant provider, the supply

- of wholesale services must be in sufficient volume for the publication of KPI data to be statistically meaningful.
- The condition is proportionate to what it is intended to achieve because the
 dominant provider will only be required to publish data on a small number of
 KPIs representative of key business processes, rather than a complete set of
 KPIs, covering all aspects of operational performance.
- The condition provides transparency in relation to what it is intended to achieve because the objective of the condition relates to the problem identified in the market, and inter alia it is aimed at ensuring nondiscrimination specifically in relation to the quality of service provided by the dominant provider in respect of its key business processes.

8.141 In addition, the Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. Overall, given the potential for the development of alternative facilities in the current market, the Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on leased lines in competition with BT. It will also assist monitoring of BT's compliance with a non discrimination condition. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK by enabling communications providers to compete on comparable terms with BT at the retail level.

Wholesale trunk proposed regulation 8: Requirement to publish technical information

8.142 Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency.

8.143 Under the proposed Condition 'Requirement to publish a reference offer', BT will be obliged to publish a Reference Offer for Network Access, which amongst other things, contains a description of the Network Access to be provided, including technical characteristics; the location of the points of Network Access; and technical standards for Network Access. That Condition sets out that a reference offer, or amendments to that reference offer, must be published on the day of commencement or amendment. However, the proposed Condition 'Requirement to publish technical information' sets out additional obligations to publish new technical information 90 days *in advance* of entering into a contract to provide the new Network Access, or amendments to existing technical terms

and conditions 90 days before those amended terms and conditions come into effect.

- 8.144 As set out above, the information to be published under this Condition comprises new or amended technical characteristics (including information on network configuration where to necessary to make effective use of the Network Access), 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.
- 8.145 The proposals in this Condition are important to ensure that communications providers to whom Network Access is being provided by BT are able to make effective use of that Network Access. Changes to technical information must be published in advance so that communications providers have sufficient time to prepare. For example, a competing provider may have to introduce new equipment or modify existing equipment to support a new or changed technical interface. Similarly, a competing provider may need to make changes to their network in order to support changes in the points of network access or configuration.
- 8.146 The Director's view is that 90 days is the minimum time that competing providers will need to modify their network to support a new or changed technical interfaces or support a new point of access or network configuration. Therefore, the Director proposes that in the market for wholesale trunk segments, BT must publish any new or modified technical characteristics, points of network access and technical standards not less than 90 days in advance of either BT entering into a contract to provide new Network Access or making technical changes to existing Network Access, unless the Director consents otherwise.
- 8.147 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

Responses to previous consultation – provision of technical information

8.148 A number of communications providers commented that a blanket 90 days may not be appropriate in all circumstances. Some changes may need a longer period with proper consultation through the NICC, for example BT's current proposed roll out of Media Gateways and Telephony Servers. In addition, it was argued that 90 days is unlikely to be sufficient time for communications providers to make material changes to their network, particularly where they need to obtain

additional interconnect circuits from BT. As a solution, some communications providers proposed a pre-notification period of 30 days, during which objections could be raised and a full consultation and review instigated if necessary.

- 8.149 In the Condition 90 days is the minimum requirement. However, in order for BT to meet its obligations under SMP Condition 1 (Requirement to provide Network Access on reasonable request), the Director considers that longer periods of notification may be appropriate in certain circumstances. SMP Condition 1 would require BT to 'provide the Network Access requested' and 'on fair and reasonable terms'. Therefore, if there were a major change to BT's terms and conditions, for which the minimum 90 day notification was allowed but which had the consequence that communications providers were unable to make use of the Network Access provided, then BT might, depending on the circumstances, be in breach of its obligation to provide the Network Access.
- 8.150 The Director notes that the BT Interconnect Contract already provides for longer notification periods for major "System Alterations" and changes such as the closure or modification of a switch and agrees that BT should continue to use longer notification periods for these major changes.
- 8.151 For other major changes, the Director considers that consultation with industry through the NICC would continue to be the best way for BT to meet its obligations in relation to the provision of Network Access on fair and reasonable terms. Therefore, the Director considers that the onus is on BT to ensure that it provides longer notification and, where appropriate, consults on major changes so that it complies with its Network Access condition as well as the technical notification condition.
- 8.152 If communications providers considered that a technical change notified by BT was not consistent with its requirements to provide Network Access on fair and reasonable terms, then they would, as always, have the option of referring a dispute to the Director for resolution, or of making a complaint regarding breach of an SMP condition.
- 8.153 BT proposed that the minimum necessary notification period should be 28 days where the equipment is designed to international or industry standards and that 90 days should only apply in the rare cases where non-standard equipment is used. This was to reflect that proprietary, network communications provider specific specifications are a thing of the past and that the time to market for telecommunications services has been drastically reduced.
- 8.154 Although the Director agrees that standardised interfaces are now much more common, even where a standardised interface is used, the Director would consider it unusual for a period of 28 days to be appropriate. This is because even where standardised equipment is available, implementation of a new interface in 28 days is unlikely to be practicable and reasonable. For example,

even where standardised equipment is available, this would still require procurement, installation and testing. The Director does however retain the option of consenting to shorter notification periods in exceptional circumstances.

8.155 BT suggests that the wording of paragraphs G8.4(c) and H7.4(c) is not compatible with conditions G8 and H7 respectively. The Director confirms that the paragraphs are compatible. The phrase "at that person's written request" is designed to mean that any person can ask to be added to BT's mailing list for notification of technical information. It does not mean that such person can obtain the relevant information prior to the 90 day notification period, unless BT wishes to provide it earlier.

Conclusion on requirement to provide technical information

8.156 Having considered the consultation responses the Director proposes to impose condition H7 in Annex D, which requires a minimum of 90 days for provision of technical information. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

- 8.157 The Director considers that the Condition meets the tests set out in the Act. The Director in proposing the Condition has considered all the Community requirements in section 4 and in particular the requirement to promote competition and to encourage service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefits for consumers by ensuring that providers have sufficient notification of technical changes to BT's network to enable them compete.
- 8.158 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it enables competing communications providers to make full and effective use of Network Access. It does not unduly discriminate in that it is imposed on BT and no other communications provider has SMP in this market. It is proportionate in that 90 days is the minimum necessary to allow competing providers to modify their networks. It is transparent in that it is clear in its intention that BT should notify technical information as set out above.
- 8.159 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with BT. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK. By requiring BT to provide advance notification of technical changes,

communications providers will be able to better plan their businesses and relationships with their customers.

Consultation on interfaces

- 8.160 Current regulation on BT (licence condition 15) includes a requirement to consult on interfaces where so directed by the Director. This was to ensure that BT could not impose unnecessary costs on competing communications providers by specifying a proprietary interface.
- 8.161 However, the Director recognises that communications providers are constrained in their choice of interface by the standardised nature of most communications equipment. In addition, the Director believes that the scope for further modifications to traditional PSTN equipment, where BT was most likely to be able exert control over interface specifications, is likely to be limited in the future, as communications providers and equipment manufacturers increasingly look to other technologies.
- 8.162 Therefore, the Director now considers it unlikely that BT would be able to exert control over interfaces in a way that could have an adverse effect on competition. Consequently, the Director does not believe that imposing a condition requiring consultation on interfaces would be proportionate.

Wholesale trunk proposed regulation 9: Obligations relating to requests for new network access

- 8.163 This condition is set in accordance with sections 87(3) and 87(5) as detailed above in relation to the condition relating to the provision of network access.
- 8.164 The Director's previous consultation invited comments on his proposals for regulation of the statement of requirements ("SOR") process. The Director stated that if regulation of the SOR process were necessary, the following obligations would be worth considering:
- (a) the publication of reasonable guidelines on requesting a new product;
- (b) the provision of information for the purpose of making a request for a new product; and
- (c) a process for dealing with requests for new products.
- 8.165 The SOR process forms part of BT's obligation to provide Network Access in all markets in which it has SMP. The SOR process and associated timescales are the same in all of these markets. In revising the proposed condition, the Director has therefore taken account of comments provided in response to consultations on other markets, notably the Fixed narrowband wholesale exchange line, call origination, conveyance and transit markets review:

explanatory statement and notification, published 26 August 2003 ('the narrowband statement').

8.166 Responses to the Director's proposals (and the Director's comments on those responses) in the April consultation document and those received in connection with the narrowband statement are set out in Chapter 6.

Revisions to the proposed condition

A. Publication of reasonable guidelines on requesting a new product

8.167 Condition H.1 would oblige BT to publish the required content and form of a request for new Network Access. In view of comments received, the Director considers that it is appropriate to require BT to produce reasonable guidelines on requesting new Network Access. The Director believes that such guidelines will contribute to an efficient process by ensuring that BT receives accurate product descriptions in the necessary detail and give requesting communications providers confidence that requests are handled in a fair and consistent manner. The Director considers that BT should consult with the Director and relevant third parties before finalising the initial version of these guidelines to ensure that the quidelines meet the reasonable needs of stakeholders. The Director would expect BT to make the proposed guidelines publicly available and to engage with stakeholders as appropriate to enable them to contribute to the development of the final guidelines. The Director also considers that BT should finalise the initial auidelines within two months of the date the condition enters into force. In addition, BT would be obliged to keep these guidelines under review and consult with relevant third parties and the Director before making any amendments.

B. Provision of information for the purpose of making a request for a new product

8.168 The Director proposes that BT, on receipt of a reasonable request, should be required to supply sufficient technical and network information to enable third parties to construct proposed product specifications that are efficient and meet their reasonable requirements. The Director would require that the information should be supplied within a "reasonable timescale". If a dispute were to arise about timescales, the Director would consider what is reasonable on a case-by-case basis, taking into account the complexity of the information request.

8.169 The Director considers that BT should not refuse access to any such information on the basis of confidentiality, although BT may require a nondisclosure agreement. BT has argued that it may be constrained in its ability to supply information to requesting operators due to confidentiality agreements with its suppliers. While the Director appreciates that there may be certain circumstances where BT finds itself constrained, communications providers will obviously be concerned that by signing confidentiality agreements with suppliers,

BT can effectively deny access to its network. The Director considers that in signing confidentiality agreements BT must consider its obligations to meet all reasonable requests for access and to provide information to requesting operators. If necessary, BT should review confidentiality agreements with its suppliers.

- 8.170 Section 87(4)(e) of the Communications Act requires the Director to take account of, inter alia, any relevant intellectual property ("IP") rights in considering whether it is proportionate to mandate or attach conditions to an access obligation. The Director recognises that IP rights will protect some types of information, but where that information is essential to allow BT's competitors to request and make use of reasonable access products, the Director would expect BT to explore whether such information could be made available and protected with nondisclosure agreements.
- 8.171 As set out in the Access Guidelines, in the event of a dispute about the provision of information, the Director will identify IP rights on a case-by-case basis. The Director notes, however, that:
 - the information must be secret, identified (recorded) and substantial; and
 - IP includes patents, know-how, and software copyright

C. Process for dealing with requests for new products

- 8.172 Amendments have been made to the proposed condition in respect of the process for dealing with requests for new products. The following is a summary of the proposed process:
 - BT must acknowledge receipt of the request within five working days (Condition H.5).
 - BT must give a first written response to the request at the latest within 15 working days of its receipt (Condition H.6). At this stage, it is envisaged that the response will not be an initial offer of terms and conditions, although nothing would preclude such a response at this stage. If the request is not adequately formulated, the Director would expect BT and communications providers to be able to discuss constructively how a request should be formulated, and this should be covered in BT's guidelines. If the request is refused on the basis of specified objective criteria or the need to maintain network integrity, BT shall detail its reasons for refusal. If the request is sufficiently well formulated BT shall state either that the initial offer of terms and conditions will be prepared, or that a feasibility study will be required (and objective reasons why a feasibility study is required). BT should also at this stage confirm preparation of a timetable for the agreement of technical issues (Condition H.6).

- Rejection BT may reject a request on the grounds that it is not reasonable, is not technically feasible, requires BT to provide something which is not within its power to provide, or would compromise the integrity of BT's network. Oftel has set out, in the Access Guidelines (at paragraph 2.28), the procedure it intends to use to resolve disputes about what is a 'reasonable request' for Network Access. Oftel considers that a request is unreasonable if it imposes an undue burden on BT, ie BT would be unable to recover its costs of providing the requested access.
- Where no feasibility study At the latest, 35 working days after receipt of the request, BT must provide an initial offer of terms and conditions and timetable for new Network Access and the resolution of technical issues (Condition H.7).
- Where, BT has said that no feasibility study is required but, due to a
 genuine error of fact, BT decides after 15 days that a feasibility study is
 reasonably required, it may inform the requesting party within 35 working
 days that a feasibility study is required (Condition H.8) and give objective
 reasons why the study is required. The Director expects that this condition
 will apply in limited circumstances only, and generally BT will be required
 to decide whether a feasibility study is required within 15 working days.
- Where feasibility study is undertaken At the end of 60 working days, BT must be able to respond fully to the majority of requests for new Network Access (Condition H,9). The condition allows provision for this time to be extended to 85 working days, where, despite using its best endeavours, BT is unable to complete the feasibility study within 60 working days or when BT and the requesting operator agree that more time is needed. The Director does however acknowledge that in certain circumstances, BT might reasonably require even more time to respond fully to a request. Such circumstances might include multiple or conflicting requests from different providers, extremely complex requests covering a number of different technologies areas or requests requiring wider industry consultation. The condition therefore includes provision for the overall deadline to be extended to over 85 working days, with the agreement of the requesting party, or with the Director (Condition H.11).

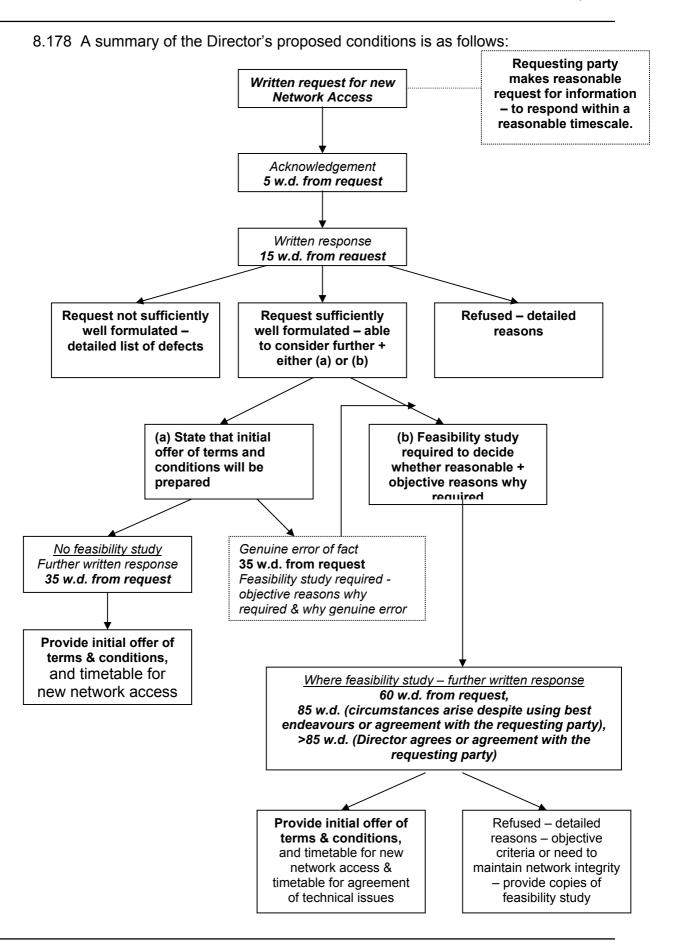
8.173 Where BT wishes to extend the 60 day deadline to 85 working days (Condition H.10), it is for BT to show that circumstances exist which prevent it from responding to the request within 60 working days

Communications Act tests

8.174 The Director proposes to impose this condition pursuant to section 87(3) and 87(5) of the Act. Specifically, under section 87(5)(a) the Director considers that the provisions of this condition will help to secure fairness and

reasonableness in the way in which requests for Network Access are made and responded to, by adding clarity and robustness to the process. In addition, under section 87(5)(b) he considers that the proposed provisions will help to secure that the obligations contained within the condition are complied with, within the reasonable periods and at the times set out in the proposed condition.

- 8.175 The Director has considered the matters set out in section 87(4). In particular, under section 87(4)(d) he considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as reductions in delays in provision of new products will ensure that communications providers are able to make effective use of BT's network in competition with BT.
- 8.176 The Director has also considered the test for setting conditions set out in section 47 of the Act, namely that the condition is objectively justifiable, does not unduly discriminate, is proportionate and transparent. The Director considers that his proposed condition meets these tests. In particular, it is objectively justifiable in the light of the deficiencies in the current process which lead to the delays and lack of clarity discussed above. It would not discriminate unduly against BT because BT has been found to have a position of SMP in this market and is therefore able to exploit this position to the potential detriment of its competitors both in this market and in downstream markets. The condition is proportionate since without it being put in place, BT's competitors would continue to experience problems of the nature already described. Furthermore, it is transparent in its intention to ensure that BT has a reasonable process for dealing with requests for new Network Access.
- 8.177 Finally, the Director, in imposing this condition, has considered all the Community requirements set out in section 4 of the Communications Act. In particular, under section 4(8) the Director considers that the provisions help secure efficiency and sustainable competition in the markets in this review. They help to ensure efficiency and sustainable competition by enabling other communications providers to make effective use of BT's network in order to offer their own products.



Wholesale trunk proposed regulation 10: Direction under general access obligation to supply PPCs subject to specific terms and conditions

- 8.179 The Phase I PPC Direction implemented specific obligations which have led to changes in BT's contract for PPCs. BT is now providing PPCs at various bandwidths on specified terms and conditions in accordance with the PPC Directions. The conditions set out by the Director in these two Directions have been transposed into the contract between BT and other communications providers.
- 8.180 These Directions will only apply to the extent that BT provides a PPC which contains an element of a product or services which falls within the wholesale trunk segment market.
- 8.181 This proposed Direction would be made under the general access obligation in the wholesale trunk market, if imposed. The Direction would require BT to provide PPC type products, upon reasonable request. It would specify regulations for PPCs, which would carry forward the existing PPC requirements brought into force by the PPC Directions, as set out within sub-sections below. The Director considers that it is necessary to carry forward the appropriate existing PPC-specific regulation. The arguments in favour of such regulation are set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.
- 8.182 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed below) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.
- 10A: Technical and paper migrations and migration issues
- 8.183 The Director is proposing to require BT to migrate any retail circuits to PPCs providing the retail circuits were installed before 23 December 2002. This includes retail circuits requiring technical modifications that may have been carried out after 1 August 2001. The Director is also proposing charges for migration.

10B: ISH extension

8.184 The Director is proposing to require BT to provide an ISH extension product as specified in the draft Direction set out in Annex E, on a non discriminatory and cost oriented basis.

10C: PPC variant of Genus circuits

8.185 The Director is proposing to require BT to provide a Genus variant 1 PPC.

10D: Forecasting requirements and revisions and forecasting penalties

8.186 The Director is proposing to require BT to set out its forecasting requirements and penalties as specified in the draft Direction set out in Annex E. This will ensure that appropriate penalties are imposed by BT and will maximise the flexibility for adjustment of forecasts from one period to the next.

10E: STM-1 ISH and CSH handover

8.187 The Director is proposing to require BT to provide STM-1 point of handover ISH and CSH products at non discriminatory and cost oriented prices.

10F: Service Level Agreement

8.188 The Director is proposing to require BT to offer a comprehensive service level agreement covering ordering, supply and repair of equipment and circuits, in order to ensure the following:

- lead times for delivery and repair which are in keeping with European best practice;
- adequate compensation payments which reflect potential losses and provide a proper incentive for BT to act efficiently;
- clarity in the processes for ordering and provisioning avoiding the scope for misunderstanding and inefficient behaviour;
- adequate measures for dealing with the disparities in market position between BT and other communications providers; and
- clauses which reduce ambiguity and strengthen certainty for communications providers.

Responses to previous consultation – PPC Direction

8.189 Communications providers suggest additional penalties for delays by BT in the processing of migration orders. They also recommend some changes to the detail of the service level agreement requirements.

8.190 The Director considers that the introduction of this regulation is too recent for amendments of this nature to be made at this stage. In the Director's view, the regulation should be allowed to "bed in" for a reasonable period of time before an objective assessment can be made of BT's performance and consideration can be given to whether any additional or amended measures are necessary. The regulation was drafted following careful and detailed consideration of opposing arguments, including those now being made by communications providers, on a range of highly complex issues, and the Director

does not consider that the position has changed since the making of the Direction to the extent that such amendments are warranted.

- 8.191 Communications providers suggest the inclusion of an additional paragraph in relation to forecasting penalties. However, the provisions of this proposed paragraph will no longer be relevant by the time this consultation has concluded and the final statement has been published.
- 8.192 Communications providers suggest that the internal BT forecasting regime should be made visible to the Director. The Director notes that BT is subject to a proposed condition which prevents undue discrimination, and he would expect BT to apply the same processes to internal requests from BT Retail as it does to those from communications providers. At this stage however, he does not consider it necessary to require visibility of BT's internal forecasting regime. Nevertheless, the Director would expect BT to have such information available, should there be the need to investigate a complaint.
- 8.193 Energis notes some differences between the wording of the proposed Direction and that of the "PPC Direction". However, in all the circumstances outlined by Energis there is no difference in the wording of the two Directions. Some confusion may have arisen from differences in nuance between the wording of the PPC Phase II Direction and the wording of the accompanying explanatory document. The Director is satisfied that the wording of the PPC Direction most closely matched his intentions in all these instances, and therefore does not propose to make any amendment to the proposed Direction.
- 8.194 In relation to 'Qualifying BT Retail Private Circuits' cited in paragraph 4 of the draft Direction, BT asks how the Director will treat the words 'Schedule 2 Public Operators' and 'non-Schedule 2 Public Operators' from the Phase 2 PPC Direction. The Director confirms that the effect of paragraph 4 is to carry forward the rights of migration given to communications providers who were, at the time of publication of the Phase 2 PPC Direction, Schedule 2 or non-Schedule 2 Public Operators, as appropriate.
- 8.195 BT suggests that the definition of a Partial Private Circuit should be amended to include the definition of PPCs set out in the Director's March 2001 Direction. The Director does not, however, propose to amend this definition at this time, for the reasons set out in paragraph 8.193 above.
- 8.196 BT proposes amendments to the reduced requisite period and expedited order requirements, citing varied industry needs. However, as stated above, the Director considers that the introduction of this regulation is too recent for amendments of this nature to be made at this stage. In the Director's view, the regulation should be allowed to "bed in" for a reasonable period of time before an objective assessment can be made of BT's performance and consideration can be given to whether any additional or amended measures are necessary. The

regulation was drafted following careful and detailed consideration of opposing arguments, including those now being made by BT, on a range of highly complex issues, and the Director does not consider that the position has changed since the making of the Direction to the extent that such amendments are warranted.

8.197 BT suggests a more practical measurement period for reduced requisite period, being BT's reporting periods rather than a three month billing period. The Director accepts the practicality of this suggestion and has amended the Direction accordingly.

8.198 BT states that 'Third Party Links' should not be included as network infrastructure, since it would pay compensation under circuit compensation for delays in delivery. The Director considers that it is to communications providers' advantage to implement this change, since if Third Party Links are to be treated as part of the associated circuit for the purposes of the Service Level Agreement then BT will be obliged to deliver them in the relevant circuit delivery times set by the Director, which are in all cases shorter than those previously proposed for Third Party Links. The Director therefore accepts BT's clarification.

8.199 Finally, the Director highlights that he has made slight adjustments to the forecasting bandwidth groupings in paragraph 11 of the proposed Direction, to take account of the fact that the regulation needs to be split in line with the low and high bandwidth TISBO markets (since a trunk segment is generally ordered with a terminating segment, rather than in isolation). The bandwidth groupings for this purpose are now:

- less than 1Mbit/s:
- 1Mbit/s through to 2Mbit/s;
- above 8Mbit/s through to 45Mbit/s: and
- 155Mbit/s.

8.200 As a consequence of this, the requirements previously set out in paragraph 18 of the proposed Direction have been modified – see Annex E for details

Conclusion on PPC Direction

8.201 Having considered the consultation responses the Director proposes to impose the Direction under condition H1 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on, other than the changes outlined above.

Communications Act tests

8.202 Justification against the tests in the Act is set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Wholesale trunk proposed regulation 11: Direction under cost orientation condition covering certain pricing matters relating to PPCs and LLU backhaul

8.203 The Phase I PPC Direction implemented specific obligations which have led to changes in BT's contract for PPCs. BT is now providing PPCs at various bandwidths on specified terms and conditions in accordance with the PPC Directions. The conditions set out by the Director in these two Directions have been transposed into the contract between BT and other communications providers.

8.204 This proposed Direction would be made under the cost orientation condition for the wholesale symmetric broadband origination market, if imposed. The Direction would require BT to provide certain PPC and LLU backhaul products and services according to certain pricing conditions. It would carry forward existing PPC requirements brought into force by the PPC Directions, as set out within sub-sections below. The imposition of price controls for PPCs is considered separately above. The Director considers that it is necessary to carry forward the appropriate existing PPC-specific regulation. The arguments in favour of such regulation are set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

8.205 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point of handover ISH and CSH products discussed above) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

11A: Charges for capacity on third party customer infrastructure

8.206 The Director is proposing maximum charges for connection of subsequent PPCs where a third party already has a PPC connected to third party customer infrastructure which was in situ before 1 August 2001.

11B: Charge for change of speed or interface

8.207 The Director is proposing a maximum charge for changes of speed or interface at a wholesale level.

11C: Charges for reclassification of BT Retail Private Circuits

8.208 The Director is proposing a maximum reclassification charge in connection with migrated circuits.

- 11D: Charges for failed migration orders
- 8.209 The Director is proposing a maximum charge for failed migration orders.
- 11E: Infrastructure tariff conversion charges
- 8.210 The Director is proposing conditions and maximum charges relating to infrastructure tariff conversion.

11F: Equipment re-use

8.211 The Director is proposing to require BT to make equipment re-use at the third party customer end available to communications providers at cost oriented prices, so that they can re-use either their own or other communications providers' equipment, at the same or a different site, either immediately or after a reasonable period. This will avoid unnecessary duplication of resources and reduce potential barriers to entry.

11G: Cost orientation of LLU backhaul prices

8.212 The Director is proposing that charges for LLU backhaul services should be consistent with the charges applicable to those elements which are common to LLU backhaul and PPCs.

Responses to previous consultation – Direction on cost orientation issues

- 8.213 Communications providers suggest that the Director should give consideration to the extension of equipment re-use to include re-use at the POC end.
- 8.214 The Director set out in the PPC Phase 2 Direction that in his view, it would not be proportionate to require BT to permit re-use of equipment at the POC end for four main reasons, namely:
 - that re-use of POC equipment was likely only in the comparatively rare event of closure of a POC site;
 - that end customer churn results in B end shifts or installation of new PPCs, thereby requiring only third party end re-use at most;
 - that only one communications provider had requested re-use at the POC end; and
 - that re-use of third party equipment would be much easier to implement as it happens more often, it does not often require physical shifting of equipment, and equipment requirements are more consistent.
- 8.215 The Director considers that the majority of these reasons still apply. He notes that a number of communications providers are now requesting POC equipment re-use to assist them with the reorganisation of their networks

following the Tier 1 breakpoint decision, but does not consider that this is an indication of longer term demand for POC end re-use that is a necessary pre-requisite for development of this potentially comparatively expensive facility. The Director considers that appropriate investment decisions are more likely to be created by maintenance of the existing situation. Notwithstanding this, if communications providers provide BT with a persuasive and reasonable case for POC end re-use at some point in the future, the Director would expect BT to give the issue proper consideration in accordance with Oftel's Access Guidelines at that time.

8.216 BT suggests in relation to paragraph 6 that the migration date should not be extended to 24 July 2003 but should remain at 23 December 2002. The Director considers that this paragraph should be maintained on an open-ended basis in order to deal effectively with new wholesale products introduced by BT at some point in the future – third parties should, in the Director's opinion, be able to migrate to such products within a reasonable period without incurring any penalty.

Conclusion on Direction under cost orientation condition

8.217 Having considered the consultation responses the Director proposes to impose the Direction under condition H3 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

8.218 Justification against the tests in the Act is set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Wholesale trunk proposed regulation 12: Direction under quality of service condition requiring BT to provide specific information in respect of PPCs

8.219 BT is obliged by the PPC Phase II Direction to provide various information in respect of PPC quality of service. This proposed Direction would be made under the proposed Quality of Service condition discussed above, and would carry forward the bulk of this regulation.

8.220 The Director considers that it is necessary to carry forward this regulation. The arguments in favour of such regulation are set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

8.221 As explained in Chapter 6, the Director is minded to conclude that CSH and ISH interconnection services (including the ISH extension and STM-1 point

of handover ISH and CSH products discussed above) can be considered as a technical area related to the markets where the Director has initially found SMP. The Director therefore intends to apply this condition also to the technical areas outlined in Chapter 6.

8.222 BT would be obliged to publish on its website in an easily accessible form quarterly statistics on its performance with respect to Committed Delivery Dates, Requisite Periods, Reduced Requisite Periods, FOC Receipt Intervals, repair, availability of service and reasons for "stopping the clock". These statistics shall include BT's performance with respect to its retail arm, and with respect to each communications provider. The information with respect to communications providers shall be presented in such a way that the identity of a communications provider cannot easily be worked out from that information.

8.223 BT would also be obliged to publish quarterly statistics on its performance with respect to the list of information below, by reference to:

- all communications providers (aggregated); and
- each communications provider (separately). The information with respect to communications providers shall be presented in such a way that the identity of a communications provider cannot easily be worked out from that information.

8.224 Order expedite related

 Percentage of a communications provider's previous month's orders having Committed Delivery Dates quoted within 50% of Requisite Periods, for applicable circuits only

8.225 Ordering and Provisioning times

- number and percentage of instances where communications provider exceeds FOC Acceptance Interval for circuits, split by bandwidth;
- number and percentage of instances where communications provider exceeds FOC Acceptance Interval for network infrastructure;
- average amount by which communications provider exceeds FOC Acceptance Interval for circuits, split by bandwidth;
- average amount by which communications provider exceeds FOC Acceptance Interval for network infrastructure;
- number and percentage of order rejections for circuits;
- number and percentage of order rejections for network infrastructure;
- list of reasons for order rejection; and
- list of reasons for any Committed Delivery Dates being over 10 working days later than the relevant requisite periods.

8.226 Fault management

- mean response time for circuits and network infrastructure;
- new installation fault report rate for circuits; and
- list of reasons for faults.

Responses to previous consultation – Direction on service quality issues

8.227 BT notes that three reports previously identified as being required 'on request' have now been included as part of the regular reporting package. It suggests that the 'significant costs' involved in preparing them may not be justified by clear benefits.

8.228 The Director does not consider that BT will incur significant additional cost in producing these reports on a regular basis compared with the cost involved in having the mechanisms in place to produce the reports upon request from the Director. The Director considers that the reports would be better published on a regular basis, than held in reserve. BT will presumably have noted that the Director, partly in the interests of balance, has removed altogether the previous requirement for having certain other reports available for production on request.

8.229 BT also notes that there may be confidentiality issues for communications providers, raised by the requirement to publish anonymised reports on its website. The Director notes BT's concerns and suggests that if communications providers also have concerns about this measure they should respond to this consultation accordingly.

Conclusion on Direction under quality of service condition

8.230 Having considered the consultation responses the Director proposes to impose the Direction under condition H6 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

8.231 Justification against the tests in the Act is set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Wholesale trunk proposed regulation 13: Direction under general access condition requiring BT to provide RBS backhaul links

8.232 This would involve requiring BT to provide particular types of trunk segments, known as RBS backhaul circuits, upon request. Such links are used by mobile phone companies to connect their radio base stations to their networks. A RBS backhaul circuit provides transparent transmission capacity at a range of bandwidths, typically N*64kbit/s and 2Mbit/s between a mobile communications provider's premises and a point of connection with a communications provider's applicable system connected to an appropriate BT

Synchronous Digital Hierarchy node. The Direction would be made under the general access obligation proposed for the wholesale trunk market.

8.233 The Director considers that it is necessary to carry forward this regulation. It should be noted that the proposed requirements have been merged into a single draft Direction under the access obligation, along with requirements for BT to provide PPCs and LLU backhaul.

8.234 The arguments in favour of such regulation are set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Responses to previous consultation - Direction on RBS backhaul circuits

8.235 BT suggests that the Director has not identified a relevant retail market or shown that the relevant retail market (BT cites mobile calls and/or access) is not effectively competitive and that the proposed measure is proportionate and necessary to stimulate competition in the relevant market to the benefit of end users. BT notes the Director's proposed conclusion in the review of the mobile markets, that there is no SMP in the wholesale access and call origination markets. BT suggests that the Director has carried out insufficient analysis, and that the Director should not carry over a Direction that has not yet been finalised.

8.236 The Director points out that, since the submission of BT's comments and prior to 25 July 2003, the Direction requiring supply of RBS backhaul circuits was finalised. The Director confirms that in his opinion, sufficient analysis has been carried out in relation to this proposed measure. The basis for intervention is concern about excessive charges and the potential for adverse effects on consumers, not a distortion of competition in mobile access/calls.

Conclusion on Direction requiring provision of RBS backhaul circuits

8.237 Having considered the consultation responses the Director proposes to impose the Direction under condition H1 set out in Annex E. This Direction remains in broadly the same terms as the Direction previously consulted on.

Communications Act tests

8.238 Justification against the tests in the Act is set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Wholesale trunk proposed regulation 14: Direction under general access condition requiring BT to supply LLU backhaul

8.239 Under the LLU backhaul Direction (*Final direction on LLU backhaul services*, 8 August 2002), BT is currently obliged to provide backhaul on reasonable terms (including service level agreements and compensation), at cost oriented prices and at prices consistent with PPCs.

8.240 As discussed in the backhaul Direction, backhaul is a similar product to PPCs and therefore consistency of approach is needed. The Director's market definitions have reflected the close links between backhaul and PPC products. Leased line backhaul links and PPC symmetric broadband origination are also defined as being in the same market.

8.241 This Direction would be made under the general access obligation proposed for the wholesale trunk market. The Director considers that it is necessary to carry forward this regulation. It should be noted that these proposed requirements have been merged into a single draft Direction under the access obligation, along with requirements for BT to provide PPCs and RBS backhaul.

8.242 The arguments in favour of such regulation are set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Communications Act tests

8.243 Justification against the tests in the Act is set out in the section proposing this regulation for the wholesale symmetric broadband origination market, in Chapter 6.

Wholesale trunk market: Conclusion on proposed regulation

8.244 The Director has concluded that if BT has SMP in this market, the following regulatory measures should be imposed:

8.245 Conditions

- 1. a general obligation to provide access on reasonable request;
- 2. requirement not to unduly discriminate;
- basis of charges obligations (cost orientation and a cost accounting system);
- 4. accounting separation obligations;
- 5. requirement to publish a reference offer;
- 6. same day notification of changes to prices, terms and conditions;
- 7. requirement to provide quality of service information;

- 8. requirement to publish technical information with 90 days' notice; and
- 9. obligations relating to requests for new network access.

Draft conditions of entitlement reflecting these preferred options are primarily set out in Annex D. Draft cost accounting and accounting separation conditions are set out in a separate consultation document on accounting issues.

8.246 Directions

- a Direction under the general access condition to provide PPCs at a range of bandwidths, RBS backhaul link products, and LLU backhaul products, subject to specific terms and conditions;
- a Direction under the cost orientation condition covering pricing matters relating to PPCs and LLU backhaul; and
- a Direction under the quality of service condition to require specific information in respect of PPCs.

Draft Directions reflecting these preferred options are set out in Annex E.

8.247 The proposed obligations for these markets are broadly similar to those currently applying, other than additional obligations relating to requests for new network access. The Director considers that the proposed measures are sufficient and proportionate given that, although BT has SMP in the market for wholesale trunk segments, it is in a context of a degree of competition rather than complete market power. The Director must ensure that regulation in this market promotes competition, rather than acting as a substitute for competition, and that remedies imposed do not act as a disincentive to other communications providers in the market to proactively compete with BT.

Chapter 9

Regulatory remedies – proposed SMP services conditions and Directions for Kingston

Introduction

- 9.1 This chapter sets out the proposed remedies for the wholesale and retail leased lines markets in Kingston upon Hull, which the Director considers generally to be a distinct geographical area (see Chapter 2 and Annex A). This chapter sets out the effect of, and the Director's reasons for making, proposals to set SMP services conditions in these markets, and explains how certain tests in the Act are satisfied.
- 9.2 The proposed conditions in respect of Kingston are attached to the Notification in Annex D of this document.
- 9.3 The Director has identified the following leased lines markets in Kingston upon Hull. The explanations for these market definitions are set out in Chapter 2 and Annex A.
- retail low bandwidth traditional interface leased lines (up to and including 8Mbit/s) – this incorporates the minimum set of retail leased lines up to and including 2Mbit/s identified by the Commission;
- wholesale low bandwidth traditional interface symmetric broadband origination ("TISBO") (up to and including 8Mbit/s);
- wholesale high bandwidth traditional interface symmetric broadband origination ("TISBO") (above 8Mbit/s up to and including 155Mbit/s); and
- wholesale alternative interface symmetric broadband origination ("AISBO").
- 9.4 Although the Director has considered traditional interface retail leased lines at bandwidths above 8Mbit/s and alternative interface retail leased lines during his analysis, he does not consider it necessary to formally identify (for the purposes of section 79 of the Act) retail markets covering such products, as he considers that regulation at the wholesale level is sufficient to meet regulatory requirements.
- 9.5 The Director explains in Annex A that in Kingston upon Hull, he does not consider there to be either a separate wholesale trunk segments market or (currently) any markets for very high bandwidth traditional interface leased lines. In Annex B, the Director sets out his reasons for proposing that Kingston Communications should be designated as having SMP in all of the above markets other than retail high bandwidth traditional interface leased lines (the Director agrees with the Commission that any problems in the high bandwidth retail leased lines market should be dealt with by means of regulation at the wholesale level, rather than at the retail level).

- 9.6 The existing obligations applicable to the retail traditional interface leased lines markets in Hull are as follows:
- obligation to supply;
- price publication;
- price notification;
- non discrimination; and
- cost orientation, including a cost accounting system.
- 9.7 The existing obligations applying in the wholesale traditional interface symmetric broadband origination markets in Hull are as follows:
- obligation to offer wholesale leased line interconnection;
- non discrimination;
- cost orientation;
- accounting separation;
- publication of prices, terms and conditions;
- advance notification of prices, terms and conditions for new products;
- advance notification of changes to prices of existing products; and
- requirement to publish technical information.
- 9.8 Section 87(1) of the Act provides that where Ofcom has made a determination that a person is dominant in the market reviewed, they shall set such SMP conditions as they consider are appropriate and as are authorised in the Act. This implements Article 8 of the Access Directive. At paragraphs 21 and 114 of the European Commission's Guidelines on market analysis and SMP state that this means that Oftel must impose one or more SMP conditions on a dominant provider. Furthermore, the European Commission states that the imposition of no SMP conditions on a dominant provider would be inconsistent with the new regime. Thus, Ofcom (or Oftel in the interim period) is under a mandatory obligation to impose at least one appropriate SMP condition on a dominant provider.
- 9.9 The SMP conditions which may be set can be summarised as follows:
- (a) the provision of network access (Article 12 of the Access Directive, sections 87(3) and 87(5) of the Act);
- (b) no undue discrimination (Article 10 of the Access Directive, section 87(6)(a) of the Act);
- (c) transparency (Article 9 of the Access Directive sections 87(6)(b) and (c) of the Act);
- (d) accounting separation (Article 11 of the Access Directive, section 87(7) of the Act);
- (e) pricing, including, in particular, price controls (Article 13 of the Access Directive, section 87(9) of the Act);
- (f) regulatory controls on retail markets (Article 17 of the Universal Service Directive, section 91 of the Act);

- (g) regulatory controls with respect to leased lines (Article 18 of the Universal Service Directive, section 92 of the Act); and
- (h) conditions with respect to carrier selection and pre-selection (Article 19 of the Universal Service Directive, section 90 of the Act).

These conditions are relevant to this review and Oftel is required to assess which of these obligations are appropriate.

- 9.10 The Director has also acted in accordance with the duties set out in section 4 of the Act. All of the conditions proposed by the Director will promote competition by helping to implement the EC Directives referred to above and by assisting with the development of the European internal market. In addition, each individual proposed condition fulfils one or more of the other duties set out in section 4, as set out in the discussion of the conditions below.
- 9.11 The Director considers that the proposed conditions satisfy the tests set out in section 47 of the Act. They are objectively justifiable, in that they relate to the need to ensure that competition develops to the benefit of consumers. They do not discriminate, in that any provider of electronic communications networks, services or associated facilities can request access from the dominant provider. They do not discriminate against Kingston because Kingston has been found to hold a position of SMP in these markets, and as such is in a particular position to exploit its advantages were this regulation not to be implemented. They are proportionate, since Kingston has SMP in these markets and these products might not be made available on fair and reasonable terms in the absence of the conditions. The proposed conditions are set out in a transparent form in Annex D, so that the Director considers that they meets the requirement of transparency set out in the Act.

Minimum set of retail leased lines in Kingston upon Hull

- 9.12 In the light of the above considerations, the Director examined in the previous consultation the following options for future regulation in the market for retail low bandwidth traditional interface leased lines:
- 1. obligation to supply the minimum set of retail leased lines;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation and cost accounting); and
- 4. requirement to publish a reference offer (obligation to publish current prices, terms and conditions).
- 9.13 These options were considered only for the minimum set of retail leased lines identified by the Commission, ie retail leased lines up to and including 2Mbit/s. The Director agrees with the Commission that any problems in the high bandwidth retail leased lines market should be dealt with by means of regulation at the wholesale level, rather than at the retail level. With regard to 8Mbit/s traditional interface leased lines, which (together with the minimum set of leased lines) form part of the low bandwidth market, no leased lines of this bandwidth

have been sold in the Kingston upon Hull area and therefore the Director does not need to consider any regulatory options.

9.14 The Director undertook a regulatory option appraisal of these options, concluding that taken together they formed an appropriate response to the degree of SMP existing in this market. Responses to the first consultation have confirmed the Director's opinion on the appropriate regulation for this market. Note, however, that the requirement to publish information concerning delivery and repair times is now being set out in a separate condition, for reasons that are explained in the relevant sections

Kingston minimum set of retail leased lines proposed regulation 1: Requirement to provide the minimum set of retail leased lines

- 9.15 The Universal Service Directive states that NRAs must ensure that organisations with SMP provide the minimum set of retail leased lines. The minimum set has been defined in the Commission Decision 2003/548/EC of 24 July 2003, as meaning leased lines of bandwidths up to and including 2Mbit/s.
- 9.16 As Kingston has been found to have SMP, the Director must impose a general obligation to supply.
- 9.17 Implementation of this obligation fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. Kingston will be required to provide these products irrespective of the purpose for which they are to be used.

Conclusion on requirement to provide

9.18 Having considered the consultation responses the Director proposes to impose condition I1 in Annex D, which requires Kingston to provide the minimum set of retail leased lines. This condition remains in the same terms as the condition previously consulted on. The Director is not amending the class of persons ("Third Parties") to whom such circuits can be provided (as he is for the wholesale symmetric broadband origination markets – see proposed regulation 1 in subsequent section), since retail leased lines should be made available to any person reasonably requesting them.

Communications Act tests

- 9.19 The Director considers that the proposed condition meets the tests set out in the Act.
- 9.20 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition promotes the interests of

consumers, particularly businesses, since Kingston is dominant in this market, and in the absence of supply by Kingston business consumers may find themselves unable to obtain retail leased lines.

Kingston minimum set of retail leased lines proposed regulation 2: Requirement not to unduly discriminate

- 9.21 Annex VII of the Universal Service Directive states that NRAs must ensure that organisations with SMP "apply similar conditions in similar circumstances to organisations providing similar services, and are to provide leased lines to others under the same conditions and of the same quality as they provide for their own services, or those of their subsidiaries or partners, where applicable."
- 9.22 As Kingston has been found to have SMP, the Director must impose a non discrimination obligation.

Conclusion on no undue discrimination

9.23 Having considered the consultation responses the Director proposes to impose condition I2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

- 9.24 The Director considers that the proposed condition meets the tests set out in the Act.
- 9.25 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition protects business consumers by ensuring supply on equal terms to all parties. As Kingston is dominant in this market, it is in a position where in the absence of this condition it would be able to discriminate on the terms of retail leased lines between different parties.
- 9.26 This regulation will also promote competition in retail leased lines by preventing Kingston from discriminating in ways which are anti-competitive, eg by de-averaging its prices in such a way that barriers to entry for competitors are created.

Kingston minimum set of retail leased lines proposed regulation 3: Basis of charges obligations (cost orientation and cost accounting)

9.27 Annex VII states that "National regulatory authorities are, **where appropriate**, to ensure that tariffs for leased lines referred to in Article 18 follow the basic principles of cost orientation. To this end, national regulatory authorities are to ensure that undertakings identified as having significant market power

pursuant to Article 18(1) formulate and put in practice a suitable cost accounting system." (emphasis added)

- 9.28 The Director has therefore considered whether it is appropriate to impose a cost orientation and associated cost accounting obligation for Kingston's low bandwidth traditional interface retail leased line products. It might be argued that such an obligation is unnecessary, since other communications providers have shown little or no interest in competing in this market.
- 9.29 However, the Director is not proposing to apply the same level of regulation in the markets for symmetric broadband origination in Kingston upon Hull as he is imposing in the remainder of the UK where PPCs have been made available, for the reasons outlined below. The Director therefore considers that it is important to impose a cost orientation obligation at the retail level.
- 9.30 The proposed cost accounting obligation is discussed in Chapter 10, along with justification for the obligation against the various regulatory tests.
- 9.31 The Director considers that imposition of a cost orientation condition will minimise the risk of adverse effects arising from price distortion that would occur if Kingston were to fix and maintain some or all of its prices at an excessively high level. Thus the condition will help to promote efficiency and sustainable competition.

Responses to previous consultation – cost orientation

- 9.32 Kingston stated in its response that it was "not convinced" that a cost orientation condition in this market is necessary or proportionate, since in its view the market is at least contestable, and arguably prospectively competitive.
- 9.33 The Director sets out in Chapter 3 and Annex B his view that this market is neither contestable nor prospectively competitive. In the Director's view, Kingston clearly has SMP in this market and a cost orientation condition is therefore both necessary and appropriate.

Conclusion on cost orientation

9.34 The Director is of the view that it is appropriate to amend slightly the condition proposed in the April consultation document to clarify the application of the forward looking incremental cost approach to each charge. In the Director's view, the wording proposed in the consultation document left room for some confusion.

- 9.35 Accordingly, the first paragraph has been amended to read:
- "......allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.
- 9.36 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition I3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.
- 9.37 The third paragraph has been amended to read
- ".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.
- 9.38 Having considered the consultation responses, the Director's current view is that a condition should be imposed in this market in the slightly amended form set out in Annex D.

Communications Act tests

- 9.39 The Director considers that the proposed condition (Condition I3 in Annex D) meets the tests set out in the Act.
- 9.40 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition protects business consumers by ensuring that the product they are purchasing is cost oriented. A cost accounting system is a necessary adjunct to a cost orientation condition, since it makes it easier for the Director to enforce it.

Kingston minimum set of retail leased lines proposed regulation 4: Requirement to publish a reference offer

- 9.41 Annex VII of the Universal Service Directive states that NRAs must ensure that information on "technical characteristics", "tariffs" and "supply conditions" is easily accessible for the set of leased lines defined in the Universal Service Directive. As Kingston has been found to have SMP, the Director must impose a transparency obligation. Kingston will be obliged to publish its prices, terms and conditions for low bandwidth products.
- 9.42 Kingston will be obliged to publish information on technical characteristics which includes physical and electrical characteristics as well as the detailed

technical and performance specifications which apply at the network termination point.

9.43 Kingston will be obliged to publish tariffs which include initial connection charges, periodic rental charges and other charges. Thus, for example, the individual connection and rental charges for a circuit must be unbundled. Where tariffs are differentiated, this must be indicated. Where Kingston considers it unreasonable to provide a leased line under its published tariff and supply conditions, it must seek the agreement of the Director to vary those conditions in that case.

Conclusion on requirement to publish a reference offer

- 9.44 Having considered the consultation responses the Director proposes to impose condition I4 in Annex D, which requires Kingston to publish a reference offer. This condition remains in the same terms as the condition previously consulted on, except that:
- (a) the Director has made a slight modification so that it falls closer in line with the wording in Annex VII of the Universal Service Directive; and
- (b) he has also transferred the requirement to publish information concerning delivery and repair times into a separate condition, for the reasons set out in the relevant conditions for BT contained in Chapter 5.

Communications Act tests

- 9.45 The Director considers that the proposed condition meets the tests set out in the Act.
- 9.46 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition gives business consumers information, so that they can establish that the terms and conditions on which they are purchasing the services do not discriminate against them. This in turn assists the policing of compliance with the non discrimination obligation, allowing the Director to tell more easily if discrimination is taking place.
- 9.47 The condition also promotes competition in retail leased lines. Clarity of the product makes it easier for switching to take place. In addition, the condition ensures that competitors know the specifications of Kingston's products and the terms and conditions to which it must adhere, thereby making it easier for them to offer competing services.
- 9.48 It is possible that transparency requirements can lead to price following, thereby discouraging vigorous price competition. However, the Director believes that Kingston's market power in this market is so extensive that the benefits of imposing this obligation are likely to outweigh any possible costs of this nature.

Kingston minimum set of retail leased lines proposed regulation 5: Requirement to publish information concerning delivery and repair times

9.49 As discussed in the previous section, Kingston will be obliged by this condition to publish supply conditions, including at least information concerning the ordering procedure, the contractual period, and any refund procedure. Justification against the Communications Act tests is set out in the previous section.

Responses to previous consultation – general comment on retail leased lines obligations in Hull

9.50 Kingston accepts in its response that "at the retail level there is probably some need for service obligations to be imposed". It also states its understanding that there is a need to ensure that a minimum set of retail leased lines is delivered in the Hull area, and that consequently it accepts the proposals with respect to obligation to supply, requirement not to unduly discriminate, and to publish a reference offer.

Kingston minimum set of retail leased lines: Conclusion on proposed regulation

- 9.51 The Director has concluded that Kingston has SMP in the provision of the minimum set of retail leased lines, and that as a consequence the following regulatory measures should be imposed:
- 1. obligation to supply the minimum set of retail leased lines;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation and cost accounting);
- 4. requirement to publish a reference offer (obligation to publish current prices, terms and conditions); and
- 5. requirement to publish information concerning delivery and repair times. Draft conditions of entitlement reflecting these preferred options are set out in Annex D.
- 9.52 The Director is not proposing to apply any regulation to the retail high bandwidth or very high bandwidth markets. Thus there is a withdrawal of the regulation currently applying to leased lines in these markets. In addition, the Director is proposing less regulation for the retail low bandwidth market than currently exists. The Director's proposals for the retail markets reflect his intention to deal with problems at the retail level by means of regulation at the wholesale level, where possible and appropriate.

Wholesale traditional interface symmetric broadband origination markets in Kingston upon Hull

- 9.53 At the wholesale level, the Director examined in the previous consultation the following options for the traditional interface symmetric broadband origination ("TISBO") markets, in which Kingston has been designated as having SMP:
- 1. no ex ante regulation;
- 2. a general access obligation to supply wholesale symmetric broadband origination products upon request;
- 3. requirement not to unduly discriminate;
- 4. basis of charges obligations (cost orientation);
- 5. requirement to publish a reference offer:
- 6. requirement to publish technical information; and
- 7. additional wholesale obligations.
- 9.54 The Director undertook a regulatory option appraisal of these options, concluding that options 1 and 7 were an inappropriate response to the degree of market power existing in this market. Responses to the first consultation have confirmed the Director's opinion on the appropriate regulation for this market, and consequently this document discusses only the remaining options.
- 9.55 Any SMP conditions to be imposed must comply with the various tests set out in section 87(4) of the Communications Act as applicable. The Director must also bear in mind the duties set out in section 4 of the Act.
- 9.56 In particular, each SMP condition must pass the test set out in section 47 of the Act, namely that each condition must be:
- (a) objectively justifiable in relation to the networks, services or facilities to which it relates:
- (b) not such as to discriminate unduly against particular persons or a particular description of persons;
- (c) proportionate to what the condition is intended to achieve; and
- (d) in relation to what it is intended to achieve, transparent.
- 9.57 It is the Director's current view that the conditions proposed in this consultation satisfy the relevant requirements specified in the Act, as discussed in detail in the following paragraphs.

Kingston wholesale traditional interface symmetric broadband origination markets proposed regulation 1:

Requirement to provide network access on reasonable request

9.58 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant provider to provide network access as the Director 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 for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, the Director must have regard to the 6 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.

- 9.59 Kingston would be required under this obligation to supply low and high bandwidth wholesale TISBO products on reasonable request.
- 9.60 Kingston has been found to have SMP in these markets. This regulation would allow communications providers to negotiate innovative wholesale products which will enable them to compete in the retail markets, encouraging competition at the retail level. If the obligation were not imposed, Kingston would be able to deny access or impose unreasonable terms having a similar effect, thereby hindering the emergence of competitive retail markets for leased lines and other services which may rely on these inputs.
- 9.61 While formulation of specific obligations may from time to time be appropriate, either for the avoidance of doubt or in resolving a dispute, the Director proposes to rely as far as possible on the general obligation. This removes the need for the Director to specify the details of products to be supplied (which he is often not best placed to do), and provides a regime which is responsive to future market and technical developments. While the scope is broad, it is appropriately limited by the ability of Kingston to refuse any request which is unreasonable. (The Director's views on reasonableness in this context are set out in his Access Guidelines.) The Access Directive states in Article 12 that an NRA may impose access obligations where the denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end users' interest. If wholesale leased line products are made available to communications providers upon reasonable request, this will enable them to construct their own retail equivalent products, thereby increasing the level of competition at the retail level with benefits that will feed through to consumers.
- 9.62 It might be argued that reliance on a general obligation to provide access may require the Director to resolve multiple disputes on the provision of wholesale products. However, this appears to be unlikely since communications providers have to date expressed relatively little interest in competing in these markets, and because of this at the current time the Director does not have the information necessary to specify particular forms of access.
- 9.63 Reliance on the Competition Act for communications providers' general access requirements will, in the Director's view, be insufficient because of the

network-based nature of the industry, and would be inconsistent with the Director's objective of promoting competition.

9.64 The Director therefore considers that it is necessary to introduce a general access obligation for the Kingston upon Hull markets, to deal with new wholesale leased line products that may be required by communications providers in the future.

9.65 The words "fair and reasonable terms" would be interpreted by the Director as meaning, amongst other things, terms which did not lead to any sort of margin squeeze between wholesale and retail markets, since a margin squeeze is in effect a constructive refusal to supply, ie a refusal to supply on commercially viable terms. Thus there will be no need to introduce a specific condition to deal with such an eventuality. The condition will also through these words, incorporate a requirement to provide service level agreements and compensation for performance below standard.

9.66 Recital 6 of the Access Directive states that:

"in markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to secure...adequate access and interconnection and interoperability of services in the interests of end users."

9.67 The Director considers the wholesale symmetric broadband origination markets in Hull to be of this type because of Kingston's position of SMP, and in accordance with the Access Directive considers it necessary to ensure end-to-end connectivity by imposing proportionate obligations on undertakings that control access to end users.

9.68 Implementation of this obligation also fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. Communications providers will be able to use Kingston's wholesale TISBO products to provide services of their choice. Thus this measure is not linked to the activities of the party seeking interconnection of the degree of its investment in network infrastructure, and it consequently accords also with Recital 7 of the Access Directive. The Director does not consider that it is necessary to add this provision. The requirement to offer on fair and reasonable terms means that terms which would normally be offered in a competitive market should be offered. In the Director's view, this includes SLAs. Should Kingston bring forward an argument that a reasonable SLA is not required in the circumstances under consideration, the Director will consider the case on its merits.

Conclusion on obligation to provide network access

9.69 Having considered all the responses, the Director is of the view that it is appropriate to amend slightly both the Network Access condition and the definition of "Third Party" proposed in the April consultation document, to clarify the nature and extent of this obligation. Accordingly, the condition has been amended to read:

"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 the Director may from time to time direct".

- 9.70 The amendment is intended to make it clearer that the Dominant Provider must comply with the condition by providing Network Access that is the same as that which has been (reasonably) requested by the Third Party. The condition continues to include the power to make a direction about the provision of Network Access and the terms and conditions on which it is provided.
- 9.71 The Director does not propose to replicate the Annex II list to define entitlement to Network Access. This is because Annex II status flows from the Interconnection Directive 97/33/EC. The provisions of that Directive including the concept of Annex II status will fall. The concept of Annex II status will continue to exist for the purposes of any licence conditions continued for an interim period until the market reviews are completed and these new obligations are imposed. However, once these new obligations are imposed, Annex II status will not be relevant.
- 9.72 For the purposes of the Network Access condition, the definition of Third Party has been amended to the provider of a **public** electronic communications network or **public** electronic communications service (i.e. electronic communications networks which are provided wholly or mainly for the purpose of making electronic communications services available to members of the public; and electronic communications services that are provided so as to be available for use by members of the public). Accordingly, providers of non-public electronic communications networks or non-public electronic communications services will not be entitled to Network Access under the proposed condition. This maintains the status quo existing prior to these consultations.
- 9.73 Further guidance as to how the Director proposes to apply the Network Access obligation can be found in the Director's guidelines on imposing access obligations under the new EU Directives, dated 13 September 2002 (the "Access Guidelines") and the Directors guidelines for the interconnection of public electronic communications networks, dated 23 May 2003 (the "Interconnection Guidelines"). These guidelines can be found at

<u>www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm</u> and <u>www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm</u> respectively.

9.74 Having considered the consultation responses the Director's current view is that a network access condition should be imposed in these markets in the form set out at Annex D.

Communications Act tests

- 9.75 The Director considers that the proposed condition (Condition G1 in Annex D) meets the tests set out in the Act.
- 9.76 In the Director's view, this condition meets the tests set out in section 47 of the Act. The proposed condition is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. It is proportionate, since it is targeted at addressing the market power that Kingston holds in this market and does not require it to provide access if it is not technically feasible or reasonable. Finally, it is transparent in that it is clear in its intention to ensure that Kingston provides access to its network in order to facilitate competition.
- 9.77 The Director has considered all the Community requirements set out in section 4 of the Act. In particular, because it requires Kingston to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of ensuring efficiency and promoting competition in the downstream markets. As Kingston has market power in the provision of wholesale TISBO, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 9.78 In addition, the Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. In particular, it is fair and reasonable taking into account the investment made by Kingston in its network, which means that it is in a position to provide these products upon reasonable request. Further, the Director considers that by making wholesale products available to communications providers to enable them to compete at the retail level, the condition satisfies the need to secure effective competition in the long term and the desirability of securing that electronic communications services are provided that are available throughout the member States of the EC.

Kingston wholesale traditional interface symmetric broadband origination markets proposed regulation 2: Requirement not to unduly discriminate

- 9.79 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access.
- 9.80 The requirement not to unduly discriminate is intended, principally, to prevent dominant providers from discriminating in favour of their own retail activities and to ensure that competing providers purchasing wholesale products from the dominant provider are placed in an equivalent position to the dominant provider's retail arm.
- 9.81 Where dominant providers are vertically integrated, like Kingston, they may have an incentive to provide wholesale services on terms and conditions that favour their own retail activities, in a way that would have a material adverse effect on competition. In particular, they may charge competing providers more than the amount charged (through transfer charging) to their own retail activities for wholesale services, thereby increasing the costs of competing providers and giving themselves an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery timescales, which would disadvantage their retail competitors and in turn consumers.
- 9.82 In the absence of a non discrimination condition, the Director could be called upon to investigate alleged breaches of the Competition Act prohibition on anticompetitive agreements and abuse of a dominant position, and might be required to resolve successive complaints. Imposing an *ex ante* condition in this instance will reduce the potential regulatory costs emanating from multiple or successive complaints related to discrimination.
- 9.83 It could be argued that the Competition Act provides adequate provision to address allegations or gather evidence of discriminatory behaviour. However, the Director considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations. In addition, it allows the Director to place a greater emphasis on promoting competition (for example by restricting the ability of an SMP communications provider to foreclose segments of the retail market).
- 9.84 It might also be argued that a requirement not to unduly discriminate prevents Kingston from fully exploiting its economies of scale. If Kingston were able to discriminate, it would be able, when needed, to quote a lower price in order to attract sufficient numbers of customers to ensure that its infrastructure is utilised at full capacity. Although this is a valid consideration, the Director considers that it is far outweighed by the fact that in view of Kingston's position of SMP, it would also be able to use discrimination for other purposes less

constructive than maximisation of capacity utilisation, and that this would have a harmful effect on competition.

9.85 The Director therefore considers that it is necessary to impose a non discrimination obligation.

9.86 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no *undue* discrimination. Oftel has considered how it might treat undue discrimination in its Access Guidelines. The Guidelines note that any obligation with respect to undue discrimination has the objective of preventing behaviour that has a material adverse effect on competition. This does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Guidelines also note that in the Director's view, there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own retail activities or between others of its own activities would have a material adverse effect on competition (paragraph 3.9). This view would also apply to discrimination in relation to the underlying components of services.

Conclusion on no undue discrimination

9.87 Having considered the consultation responses the Director proposes to impose condition G2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on.

Communications Act tests

9.88 The Director considers that the proposed condition meets the tests set out in the Act.

9.89 The Director has considered all the Community requirements set out in section 4. In particular, because it requires Kingston to provide the necessary access products on a non discriminatory basis, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the downstream markets. As Kingston has market power in the provision of wholesale TISBO, it controls a key input into a range of downstream services – principally retail traditional interface leased lines but also virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services by enabling communications providers to compete with Kingston at the retail level.

- 9.90 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that this proposed condition is objectively justifiable, in that it provides safeguards to ensure that competitors, and hence consumers, are not disadvantaged by Kingston discriminating in favour of its own retail activities or between its own different activities. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. It is proportionate since it only prevents discriminatory behaviour that has a material effect on competition. Finally, it is transparent in that it is clear in its intention to ensure that Kingston does not unduly discriminate. In addition, Oftel has given guidance as to how it might treat undue discrimination in its Access Guidelines.
- 9.91 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with Kingston. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the geographic market by enabling communications providers to compete with Kingston at the retail level.

Kingston wholesale traditional interface symmetric broadband origination markets proposed regulation 3: Basis of charges obligations (cost orientation)

- 9.92 Section 87(9) authorises the setting of SMP services conditions imposing on the dominant provider rules concerning the recovery of costs and cost orientation.
- 9.93 Under this obligation, Kingston would be required to provide wholesale services at cost oriented prices. As Kingston has been identified as having SMP in these markets, the availability of wholesale services at cost oriented prices would ensure that the competition in the retail leased lines and other downstream markets should lead to lower prices.
- 9.94 It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, the Director considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers.
- 9.95 The Director therefore considers that it is necessary to apply this obligation. The proposed condition sets out that the charges for services should be reasonably derived from the costs of providing those services. It further states that the costs must be calculated on a forward looking long run incremental cost

approach, and allowing an appropriate mark-up for the recovery of common costs including an appropriate return on capital employed.

- 9.96 The condition will apply across all services within these markets. This means that the price of all services provided by Kingston in the markets should be based on LRIC and allowing an appropriate mark-up.
- 9.97 The Director confirms that all new services that are introduced into this market will also be covered by the same pricing rule. This is because new services in the same market would be expected to be subject to the same competitive conditions as existing services. This does not however mean that Kingston cannot recover costs appropriate to new wholesale services. The recovery of efficiently incurred costs for new wholesale services was discussed in paragraphs 2.23 2.25 of Oftel's access guidelines.
- 9.98 Although this condition will apply to all services in this market, and the expectation is that the treatment of new services under the condition will be the same as for existing services, there may be occasional exceptions to this rule. This may arise where the new service is innovative and thus warrants a different regulatory approach. There are three ways in which such services can be dealt with.
- i) The service may be so innovative that it falls in a completely new and separate market. In this case the appropriate regulatory obligations will be determined by the Director following analysis of this new market.
- ii) The new service falls within the market but the Director determines that an alternative charging basis is appropriate. For example, a different charging basis may be appropriate for services offered during a trial.
- iii) The new service falls within the market and the cost orientation obligation is applied, but there might be a range of prices which would be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost orientated, the Director would consider whether the expected or achieved return on capital was excessive. In making this assessment, the Director will need to take account of the risk of the new service failing and the lost investment that would result. This therefore maintains an appropriate incentive for the communications provider to invest in new services and technologies.
- 9.99 The proposed condition contains a clause enabling the Director to determine that a price need not be set on a forward-looking LRIC basis. This is particularly relevant to scenario ii) above where the Director determines that an alternative charging basis is appropriate. If Kingston wishes to set a price for a service in any of the markets on any other basis than forward-looking LRIC, it must apply to the Director for permission to do this.

9.100 The Director considers that the proposed cost orientation condition is justifiable and a proportionate response to the extent of competition in the markets analysed. It enables competitors to purchase services at a rate which will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing Kingston a fair rate of return which it would expect in a competitive market. The potential for a degree of flexibility envisaged in the approach to the recovery of cost of capital recognises that some investments will carry a higher degree of risk than others and does not remove incentives for the development of new services.

Responses to previous consultation – basis of charges obligations

- 9.101 Kingston makes the point in its response that it would be difficult to satisfy a cost orientation obligation without having in place a regulatory cost accounting or accounting separation system. The Director notes this point and will bear it in mind should there be a reasonable demand for wholesale symmetric broadband origination services in Hull at some point in the future.
- 9.102 The Director is of the view that it is appropriate to amend slightly the condition proposed in the April consultation document to clarify the application of the forward looking long run incremental cost approach to each charge. In the Director's view, the wording proposed in the April consultation document left room for some confusion.
- 9.103 Accordingly, the first paragraph has been amended to read:
- "...based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.
- 9.104 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition G3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.
- 9.105 The third paragraph has been amended to read
- ".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.

Conclusion on basis of charges obligations

9.106 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.

Communications Act tests

- 9.107 The Director considers that the proposed condition (Condition G3 in Annex D) meets the tests set out in the Act.
- 9.108 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. Excessively high pricing of wholesale inputs distorts allocation of resources and leads to inefficiency for retail competitors who may be forced into using less efficient alternative technologies. Ensuring that Kingston as the dominant provider is unable to charge excessive prices will therefore promote competition and thereby promote the interests of end users.
- 9.109 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that the proposed condition is an objectively justifiable and proportionate response to the extent of competition in the markets analysed, as it enables competitors to purchase services at charges that will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing Kingston a fair rate of return that it would expect in competitive markets. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that Kingston charges on a LRIC plus mark-up basis.
- 9.110 The Director considers that imposition of this condition satisfies section 88 of the Act since without it there is a relevant risk of adverse effects arising from price distortion by Kingston, which has SMP in this market and has the ability to price above the competitive level, so as to have adverse consequences for end users of public electronic communications services. The Director further considers in this connection that the condition is appropriate for the purposes of promoting efficiency and sustainable competition and conferring the greatest possible benefits on the end users of public electronic communications services.

Kingston wholesale traditional interface symmetric broadband origination markets proposed regulation 4:
Requirement to publish a reference offer

9.111 Section 87(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the

Director may direct, all such information for the purpose of securing transparency. Section 87(6)(d) also permits the setting of conditions requiring the dominant provider to include specified terms and conditions into the reference offer.

- 9.112 Kingston is currently obliged to publish prices, terms and conditions for any wholesale leased lines services. Under this proposed obligation, Kingston would have to publish in respect of its wholesale services the prices, terms and conditions in the form of a Reference Offer (RO) the published RO must include:
- a clear description of the services on offer;
- terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable communications providers to make technical and commercial judgements such that there is no material adverse effect on competition;
- 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;
- conditions relating to maintenance and quality (service level agreement). 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; and
- terms and conditions that are fair and reasonable. This will ensure that
 products 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.
- 9.113 The proposed obligation prohibits Kingston from departing from the charges terms and conditions in the Reference Offer and requires Kingston to comply with any Directions the Director may make from time to time under the condition.
- 9.114 The proposed condition also requires Kingston to set out the allocation of cost to each network component used for the products and services supplied in this market.
- 9.115 It might be argued that an obligation to publish prices could lead to communications providers following Kingston's prices, rather than being dynamic in setting prices at the true competitive level. Buyers may not exert so much power in the market if Kingston is unable to offer bespoke deals. However, the Director considers that requiring Kingston to publish prices, terms and conditions would help to create transparency in these markets where Kingston has been identified as having SMP. Since wholesale services are an input for retail products, transparency is necessary to ensure competition in downstream (retail) markets.

- 9.116 The Director therefore considers that a price publication obligation should be put in place. This accords with Article 9 and with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms.
- 9.117 This obligation will ensure that communications providers, end users and others are able to put to the Director fully justified and objectively reasoned complaints of anti-competitive behaviour by Kingston, and to obtain redress where appropriate.

Responses to previous consultation – publication of reference offer

- 9.118 Kingston notes in its response that the list of network components contained in Annex A to the conditions is based on the BT network and contains certain BT-specific elements that are not applicable in the Kingston network.
- 9.119 This list is being considered in detail in the review of regulatory financial reporting obligations. The document *Financial reporting obligations in SMP markets* (dated 22 May 2003) consulted on that list of network components, and the list is subject to change. Therefore, the Annex containing the list of network components has been removed from the draft conditions for this second consultation, and the definition of network components has been amended to read "as specified in any Direction of the Director from time to time for the purpose of these conditions".
- 9.120 The final notification and explanatory statement on regulatory financial reporting obligations will contain a draft direction to implement a new network component list based on the ongoing review. The draft direction will be subject to consultation and hence interested parties will have an opportunity to comment on the Director's proposals with respect to network components. Kingston's comments will be taken into account at that time.
- 9.121 This means that, for present purposes, the dominant provider is not yet required to publish charges and transfer charges for network components as part of its reference offer, as no network components have yet been specified by the Director. However, once the anticipated direction setting out the list of network components is finalised, the obligation to publish this information will enter into effect.

Conclusion on requirement to publish a reference offer

9.122 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.

9.123 The text of the condition which the Director proposes to impose is substantially the same as that contained in the April consultation document. The numbering of what is now paragraph G4.3 has been changed, and the transitional arrangements specified in paragraphs G4.4 and G4.5, relating to the dates on which the new Reference Offer should be published and updated, have been changed to reflect the uncertainty about the actual date on which the condition will come into force.

- 9.124 The Director considers that the proposed condition (Condition G4 in Annex D) meets the tests set out in the Act.
- 9.125 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with the requirement not to discriminate unduly, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers. It promotes the interests of purchasers of wholesale symmetric broadband origination services by enabling them to adjust their downstream offerings in competition with Kingston, in response to changes in Kingston's terms and conditions. It also promotes competition in the TISBO market by allowing Kingston's competitors in the provision of TISBO services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, so ensuring competition in the downstream markets.
- 9.126 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it requires that terms and condition are published in order to encourage competition and provide stability in markets by providing transparency of Kingston's prices, terms and conditions, thereby allowing communications providers to better plan their businesses and customer relationships. It is proportionate, as only information that is necessary to ensure that that there is no material adverse effect on competition is required to be provided. It does not unduly discriminate as it is applied to Kingston and no other provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that Kingston publishes details of its terms and conditions.
- 9.127 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director also believes that this condition is fair and reasonable taking into account the investment made by Kingston in its network. Given the potential for the development of alternative facilities in the current market, the Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are

able to make effective use of wholesale inputs and offer products based on leased lines in competition with Kingston. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK.

Kingston wholesale traditional interface symmetric broadband origination markets proposed regulation 5: Requirement to publish technical information

- 9.128 Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency.
- 9.129 Under the proposed Condition 'Requirement to publish a reference offer', Kingston will be obliged to publish a Reference Offer for Network Access, which amongst other things, contains a description of the Network Access to be provided, including technical characteristics; the location of the points of Network Access; and technical standards for Network Access. The proposed Condition 'Requirement to publish technical information' sets out additional obligations to publish new technical information 90 days in advance of entering into a contract to provide the new Network Access, or amendments to existing technical terms and conditions 90 days before those amended terms and conditions come into effect.
- 9.130 As set out above, the information to be published under this Condition comprises new or amended technical characteristics (including information on network configuration where to necessary to make effective use of the Network Access), 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.
- 9.131 The proposals in this Condition are important to ensure that communications providers to whom Network Access is being provided by Kingston are able to make effective use of that Network Access. Changes to technical information must be published in advance so that communications providers have sufficient time to prepare. For example, a competing provider may have to introduce new equipment or modify existing equipment to support a new or changed technical interface. Similarly, a competing provider may need to make changes to their network in order to support changes in the points of network access or configuration.

9.132 The Director's view is that 90 days is the minimum time that competing providers will need to modify their network to support a new or changed technical interfaces or support a new point of access or network configuration. Therefore, the Director proposes that in the market for wholesale TISBO, Kingston must publish any new or modified technical characteristics, points of network access and technical standards not less than 90 days in advance of either Kingston entering into a contract to provide new Network Access or making technical changes to existing Network Access, unless the Director consents otherwise.

Conclusion on requirement to provide technical information

9.133 Having considered the consultation responses the Director proposes to impose condition G5 in Annex D, which requires a minimum of 90 days for provision of technical information. This condition remains in the same terms as the condition previously consulted on.

- 9.134 The Director considers that the Condition meets the tests set out in the Act. The Director in proposing the Condition has considered all the Community requirements in section 4 and in particular the requirement to promote competition and to encourage service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefits for consumers by ensuring that providers have sufficient notification of technical changes to Kingston's network to enable them compete.
- 9.135 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it enables competing communications providers to make full and effective use of Network Access. It does not unduly discriminate in that it is imposed on Kingston and no other communications provider has SMP in these markets. It is proportionate in that 90 days is the minimum necessary to allow competing providers to modify their networks. It is transparent in that it is clear in its intention that Kingston should notify technical information as set out above.
- 9.136 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with Kingston. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK. By requiring Kingston to provide advance notification of

technical changes, communications providers will be able to better plan their businesses and relationships with their customers.

Consultation on interfaces

- 9.137 Current regulation on Kingston (licence condition 15) includes a requirement to consult on interfaces where so directed by the Director. This was to ensure that Kingston could not impose unnecessary costs on competing communications providers by specifying a proprietary interface. However, the Director recognises that communications providers are constrained in their choice of interface by the standardised nature of most communications equipment. In addition, the Director believes that the scope for further modifications to traditional PSTN equipment, where Kingston was most likely to be able exert control over interface specifications, is likely to be limited in the future, as communications providers and equipment manufacturers increasingly look to other technologies.
- 9.138 Therefore, the Director now considers it unlikely that Kingston would be able to exert control over interfaces in a way that could have an adverse effect on competition. Consequently, the Director does not believe that imposing a condition requiring consultation on interfaces would be proportionate.

Responses to previous consultation – general comment on wholesale TISBO obligations in Hull

- 9.139 Kingston states in its response that the remedies proposed by the Director in respect of these markets are in its view unduly interventionist, potentially overly burdensome and likely to lead to market foreclosure. It bases this statement on the allegation that barriers to entry are insubstantial due to the compact nature of the Hull area, and the absence of evidence presented by the Director to demonstrate that the market is not contestable. Kingston states that its small scale compared with BT means that it is more difficult for it to exert market power; and suggests that its service is superior to BT's in terms of price and quality.
- 9.140 The Director sets out in Chapter 3 and Annex B his view that this market is not contestable and that the barriers to entry are not insubstantial. Although in absolute terms the scale of investment required to enter Hull markets may be relatively small, since the network build costs faced by potential entrants are comparatively small, nevertheless the size of the potential market is also relatively small. As a result potential entry may be deterred. Moreover, other barriers exist as potential entrants would have to incur sunk costs in order to build up a customer base. Similarly, while Kingston is smaller than BT, the Hull market is also smaller than the rest of the UK, so that its ability to exert market power may in fact be unaffected by this factor.

9.141 In the Director's view, Kingston clearly has SMP in this market and the proposed regulation is therefore both necessary and appropriate. The Director has set out the ways in which he has ensured that the regulation imposed is proportionate to the competitive conditions operating in this market.

Kingston upon Hull wholesale traditional interface symmetric broadband origination markets: Conclusion on proposed regulation

- 9.142 The Director has concluded that Kingston has SMP in these markets, and that as a consequence the following regulatory measures should be imposed:
- 1. general access obligation to supply wholesale products upon request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation);
- 4. requirement to publish a reference offer; and
- 5. requirement to publish technical information.
- 9.143 Draft conditions of entitlement reflecting these preferred options are set out in Annex D. The proposed obligations for these markets are broadly similar to those currently applying.

Wholesale alternative interface symmetric broadband origination market in the Hull area

- 9.144 In Chapter 2, the Director explains how he has identified an additional market in the Hull area, Alternative Interface Symmetric Broadband Origination or AISBO. In Chapter 3, the Director provides an explanation for identifying that Kingston has SMP in this market. As a consequence, the Director is examining the following options for this market:
- 1. a general access obligation to supply wholesale AISBO products upon request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation);
- 4. requirement to publish a reference offer; and
- 5. requirement to publish technical information.
- 9.145 Any SMP conditions to be imposed must comply with the various tests set out in section 87(4) of the Communications Act. The Director must also bear in mind the duties set out in section 4 of the Act.
- 9.146 In particular, each SMP condition must pass the test set out in section 47 of the Act, namely that each condition must be:
- (a) objectively justifiable in relation to the networks, services or facilities to which it relates;
- (b) not such as to discriminate unduly against particular persons or a particular description of persons;
- (c) proportionate to what the condition is intended to achieve; and

- (d) in relation to what it is intended to achieve, transparent.
- 9.147 It is the Director's current view that the conditions proposed in this consultation satisfy the relevant requirements specified in the Act, as discussed in detail in the following paragraphs.

Kingston wholesale AISBO markets proposed regulation 1: Requirement to provide network access on reasonable request

- 9.148 Section 87(3) of the Act authorises the setting of SMP services conditions requiring the dominant provider to provide network access as the Director 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 for securing that the obligations in the conditions are complied with within periods and at times required by or under the conditions. When considering the imposition of such conditions in a particular case, the Director must have regard to the 6 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.
- 9.149 Kingston would be required under this obligation to supply wholesale AISBO products on reasonable request. Kingston has been found to have SMP in this market. This regulation would allow communications providers to negotiate innovative wholesale products which will enable them to compete in the retail markets, encouraging competition at the retail level. If the obligation were not imposed, Kingston would be able to deny access or impose unreasonable terms having a similar effect, thereby hindering the emergence of competitive retail markets for leased lines and other services which may rely on these inputs.
- 9.150 While formulation of specific obligations may from time to time be appropriate, either for the avoidance of doubt or in resolving a dispute, the Director proposes to rely as far as possible on the general obligation. This removes the need for the Director to specify the details of products to be supplied (which he is often not best placed to do), and provides a regime which is responsive to future market and technical developments. While the scope is broad, it is appropriately limited by the ability of Kingston to refuse any request which is unreasonable. (The Director's views on reasonableness in this context are set out in his Access Guidelines.) The Access Directive states in Article 12 that an NRA may impose access obligations where the denial of access or unreasonable terms and conditions having a similar effect would hinder the emergence of a sustainable competitive market at the retail level, or would not be in the end users' interest. If wholesale leased line products are made available to communications providers upon reasonable request, this will enable them to construct their own retail equivalent products, thereby increasing the level of competition at the retail level with benefits that will feed through to consumers.

- 9.151 It might be argued that reliance on a general obligation to provide access may require the Director to resolve multiple disputes on the provision of wholesale products. However, this appears to be unlikely since communications providers have to date expressed relatively little interest in competing in this market, and because of this at the current time the Director does not have the information necessary to specify particular forms of access.
- 9.152 Reliance on the Competition Act for communications providers' general access requirements will, in the Director's view, be insufficient because of the network-based nature of the industry, and would be inconsistent with the Director's objective of promoting competition.
- 9.153 The Director therefore considers that it is necessary to introduce a general access obligation for the Kingston upon Hull market, to deal with new wholesale leased line products that may be required by communications providers in the future.
- 9.154 The words "fair and reasonable terms" would be interpreted by the Director as meaning, amongst other things, terms which did not lead to any sort of margin squeeze between wholesale and retail markets, since a margin squeeze is in effect a constructive refusal to supply, ie a refusal to supply on commercially viable terms. Thus there will be no need to introduce a specific condition to deal with such an eventuality. The condition will also through these words, incorporate a requirement to provide service level agreements and compensation for performance below standard.
- 9.155 Recital 6 of the Access Directive states that:

"in markets where there continue to be large differences in negotiating power between undertakings, and where some undertakings rely on infrastructure provided by others for delivery of their services, it is appropriate to secure...adequate access and interconnection and interoperability of services in the interests of end users."

- 9.156 The Director considers the wholesale AISBO market in Hull to be of this type because of Kingston's position of SMP, and in accordance with the Access Directive considers it necessary to ensure end-to-end connectivity by imposing proportionate obligations on undertakings that control access to end users.
- 9.157 Implementation of this obligation also fits with Recital 18 of the Framework Directive which requires NRAs where possible to take the utmost account of the desirability of making regulation technologically neutral. Communications providers will be able to use Kingston's wholesale AISBO products to provide services of their choice. Thus this measure is not linked to the activities of the party seeking interconnection of the degree of its investment in network

infrastructure, and it consequently accords also with Recital 7 of the Access Directive.

Conclusion on obligation to provide network access

- 9.158 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section.
- 9.159 Having considered all the responses, the Director is of the view that it is appropriate to amend slightly both the Network Access condition and the definition of "Third Party" proposed for the SBO market in the April consultation document, to clarify the nature and extent of this obligation. Accordingly, the condition has been amended to read:

"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 the Director may from time to time direct".

- 9.160 The amendment is intended to make it clearer that the Dominant Provider must comply with the condition by providing Network Access that is the same as that which has been (reasonably) requested by the Third Party. The condition continues to include the power to make a direction about the provision of Network Access and the terms and conditions on which it is provided.
- 9.161 The Director does not propose to replicate the Annex II list to define entitlement to Network Access. This is because Annex II status flows from the Interconnection Directive 97/33/EC. The provisions of that Directive including the concept of Annex II status will fall. The concept of Annex II status will continue to exist for the purposes of any licence conditions continued for an interim period until the market reviews are completed and these new obligations are imposed. However, once these new obligations are imposed, Annex II status will not be relevant.
- 9.162 For the purposes of the Network Access condition, the definition of Third Party has been amended to the provider of a **public** electronic communications network or **public** electronic communications service (i.e. electronic communications networks which are provided wholly or mainly for the purpose of making electronic communications services available to members of the public; and electronic communications services that are provided so as to be available for use by members of the public). Accordingly, providers of non-public electronic communications networks or non-public electronic communications services will

not be entitled to Network Access under the proposed condition. This maintains the status quo existing prior to these consultations.

9.163 Further guidance as to how the Director proposes to apply the Network Access obligation can be found in the Director's guidelines on imposing access obligations under the new EU Directives, dated 13 September 2002 (the "Access Guidelines") and the Directors guidelines for the interconnection of public electronic communications networks, dated 23 May 2003 (the "Interconnection Guidelines"). These guidelines can be found at www.oftel.gov.uk/publications/ind_guidelines/acce0902.htm and www.oftel.gov.uk/publications/eu_directives/2003/intercon0503.htm respectively.

9.164 Having considered the consultation responses the Director's current view is that a network access condition should be imposed in this market in the form set out at Annex D.

- 9.165 The Director considers that the proposed condition (Condition H1 in Annex D) meets the tests set out in the Act.
- 9.166 In the Director's view, this condition meets the tests set out in section 47 of the Act. The proposed condition is objectively justifiable, in that it relates to the need to ensure that competition develops to the benefit of consumers. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. It is proportionate, since it is targeted at addressing the market power that Kingston holds in this market and does not require it to provide access if it is not technically feasible or reasonable. Finally, it is transparent in that it is clear in its intention to ensure that Kingston provides access to its network in order to facilitate competition.
- 9.167 The Director has considered all the Community requirements set out in section 4 of the Act. In particular, because it requires Kingston to provide the necessary access products, the proposed condition encourages the provision of network access and service interoperability for the purpose of ensuring efficiency and promoting competition in the downstream markets. As Kingston has market power in the provision of wholesale AISBO, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. In requiring this condition, the Director is promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.
- 9.168 In addition, the Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. In particular, it is fair and reasonable taking into account the investment made by Kingston in its network, which means that it is in a position to provide these products upon

reasonable request; the need to secure effective competition in the long term; and the desirability of securing that electronic communications services are provided that are available throughout the UK.

Kingston wholesale AISBO markets proposed regulation 2: Requirement not to unduly discriminate

- 9.169 Section 87(6)(a) of the Act authorises the setting of an SMP services condition requiring the dominant provider not to unduly discriminate against particular persons, or against a particular description of persons, in relation to matters connected with the provision of network access. The requirement not to unduly discriminate is intended, principally, to prevent dominant providers from discriminating in favour of their own retail activities and to ensure that competing providers purchasing wholesale products from the dominant provider are placed in an equivalent position to the dominant provider's retail arm.
- 9.170 Where dominant providers are vertically integrated, like Kingston, they may have an incentive to provide wholesale services on terms and conditions that favour their own retail activities, in a way that would have a material adverse effect on competition. In particular, they may charge competing providers more than the amount charged (through transfer charging) to their own retail activities for wholesale services, thereby increasing the costs of competing providers and giving themselves an unfair competitive advantage. They might also provide services on different terms and conditions, for example with different delivery timescales, which would disadvantage their retail competitors and in turn consumers.
- 9.171 In the absence of a non discrimination condition, the Director could be called upon to investigate alleged breaches of the Competition Act prohibition on anticompetitive agreements and abuse of a dominant position, and might be required to resolve successive complaints. Imposing an *ex ante* condition in this instance will reduce the potential regulatory costs emanating from multiple or successive complaints related to discrimination.
- 9.172 It could be argued that the Competition Act provides adequate provision to address allegations or gather evidence of discriminatory behaviour. However, the Director considers that at the wholesale level sectoral regulation provides a faster and more secure means of giving effect to decisions and determinations. In addition, it allows the Director to place a greater emphasis on promoting competition (for example by restricting the ability of an SMP communications provider to target segments of the retail market).
- 9.173 It might also be argued that a requirement not to unduly discriminate prevents Kingston from fully exploiting its economies of scale. If Kingston were able to discriminate, it would be able, when needed, to quote a lower price in order to attract sufficient numbers of customers to ensure that its infrastructure is

utilised at full capacity. Although this is a valid consideration, the Director considers that it is far outweighed by the fact that in view of Kingston's position of SMP, it would also be able to use discrimination for other purposes less constructive than maximisation of capacity utilisation, and that this would have a harmful effect on competition.

- 9.174 The Director therefore considers that it is necessary to impose a non discrimination obligation.
- 9.175 A prohibition of discrimination might have disadvantages if it prevented discrimination that was economically efficient or justified. However, the proposed condition provides that there should be no *undue* discrimination. Oftel has considered how it might treat undue discrimination in its Access Guidelines. The Guidelines note that any obligation with respect to undue discrimination has the objective of preventing behaviour that has a material adverse effect on competition. This does not mean that there should not be any differences in treatment between undertakings, rather that any differences should be objectively justifiable, for example, by differences in underlying costs of supplying different undertakings. The Guidelines also note that in the Director's view, there is a rebuttable presumption that a vertically integrated SMP communications provider discriminating in favour of its own retail activities or between others of its own activities would have a material adverse effect on competition (paragraph 3.9). This view would also apply to discrimination in relation to the underlying components of services.

Conclusion on no undue discrimination

9.176 Having considered the consultation responses the Director proposes to impose condition H2 in Annex D, which prohibits *undue* discrimination. This condition remains in the same terms as the condition previously consulted on.

- 9.177 The Director considers that the proposed condition meets the tests set out in the Act.
- 9.178 The Director has considered all the Community requirements set out in section 4. In particular, because it requires Kingston to provide the necessary access products on a non discriminatory basis, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the downstream markets. As Kingston has market power in the provision of wholesale AISBO, it controls a key input into a range of downstream services principally leased lines but also virtual private networks, managed services etc. By allowing communications providers access on non-discriminatory terms, competition at the retail level will

be encouraged, thereby promoting competition and the interests of consumers and maximising choice in the markets for those downstream services.

- 9.179 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that this proposed condition is objectively justifiable, in that it provides safeguards to ensure that competitors, and hence consumers, are not disadvantaged by Kingston discriminating in favour of its own retail activities or between its own different activities. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. It is proportionate since it only prevents discriminatory behaviour that has a material adverse effect on competition. Finally, it is transparent in that it is clear in its intention to ensure that Kingston does not unduly discriminate. In addition, Oftel has given guidance as to how it might treat undue discrimination in its Access Guidelines.
- 9.180 The Director considers that imposition of this condition satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with Kingston. By allowing communications providers access on non-discriminatory terms, competition at the retail level will be encouraged, thereby addressing the goal of ensuring that services based on leased line components are provided throughout the geographic market.

Kingston wholesale AISBO markets proposed regulation 3: Basis of charges obligations (cost orientation)

- 9.181 Section 87(9) authorises the setting of SMP services conditions imposing on the dominant provider rules concerning the recovery of costs and cost orientation.
- 9.182 Under this obligation, Kingston would be required to provide wholesale services at cost oriented prices. As Kingston has been identified as having SMP in this market, the availability of wholesale services at cost oriented prices would ensure that the competition in the retail alternative interface leased lines and other downstream markets should lead to lower prices.
- 9.183 It might be argued that the Competition Act should be used to avoid excessive or predatory pricing. However, the Director considers that sectoral tests are likely to be more stringent and more effective than the Competition Act, giving the SMP communications provider less latitude and providing greater certainty for access customers.

- 9.184 The Director therefore considers that it is necessary to apply this obligation. The proposed condition sets out that the charges for services should be reasonably derived from the costs of providing those services. It further states that the costs must be calculated on a forward looking long run incremental cost approach, and allowing an appropriate mark-up for the recovery of common costs including an appropriate return on capital employed.
- 9.185 The condition will apply across all services within this market. This means that the price of all services provided by Kingston in the market should be based on LRIC and allowing an appropriate mark-up.
- 9.186 The Director confirms that all new services that are introduced into this market will also be covered by the same pricing rule. This is because new services in the same market would be expected to be subject to the same competitive conditions as existing services. This does not however mean that Kingston cannot recover costs appropriate to new wholesale services. The recovery of efficiently incurred costs for new wholesale services was discussed in paragraphs 2.23 2.25 of Oftel's access guidelines.
- 9.187 Although this condition will apply to all services in this market, and the expectation is that the treatment of new services under the condition will be the same as for existing services, there may be occasional exceptions to this rule. This may arise where the new service is innovative and thus warrants a different regulatory approach. There are three ways in which such services can be dealt with.
- i) The service may be so innovative that it falls in a completely new and separate market. In this case the appropriate regulatory obligations will be determined by the Director following analysis of this new market.
- ii) The new service falls within the market but the Director determines that an alternative charging basis is appropriate. For example, a different charging basis may be appropriate for services offered during a trial.
- iii) The new service falls within the market and the cost orientation obligation is applied, but there might be a range of prices which would be consistent with cost orientation given the uncertainty about the take up and future profitability of the service. In determining whether a charge is not cost oriented, the Director would consider whether the expected or achieved return on capital was excessive. In making this assessment, the Director will need to take account of the risk of the new service failing and the lost investment that would result. This therefore maintains an appropriate incentive for the communications provider to invest in new services and technologies.
- 9.188 The proposed condition contains a clause enabling the Director to determine that a price need not be set on a forward-looking LRIC basis. This is particularly relevant to scenario ii) above where the Director determines that an alternative charging basis is appropriate. If Kingston wishes to set a price for any

service in the market on any other basis than forward-looking LRIC, it must apply to the Director for permission to do this.

9.189 The Director considers that the proposed cost orientation condition is justifiable and a proportionate response to the extent of competition in the markets analysed. It enables competitors to purchase services at a rate which will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing Kingston a fair rate of return which it would expect in a competitive market. The potential for a degree of flexibility envisaged in the approach to the recovery of cost of capital recognises that some investments will carry a higher degree of risk than others and does not remove incentives for the development of new services.

Responses to previous consultation – basis of charges obligations

- 9.190 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 9.191 Kingston makes the point in its response that it would be difficult to satisfy a cost orientation obligation without having in place a regulatory cost accounting or accounting separation system. The Director notes this point and will bear it in mind should there be a reasonable demand for wholesale AISBO services in Hull at some point in the future.
- 9.192 The Director is of the view that it is appropriate to amend slightly the condition proposed for the SBO market in the April consultation document, to clarify the application of the forward looking long run incremental cost approach to each charge. In the Director's view, the wording proposed in the April consultation document left room for some confusion.
- 9.193 Accordingly, the first paragraph has been amended to read:
- "...based on a forward looking long run incremental cost approach and allowing an appropriate mark up for the recovery of common costs including an appropriate return on capital employed." The wording in the April consultation document may have implied, spuriously, that return on capital employed is viewed as additional to common costs.
- 9.194 The second paragraph has been amended to read:
- ".....such that a charge satisfies the requirements of Condition HH3.1" The wording in the April consultation document, in attempting to elaborate on the principle of cost orientation, only served to confuse the issue.

- 9.195 The third paragraph has been amended to read
- ".... the Director may from time to time direct under this condition". This change is intended merely to achieve consistency of drafting in the various SMP conditions.

Conclusion on basis of charges obligations

9.196 Having considered the consultation responses, the Director's current view is that a condition should be imposed in this market in the slightly amended form set out at Annex D.

- 9.197 The Director considers that the proposed condition (Condition H3 in Annex D) meets the tests set out in the Act.
- 9.198 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages the provision of network access and service interoperability for the purpose of efficiency and sustainable competition in the markets for electronic communications networks, electronic communications services and associated facilities. Excessively high pricing of wholesale inputs distorts allocation of resources and leads to inefficiency for retail competitors who may be forced into using less efficient alternative technologies. Ensuring that Kingston as the dominant provider is unable to charge excessive prices will therefore promote competition and thereby promote the interests of end users.
- 9.199 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director considers that the proposed condition is an objectively justifiable and proportionate response to the extent of competition in the market analysed, as it enables competitors to purchase services at charges that will enable them to develop competitive services to the benefit of consumers, whilst at the same time allowing Kingston a fair rate of return that it would expect in competitive markets. It does not unduly discriminate, as it is imposed on Kingston and no other communications provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that Kingston charges on a LRIC plus mark-up basis.
- 9.200 The Director considers that imposition of this condition satisfies section 88 of the Act since without it there is a relevant risk of adverse effects arising from price distortion by Kingston, which has SMP in this market and has the ability to price above the competitive level, so as to have adverse consequences for end users of public electronic communications services. The Director further considers in this connection that the condition is appropriate for the purposes of

promoting efficiency and sustainable competition and conferring the greatest possible benefits on the end users of public electronic communications services.

Kingston wholesale AISBO markets proposed regulation 4: Requirement to publish a reference offer

9.201 Section 87(6)(c) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency. Section 87(6)(d) also permits the setting of conditions requiring the dominant provider to include specified terms and conditions into the reference offer.

9.202 Kingston is currently obliged to publish prices, terms and conditions for any wholesale leased lines services. Under this proposed obligation, Kingston would have to publish in respect of its wholesale services the prices, terms and conditions in the form of a Reference Offer (RO) – the published RO must include:

- · a clear description of the services on offer;
- terms and conditions including charges and ordering, provisioning, billing and dispute resolution procedures. The RO should provide sufficient information to enable communications providers to make technical and commercial judgements such that there is no material adverse effect on competition;
- 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;
- conditions relating to maintenance and quality (service level agreement). 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; and
- terms and conditions that are fair and reasonable. This will ensure that
 products 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.

9.203 The proposed obligation prohibits Kingston from departing from the charges terms and conditions in the Reference Offer and requires Kingston to comply with any Directions the Director may make from time to time under the condition. It also requires Kingston to set out the allocation of cost to each network component used for the products and services supplied in this market.

9.204 It might be argued that an obligation to publish prices could lead to communications providers following Kingston's prices, rather than being dynamic in setting prices at the true competitive level. Buyers may not exert so much power in the market if Kingston is unable to offer bespoke deals. However, the Director considers that requiring Kingston to publish prices, terms and conditions

would help to create transparency in these markets where Kingston has been identified as having SMP. Since wholesale services are an input for retail products, transparency is necessary to ensure competition in downstream (retail) markets.

9.205 The Director therefore considers that a price publication obligation should be put in place. This accords with Article 9 and with Recital 16 of the Access Directive, which states that transparency of terms and conditions for access and interconnection, including prices, serves to speed up negotiation, avoid complaints and give confidence to market players that a service is not being provided on discriminatory terms. This obligation will ensure that communications providers, end users and others are able to put to the Director fully justified and objectively reasoned complaints of anti-competitive behaviour by Kingston, and to obtain redress where appropriate.

Responses to previous consultation – publication of reference offer

- 9.206 In considering the application of this condition to the AISBO market, the Director has taken into account responses to the consultation on application of equivalent conditions to the TISBO markets, where such responses are also applicable to the AISBO market. The Director's consideration of such responses is set out in this section and in the conclusion section below.
- 9.207 Kingston notes in its response that the list of network components contained in Annex A to the conditions is based on the BT network and contains certain BT-specific elements that are not applicable in the Kingston network.
- 9.208 This list is being considered in detail in the review of regulatory financial reporting obligations. The document *Financial reporting obligations in SMP markets* (dated 22 May 2003) consulted on that list of network components, and the list is subject to change. Therefore, the Annex containing the list of network components has been removed from the draft conditions for this second consultation, and the definition of network components has been amended to read "as specified in any Direction of the Director from time to time for the purpose of these conditions".
- 9.209 The final notification and explanatory statement on regulatory financial reporting obligations will contain a draft direction to implement a new network component list based on the ongoing review. The draft direction will be subject to consultation and hence interested parties will have an opportunity to comment on the Director's proposals with respect to network components. Kingston's comments will be taken into account at that time.
- 9.210 This means that, for present purposes, the dominant provider is not yet required to publish charges and transfer charges for network components as part of its reference offer, as no network components have yet been specified by the

Director. However, once the anticipated direction setting out the list of network components is finalised, the obligation to publish this information will enter into effect.

Conclusion on requirement to publish a reference offer

- 9.211 Having considered the consultation responses, the Director's current view is that a condition should be imposed in these markets in the slightly amended form set out at Annex D.
- 9.212 The text of the condition which the Director proposes to impose is substantially the same as that contained in the April consultation document. The numbering of what is now paragraph H4.3 has been changed, and the transitional arrangements specified in paragraphs H4.4 and H4.5, relating to the dates on which the new Reference Offer should be published and updated, have been changed to reflect the uncertainty about the actual date on which the condition will come into force.

- 9.213 The Director considers that the proposed condition (Condition HH4 in Annex D) meets the tests set out in the Act.
- 9.214 The Director has considered all the Community requirements set out in section 4. In particular, the proposed condition encourages compliance with the requirement not to discriminate unduly, for the purpose of facilitating service interoperability and securing freedom of choice for the customers of communications providers. It promotes the interests of purchasers of wholesale AISBO services by enabling them to adjust their downstream offerings in competition with Kingston, in response to changes in Kingston's terms and conditions. It also promotes competition in the AISBO market by allowing Kingston's competitors in the provision of AISBO services to make appropriate changes to their products. Finally, it will allow the Director more easily to monitor discrimination, so ensuring competition in the downstream markets.
- 9.215 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it requires that terms and condition are published in order to encourage competition and provide stability in markets by providing transparency of Kingston's prices, terms and conditions, thereby allowing communications providers to better plan their businesses and customer relationships. It is proportionate, as only information that is necessary to ensure that that there is no material adverse effect on competition is required to be provided. It does not unduly discriminate as it is applied to Kingston and no other provider has SMP in this market. Finally, it is transparent in that it is clear in its intention to ensure that Kingston publishes details of its terms and conditions.

9.216 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director also believes that this condition is fair and reasonable taking into account the investment made by Kingston in its network. Given the potential for the development of alternative facilities in the current market, the Director considers that it is fair and reasonable to impose this condition in the interests of effective competition in the long term, as it will ensure that communications providers are able to make effective use of wholesale inputs and offer products based on leased lines in competition with Kingston. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the member States of the EU.

Kingston wholesale AISBO markets proposed regulation 5: Requirement to publish technical information

9.217 Section 87(6)(c) of the Act authorises the setting of SMP services conditions requiring the dominant provider to publish, in such manner as the Director may direct, the terms and conditions on which it is willing to enter into an access contract. Section 87(6)(b) of the Act authorises the setting of SMP services conditions which require a dominant provider to publish, in such manner as the Director may direct, all such information for the purpose of securing transparency.

9.218 Under the proposed Condition 'Requirement to publish a reference offer', Kingston will be obliged to publish a Reference Offer for Network Access, which amongst other things, contains a description of the Network Access to be provided, including technical characteristics; the location of the points of Network Access; and technical standards for Network Access. The proposed Condition 'Requirement to publish technical information' sets out additional obligations to publish new technical information 90 days in advance of entering into a contract to provide the new Network Access, or amendments to existing technical terms and conditions 90 days before those amended terms and conditions come into effect.

9.219 As set out above, the information to be published under this Condition comprises new or amended technical characteristics (including information on network configuration where to necessary to make effective use of the Network Access), 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.

9.220 The proposals in this Condition are important to ensure that communications providers to whom Network Access is being provided by

Kingston are able to make effective use of that Network Access. Changes to technical information must be published in advance so that communications providers have sufficient time to prepare. For example, a competing provider may have to introduce new equipment or modify existing equipment to support a new or changed technical interface. Similarly, a competing provider may need to make changes to their network in order to support changes in the points of network access or configuration.

9.221 The Director's view is that 90 days is the minimum time that competing providers will need to modify their network to support a new or changed technical interfaces or support a new point of access or network configuration. Therefore, the Director proposes that in the market for wholesale AISBO, Kingston must publish any new or modified technical characteristics, points of network access and technical standards not less than 90 days in advance of either Kingston entering into a contract to provide new Network Access or making technical changes to existing Network Access, unless the Director consents otherwise.

Conclusion on requirement to provide technical information

9.222 Having considered the consultation responses the Director proposes to impose condition H5 in Annex D, which requires a minimum of 90 days for provision of technical information. This condition remains in the same terms as the condition previously consulted on.

- 9.223 The Director considers that the Condition meets the tests set out in the Act. The Director in proposing the Condition has considered all the Community requirements in section 4 and in particular the requirement to promote competition and to encourage service interoperability for the purpose of securing efficient and sustainable competition and the maximum benefits for consumers by ensuring that providers have sufficient notification of technical changes to Kingston's network to enable them compete.
- 9.224 Section 47 requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The proposed condition is objectively justifiable in that it enables competing communications providers to make full and effective use of Network Access. It does not unduly discriminate in that it is imposed on Kingston and no other communications provider has SMP in this market. It is proportionate in that 90 days is the minimum necessary to allow competing providers to modify their networks. It is transparent in that it is clear in its intention that Kingston should notify technical information as set out above.
- 9.225 The Director considers that imposing this obligation satisfies the conditions set out in section 87(4) of the Communications Act. The Director considers that it is fair and reasonable to impose this condition in the interests of

effective competition in the long term, by ensuring communications providers can make effective use of wholesale inputs and offer products based on these wholesale inputs in competition with Kingston. In addition it will address the goal of ensuring that services based on leased line components are provided throughout the UK. By requiring BT to provide advance notification of technical changes, communications providers will be able to better plan their businesses and relationships with their customers.

Consultation on interfaces

9.226 Current regulation on Kingston (licence condition 15) includes a requirement to consult on interfaces where so directed by the Director. This was to ensure that Kingston could not impose unnecessary costs on competing communications providers by specifying a proprietary interface. However, the Director recognises that communications providers are constrained in their choice of interface by the standardised nature of most communications equipment. In addition, the Director believes that the scope for further modifications to traditional PSTN equipment, where Kingston was most likely to be able exert control over interface specifications, is likely to be limited in the future, as communications providers and equipment manufacturers increasingly look to other technologies.

9.227 Therefore, the Director now considers it unlikely that Kingston would be able to exert control over interfaces in a way that could have an adverse effect on competition. Consequently, the Director does not believe that imposing a condition requiring consultation on interfaces would be proportionate.

Kingston upon Hull wholesale AISBO market: Conclusion on proposed regulation

9.228 The Director has concluded that Kingston has SMP in this market, and that as a consequence the following regulatory measures should be imposed:

- 1. general access obligation to supply wholesale products upon request;
- 2. requirement not to unduly discriminate;
- 3. basis of charges obligations (cost orientation);
- 4. requirement to publish a reference offer; and
- 5. requirement to publish technical information.

9.229 Draft conditions of entitlement reflecting these preferred options are set out in Annex D. The proposed obligations for this markets are broadly similar to those currently applying in the wholesale SBO markets in Hull.

Chapter 10

Cost accounting and accounting separation conditions

- 10.1 This chapter discusses the financial reporting obligations that may be imposed on BT and Kingston, to ensure that a number of the proposed obligations set out in Chapters 5 to 9 are met. In particular, obligations of cost orientation, price controls and non discrimination can require the imposition of financial reporting regimes to monitor dominant providers' compliance with these obligations. This chapter discusses in some detail the imposition of obligations for cost accounting systems and accounting separation.
- 10.2 The Director considers that it is appropriate to impose cost accounting and accounting separation obligations in certain of the markets covered in this review. The two sub-sections below outline the markets in which these financial reporting obligations are required and the reasons for them being required.
- 10.3 The processes of cost accounting and accounting separation are complex, covering issues such as cost attribution methodologies, accounting standards, audit, transparency, disaggregation, reconciliation and publication of information. These practical processes are distinct from the questions of principle, such as the level of regulation in the market, the remedies to be applied, etc. For example, the decision on whether to impose a cost accounting obligation and the level of information required is made on the basis of the findings of the market review. Nevertheless, the practical processes must be consistent across all markets susceptible to regulation to ensure that there is certainty for the Director, the dominant providers and other persons in the market regarding regulatory financial information requirements.
- 10.4 Therefore, on 22 May 2003, the Director published the consultation document *Financial reporting obligations in SMP markets*. This document can be found at www.oftel.gov.uk/publications/eu_directives/2003/cost/index.htm. This consultation closed on 31 July 2003 and responses to the consultation can be accessed at www.oftel.gov.uk/publications/responses/2003/cost0503/index.htm.
- 10.5 The scope of *Financial reporting in SMP markets* was to address the issues of how the requirements for cost accounting and accounting separation will be implemented. It contained the draft cost accounting and accounting separation conditions. It also proposed the level of granularity required for such obligations to be imposed in a proportionate and appropriate manner. The Director intends to publish the explanatory statement and formal notifications on regulatory financial reporting at the end of the market review process so that the requirements of the accounting separation condition and the cost accounting condition can reflect the findings of the individual reviews.

Cost accounting systems

10.6 Under sections 87(9) to 87(11) and 88 of the Communications Act, appropriate cost accounting obligations may be imposed on dominant providers in respect of the provision of network access, the use of the relevant network and the availability of relevant facilities. Cost accounting rules may be made in relation to charge controls, the recovery of costs and cost orientation.

10.7 In the following markets where the Director proposes that BT should be designated as having SMP:

- retail low bandwidth traditional interface (analogue circuits and 8Mbit/s circuits only);
- wholesale traditional interface symmetric broadband origination ("TISBO") low and high bandwidth;
- wholesale alternative interface symmetric broadband origination ("AISBO");
 and
- wholesale trunk segments;

the Director is proposing in Proposed regulation 3 relating to each market, that charges should be cost-oriented on the basis of LRIC with an appropriate mark-up for the recovery of common costs. For the latter (wholesale) markets this is, as explained in the relevant sections, to ensure that BT's charges are constrained to enable competitors purchasing such services to compete with the dominant provider in downstream markets. In particular, these sections describe why LRIC with an appropriate mark-up for the recovery of common costs, is a justifiable and proportionate response to the extent of competition in the markets analysed.

10.8 The Director is also proposing that Kingston has SMP in the retail market for low bandwidth traditional interface leased lines in the Kingston upon Hull area. The Director proposes that, in this market, charges should be cost-oriented on the basis of LRIC with an appropriate mark-up for the recovery of common costs (see Proposed regulation 3 in relation to that market).

10.9 In addition, in Proposed regulation 4 for the wholesale TISBO low and high bandwidth markets in the UK excluding Kingston upon Hull, the Director is proposing to impose a charge control on BT. As explained in that section, such charge controls are necessary to ensure that competition develops to the benefit of consumers and to encourage network efficiency. In particular, the section and the associated Annex C of this consultation document describe why the charge control is a justifiable and appropriate response to the extent of competition in those markets. It should be noted that the Director is not proposing a charge control on the wholesale services offered by Kingston, for the reasons given in Chapter 9.

10.10 Given the imposition of LRIC with an appropriate mark-up for the recovery of common costs on both BT and Kingston, and a charge control for BT, the

Director is proposing that BT and Kingston should maintain appropriate cost accounting systems, that demonstrate that the obligations of cost orientation and (for BT) the charge control are being met. This will enable the Director to monitor compliance with those obligations.

- 10.11 The cost accounting obligations for BT would, therefore, apply to the following markets in the UK excluding Kingston upon Hull area:
- retail low bandwidth traditional interface (analogue circuits and 8Mbit/s circuits only);
- TISBO low and high bandwidth;
- AISBO; and
- wholesale trunk segments,

ie those markets in which BT must demonstrate that its charges are set on the basis of LRIC plus an appropriate mark-up for the recovery of common costs.

- 10.12 The cost accounting obligations for Kingston would apply to the retail market for the minimum set of leased lines. That is, Kingston must demonstrate that its charges are set on the basis of LRIC plus an appropriate mark-up for the recovery of common costs. In relation to the basis of charges, the Director has previously indicated elsewhere that CCA FAC can in certain cases be a good proxy for LRIC plus mark-ups. In terms of Kingston's charges, this matter will be considered further in the context of its financial reporting obligations.
- 10.13 In order to demonstrate cost orientation of a service or product, it is necessary for the dominant provider to establish cost accounting systems that capture, identify, value and attribute relevant costs to its services and products in accordance with agreed regulatory accounting principles, such as cost causality. A key part of this process is the stage which identifies those parts of the underlying activities or elements that directly support or are consumed by those services or products. These elements are referred to as network components. As these components are frequently used to provide more than one product or service, it is also necessary to determine how much of each component is used for each service or product that should be cost-oriented. The service/product costing methodology applies the utilisation of these components (which are characterised by common usage measures) to the appropriate service product.
- 10.14 For example, a 2Mbit/s PPC uses a number of distinguishable underlying cost components. These would include DWSS network terminating equipment & serving exchange equipment, SDH multiplexors at third party site, tributary card for SDH network, SDH multiplexors, SDH cross connection/grooming equipment, transmission links over fibre, and product management, policy & planning for PPCs all of which require analysis in the cost accounting system. Therefore, for each of these components, it would be necessary to produce a financial statement, that sets out costs and volumes which demonstrate that this information has been properly prepared, in addition to the financial statement for the PPC service.

- 10.15 Section 4 of the Act sets out the Community requirements for regulation. The Director has considered all of the criteria in section 4 of the Act. In particular, the imposition of a cost accounting obligation would specifically be justifiable and proportionate to promote competition; and to ensure the provision of network access and service interoperability in order to secure efficient and sustainable competition and the maximum benefit for the persons who are customers of communications providers. This is because the imposition of a cost accounting obligation will ensure that obligations designed to curb potentially damaging market power can be effectively monitored and enforced.
- 10.16 In addition, the Director has considered the tests laid out in section 87 of the Communications Act. From the SMP assessment set out in Chapter 3 and Annex B, it appears to the Director that there is a relevant risk of adverse effects arising from price distortion. In particular, the market analysis has shown that BT might fix and maintain some or all of its prices at an excessively high level, or impose a price squeeze so as to have adverse consequences for end users. In the light of this analysis, and taking into account the level of investment of the dominant provider, the Director is of the view that a cost accounting obligation is appropriate for the purposes of promoting efficiency, promoting sustainable competition, and conferring the greatest possible benefits on the end users of public electronic communications services.
- 10.17 Section 47 of the Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director believes that given the importance of cost orientation and charge controls in these markets the imposition of a cost accounting obligation is objectively justifiable. That is, in order to ensure that the obligations of cost orientation and charge control are met and the benefits are realised, it is essential that the Director is able to monitor the obligations via a cost accounting obligation. Furthermore, the cost accounting obligation does not discriminate unduly between providers of the same class. That is, although Kingston has also been identified by this market review as a dominant provider, there is not the same demand for wholesale products in its SMP area and the imposition of these obligations in those wholesale markets would therefore, in the Director's view, be disproportionate.
- 10.18 The proportionality and transparency of the obligation is dealt with in more detail in the separate consultation document *Financial reporting in SMP markets:* A consultation on accounting separation and cost accounting systems. In this document, the Director proposes the amount of information required and the processes needed to ensure that the information is fit for purpose, relevant and reliable. The Director will ensure that the cost accounting obligation imposed is both proportionate and transparent.

Accounting separation

10.19 Under sections 87(7) and 87(8) of the Communications Act, appropriate accounting separation obligations may be imposed on the dominant provider in respect of the provision of network access, the use of the relevant network and the availability of relevant facilities. That is to say, the dominant provider may be required to maintain a separation for accounting purposes between such different matters relating to network access or the availability of relevant facilities.

10.20 In the following markets where the Director proposes that BT should be designated as having SMP:

- TISBO low and high bandwidth;
- AISBO; and
- wholesale trunk segments;

the Director is proposing in Proposed regulation 2 relating to each market that BT should have an obligation not to unduly discriminate. This is because where a dominant provider is vertically integrated it has an incentive to provide wholesale services on terms and conditions that discriminate in favour of its own retail activities in such a way that may have a material effect on competition.

10.21 Therefore, given the importance of this issue in ensuring effective competition, the Director believes that it is necessary that BT should be obliged to have an accounting separation obligation. This obligation will enable the Director to monitor whether it is unduly discriminating against or between other providers, by making visible the wholesale prices and internal transfer prices of its services and products. Therefore, the accounting separation obligation for BT will apply to the markets identified above.

10.22 Section 4 of the Act sets out the Community requirements for regulation. The Director has considered all of the criteria in section 4 of the Act. In particular, the imposition of an accounting separation obligation would specifically be justifiable and proportionate to promote competition; to ensure the provision of network access and service interoperability in order to secure efficient and sustainable competition and the maximum benefit for the persons who are customers of communications providers. This is because the imposition of an accounting separation obligation will ensure that obligations designed to curb potentially damaging market power can be effectively monitored and enforced.

10.23 Section 47 of the Act requires conditions to be objectively justifiable, non-discriminatory, proportionate and transparent. The Director believes that given the importance of non-discrimination in these markets the imposition of an accounting separation obligation is objectively justifiable. That is, in order to ensure that the obligation to not unduly discriminate is met and the benefits are realised, it is essential that the Director is able to monitor the obligations via an accounting separation obligation. Furthermore, the accounting separation obligation does not discriminate between communications providers of the same

class. That is, although Kingston has also been identified by this market review as a dominant provider, there is not the same demand for wholesale products in its SMP area and the imposition of these obligations would therefore, in the Director's view, be disproportionate.

10.24 The proportionality and transparency of the obligation is dealt with in more detail in the separate consultation document *Financial reporting in SMP markets:* A consultation on accounting separation and cost accounting systems. In this document, the Director proposes the amount of information required and the processes needed to ensure that the information is reliable. The Director will ensure that in imposing an accounting separation obligation it is both proportionate and transparent.

10.25 As non-discrimination must be capable of being implemented, where appropriate, on a service or product basis it is not sufficient for monitoring to be carried out only at the market level, as this would not enable the Director to identify whether products and services are being provided on a non-discriminatory basis.

10.26 As an example, in order to ensure that BT's retail leased lines are being provided on a basis that is not unduly discriminatory, it would be necessary to make visible the wholesale prices and internal transfer prices of symmetric broadband origination on an equivalent basis. The same is true of other products within SMP markets where there is an obligation not to unduly discriminate. The consultation document on financial reporting will go into these issues of granularity in more detail and provide justification for the level of granularity in each market.

Responses to the previous consultation

10.27 Nearly all respondents stated that they would reserve their substantive comments for responding to the consultation document *Financial reporting in SMP markets*. Additionally, there was no substantive disagreement regarding the necessity of accounting separation and cost accounting obligations; the debate concerned the extent and detail of the obligations. This chapter will only address certain points; the more detailed issues have been consulted on in more detail in *Financial reporting in SMP markets* and will be considered in the context of that consultation.

BT

10.28 While reserving substantive comments for the consultation on financial reporting, BT did raise the following issues regarding financial reporting obligations:

- BT stated that there was a lack of clarity regarding the level of detail required by the financial reporting obligations;
- BT stated that a cost accounting system was not necessary to monitor a price control, as this could be accomplished using price data;
- BT stated that only in the UK and the Republic of Ireland were Dominant Providers required to produce financial statements of this type; and
- BT objected to the list of 94 network components (Schedule 1, Appendix A as set out in Annex D).

10.29 The Director considers that *Financial reporting in SMP markets* addresses the issue of the level of detail required by the financial reporting obligations and that this subject has been dealt with fully in that consultation, and will be dealt with in the explanatory statements and formal notification to that consultation. Similarly, the Director considers that the number and definition of network components will be addressed by the financial reporting obligations consultation.

10.30 In relation to a price control, the Director considers that the purpose of cost accounting is for the setting and reviewing of the price control. That is, in setting or reviewing a price control, the Director requires financial information on the impact on costs, not just prices.

10.31 On the issue of the compatibility of the proposals with the practice in Europe, the Director considers that his proposals are consistent with the Directives and the Communications Act. Additionally, the Director notes that the Eighth report from the European Commission on the implementation of the Telecommunications Regulatory Package stated:

"The implementation of cost accounting and accounting separation in Ireland and in the United Kingdom can be regarded as best practice in the EU as regards the approach and methodology used, the detail of the verification carried out by the regulators and the availability of information to third parties." (p. 37)

Other respondents

10.32 Other communications providers also stated that they would respond in full to the financial reporting obligation consultation. However, a common theme of their initial comments was that the financial reporting obligations should cover all areas of BT's business not just those upstream markets with SMP and certain downstream markets with SMP.

10.33 The Director considers that the European Directives only allow the imposition of financial reporting obligations on providers in markets where that provider has SMP, and only in downstream markets where remedies in upstream markets are not sufficient.

Chapter 11

Representations

- 11.1. The Director is publishing the Notification at Annex D to allow interested parties, and the European Commission and other national regulatory authorities, to make any representations. After considering any such representations, the Director will, if appropriate, give effect to these proposals by publishing a further and final notification.
- 11.2 Representations must arrive at Ofcom **no later than close of business on 6 February 2004**. Representations received after this time will not be taken into account, and no extensions of the deadline will be permitted.
- 11.3 Where possible, comments should be made in writing and sent by email to **martin.hill@ofcom.org.uk**. However, copies may also be posted or faxed to the address below. If any parties are unable to respond in one of these ways, they should discuss alternatives with:

Martin Hill
Ofcom
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

tel: 020 7783 4334 fax: 020 7981 3990

Further copies of this document

11.4 This document can be viewed on Ofcom's website, www.ofcom.org.uk. Hard copies can be made available on request from the Ofcom Contact Centre by telephoning 0845 456 3000 or sending an email to contact@ofcom.org.uk.

Publication of representations

11.5 On this occasion, the Director is not inviting interested parties to comment on the representations made by others. However, in the interests of transparency, all representations will be published, except where respondents indicate that a response, or part of it, is confidential. Respondents are therefore asked to separate out any confidential material into a confidential annex which is clearly identified as containing confidential material. Ofcom will take steps to protect the confidentiality of all such material from the moment that it is received

at Ofcom's offices. In the interests of transparency, respondents should avoid applying confidential markings wherever possible.

11.6 Non-confidential representations can be viewed on Ofcom's website in the Publications section under Responses to Oftel consultations. They can also be viewed at Oftel's Research and Information Unit. Appointments must be made in advance by telephoning 020 7634 8761 or by sending an e-mail to infocent@oftel.gov.uk.