

Proposed requirement on British Telecommunications to publish Key Performance Indicators

Explanatory Memorandum and Draft Directions

Consultation document

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Section 1

Summary

Purpose of consultation

1.1 This document contains draft Directions for a proposed set of Key Performance Indicators (“KPIs”) that BT will be required to publish in respect of key wholesale products and services. This requirement to publish Quality of Service information was confirmed and imposed in the following reviews of competition in communications markets, undertaken by Oftel/Ofcom:

- Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets (‘Fixed Narrowband Review’); condition AA7 – (Final Explanatory Statement and Notification published on 28 November 2003);
- Review of the wholesale broadband access market – (‘Broadband Review’); condition EA5 (Final Explanatory Statement and Notification – published on 13 May 2004);

and proposed in the following review:

- Review of the retail leased lines symmetric broadband origination and wholesale trunk segments market (‘Leased Lines Review’), conditions G7, GG7, H6 and HH6 (Explanatory Statement and Notification - published 18 December 2003).

1.2 It has been proposed (and confirmed in the case of the Fixed Narrowband and Broadband Reviews) that the Quality of Service condition will not apply to Kingston Communications as there is insufficient demand for the wholesale services in question for the data provided to be statistically meaningful.

1.3 Where BT has significant market power in a specific wholesale market, it has the potential to leverage this into downstream retail markets, by providing a different Quality of Service to different wholesale customers. This could have a material impact on competition in retail markets, ultimately to the detriment of retail customers. By providing transparency of the Quality of Service BT provides to its own retail arm (where relevant) and to other communications providers, BT’s competitors in downstream retail markets will be able to identify where potential discrimination exists.

1.4 Discrimination in relation to Quality of Service could take several different forms, and the proposed KPI publication obligation is relevant to all of these:

- (i) There may be some circumstances where the retail arm of BT purchases the same wholesale product from BT as its competitors, and does so using the same processes. In this case, the proposed KPI publication obligation is intended to ensure that the operational management of the processes does not result in undue discrimination in the Quality of Service provided.

(ii) There may be other circumstances where the retail arm of BT purchases the same wholesale product from BT as its competitors, but does so using different processes (for example, a different ordering gateway). In this case, the proposed KPI publication obligation is intended to ensure that the differing process designs do not result in undue discrimination.

(iii) There may be other circumstances where the retail arm of BT purchases a different wholesale product from BT to its competitors (e.g. PPCs), but uses this to compete in the same downstream market (e.g. leased lines). In this case the proposed KPI obligation is intended to ensure that the different product designs do not result in undue discrimination in the Quality of Service provided.

1.5 The initial consultation, *Proposed requirement on dominant providers to publish Key Performance Indicators*, published by Ofel in July 2003, set out high level proposals for specific KPIs. It was proposed there that it would not be proportionate to require BT to publish a large number of KPIs, covering all aspects of operational performance. Instead Ofel/Ofcom have consulted widely with stakeholders to select a small number of KPIs that are representative of key business processes, where the need for transparency regarding Quality of Service is paramount. The purpose of this document is to consult on Ofcom's proposals (set out in this Explanatory Memorandum and Draft Directions) for a set of KPIs covering BT's Wholesale Line Rental product (WLR), Interconnection circuits, FRIACO and Wholesale Broadband Origination and Conveyance (BT's DataStream product, specifically End User Access, Virtual Paths and ATM Interconnection).

1.6 A detailed KPI publication obligation for PPCs was established in the PPC Phase II Direction to resolve a dispute concerning the provision of partial private circuits and re-proposed in the Leased Lines Review (<http://www.ofcom.org.uk/consultations/past/llmr/?a=87101>). KPIs for PPCs are therefore not covered in this consultation.

Next steps

1.7 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 Communications Act 2003), the draft Directions are also being sent to the European Commission and to other NRAs as in Ofcom's opinion, the proposals may affect trade between member states. The Commission and other NRAs may make comments within the ten week consultation period.

1.8 Once Ofcom has considered any representations made within the period to 6 August 2004, including any made by the Commission, they may give effect to the proposals, with or without modifications, by publishing a final Explanatory Statement and Directions. Following publication of the Directions, it is proposed that BT will have a period of three months to implement the requirements.

Section 2

Regulatory Framework

A new regulatory regime

2.1 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 Communications Act 2003 (the “Act”). The fifth Directive, on Privacy and Electronic Communications, was implemented by a set of Regulations under the European Communities Act 1972 on 11 December 2003.

2.2 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 EU Communications Directives referred to above. For an interim period until Ofcom assumed its functions, the Director General of Telecommunications (“Director”) was able to carry out various of these functions on behalf of Ofcom. Ofcom has now assumed full functions under the Act as of 29 December 2003. For these reasons this document refers to both acts undertaken by the Director (and Oftel) up until 29 December 2003 and acts now being undertaken by Ofcom.

Market reviews

2.3 The new Directives require National Regulatory Authorities (‘NRAs), such as Ofcom, to carry out reviews of competition in communications markets to ensure that regulation remains appropriate in the light of changing market conditions.

2.4 In its concluding Statements on the review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets (“Fixed Narrowband Review”) (http://ofcom.org.uk/about_ofcom/publications.fixednarrowbandstatement.pdf), and the wholesale broadband access market (“Broadband Review”) (http://www.ofcom.org.uk/codes_guidelines/telecoms/netw_intercon_index/wholesalebroadbandreview/), Oftel/Ofcom concluded that BT has significant market power (“SMP”) in a number of markets (see Annex 3). As a result, the Director proposed that BT should be subject to a requirement to publish data relating to the Quality of Service it delivers in providing certain wholesale services.

2.5 As discussed in more detail in Section 4 below the Director considered that this could be best achieved by requiring publication of a specified set of Key Performance Indicators (“KPIs”), representative of key business processes.

2.6 A detailed KPI obligation for PPCs was established in the PPC Phase II Direction to resolve a dispute concerning the provision of partial private circuits and re-proposed in the review of the retail leased lines, symmetric broadband origination and wholesale trunk segments market (“Leased Lines Review”)

(<http://www.ofcom.org.uk/consultations/past/llmr/?a=87101>). KPIs for PPCs are therefore not covered in this consultation.

2.7 Kingston Communications (in the Hull area) was also designated/proposed as having SMP in a number of markets. However, it has been proposed that the Quality of Service condition should apply only to BT because the level of data for Kingston's relevant wholesale products and services is not considered to be statistically meaningful for the purposes of the KPI proposals.

Relationship of the draft Directions to the Market Review process

2.8 The Director published a consultation, *Proposed requirement on dominant providers to publish Key Performance Indicators*, on 11 July 2003 (see http://www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/kpis0703.htm) ("July Consultation").

Responses to that consultation can be found on Ofcom's website <http://www.ofcom.org.uk/static/archive/oftel/publications/responses/2003/kpis0703/index.htm>.

2.9 The draft Directions contained in Annexes 4 and 5 provide the detail of the data that Ofcom considers should be published under the Quality of Service conditions arising from the above mentioned reviews. The details of the Directions are discussed in Sections 5 and 6. In accordance with section 49(2) of the Act, Ofcom can only give these Directions if it is satisfied that to do so is:-

- Objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which they relate;
- Not such as to discriminate unduly against particular persons or against a particular description of persons;
- Proportionate to what they are intended to achieve; and
- In relation to what they are intended to achieve, transparent.

2.10 For the reasons set out in Sections 5 and 6 of this document, Ofcom considers that these requirements are met.

Ofcom's duties and functions

2.11 Section 3 of the Act sets out the general duties of Ofcom. In making its proposals for KPIs in this document, Ofcom has taken account of its general duties under section 3 of the Act including the principle that the proposed regulatory activity is transparent, accountable, proportionate, consistent and is targeted only where the action is needed; and represents the best regulatory practice.

2.12 In addition, Section 4 of the Act sets out the Community requirements on Ofcom under its duties for the purpose of fulfilling Community obligations which flow from Article 8 of the Framework Directive. In proposing the obligation to publish KPIs Ofcom has considered all of those requirements. In particular, Ofcom considers the requirement promotes competition and secures efficient and sustainable competition. The transparency of information is intended to ensure that BT provides a broadly equivalent quality of service to competing providers as it provides to itself.

Section 3

Policy framework for proposals

3.1 Where BT has SMP in a specific wholesale market, it has the potential to leverage this into downstream retail markets, by providing a different Quality of Service to different wholesale customers. This could have a material impact on competition in retail markets, ultimately to the detriment of retail customers.

3.2 Whilst it may be possible to address this concern by requiring BT to provide wholesale services to other communications providers using the same operational processes and interfaces as it uses to supply itself (“transactional equivalence”), the high cost of replacing legacy systems means that this may not always be practical, or indeed proportionate.

3.3 An alternative is to require BT to publish information about the quality of wholesale services that it provides to both itself and to other communications providers. Following the market reviews (outlined in paragraph 1.1) where BT was found to have SMP and a Quality of Service condition was imposed, Ofcom is proposing that BT should publish a set of KPIs for key wholesale products. By providing transparency, BT’s competitors will be able to identify where potential discrimination exists.

3.4 Discrimination in relation to Quality of Service could take several different forms, and the KPI obligation is relevant to all of these:

(i) There will be some circumstances where the retail arm of BT purchases the same wholesale product from BT as its competitors, and does so using the same processes. In this case, the proposed KPI publication obligation is intended to ensure that the operational management of the processes does not result in undue discrimination in the Quality of Service provided.

(ii) There will be other circumstances where the retail arm of BT purchases the same wholesale product from BT as its competitors, but does so using different processes. For example, the basic product design for WLR is similar for all retail providers, including the retail arm of BT. However, alternative providers have to purchase WLR, and provide in-life service management, via external gateways to BTs systems, whereas the retail arm of BT has direct access to BTs internal systems. In this case, the proposed KPI publication obligation is intended to ensure that the differing process designs do not result in undue discrimination.

(iii) There will be other circumstances where the retail arm of BT purchases a different wholesale product from BT compared to its competitors, but uses this to compete in the same downstream market. For example, alternative providers competing in the retail leased lines market base their service on wholesale PPCs purchased from BT, but the retail arm of BT does not. In this case the KPI publication obligation is intended to ensure that the different product designs do not result in undue discrimination in the Quality of Service provided.

3.5 It is important to emphasise that the proposed KPI publication obligations are not intended to set an absolute standard for BT's performance, of the type that would normally be set out in a Service Level Agreement (SLA). The intention is only to ensure that the relative performance of BT in relation to different providers is not unduly discriminatory. In addition to defining the KPIs that Ofcom proposes BT should publish, this document sets out the comparative data to be published for this purpose. There are two different types of comparative data that may be required:

(i) Where the retail arm of BT purchases the same wholesale product from BT as its competitors, then the most appropriate comparator is the performance of BT in providing wholesale services to itself. An example is FRIACO, which is purchased by BT's retail arm, and forms the basis of its Surfport 24 service.

(ii) There are however several cases where the retail arm of BT does not explicitly purchase the same wholesale product from BT as its competitors, and where it may not be possible to identify and measure an explicit comparator at the wholesale level. Although there is not an explicit transaction in such cases, there is an implicit transaction which must generally deliver a similar operational performance if the requirement for no undue discrimination is to be satisfied. If it is not possible to measure such wholesale transactions directly, BT's operational performance at the wholesale level may be derived from the downstream or retail performance.

New reporting requirements

3.6 Under the former regulatory regime, BT was required under Condition 65 of its licence to provide an annual Quality of Service report ("Quality Schedule") to the Director. The report gave results of the measurements of actual performance against target performance for a set of standard services and private leased circuits to a representative sample of communications providers and was produced annually. Condition 65 was continued by a Notice given to BT on 23 July 2003 under paragraph 9 of Schedule 18 to the Act, which took effect from 25 July 2003. Since then, Condition 65 has been discontinued in accordance with the Act except in so far as it relates to those services which are currently being reviewed as part of the Leased Lines Review, (see para 1.5 above).

3.7 There is no obligation under the Act or the new Quality of Service conditions to base the proposed KPIs on the old Quality Schedule. This provides an opportunity to take account of recent commercial developments and stakeholder requirements. Having consulted widely with stakeholders, Ofcom is proposing in this document that BT should publish KPIs for Wholesale Line Rental ("WLR"), Interconnect circuits, FRIACO, and DataStream (specifically EUA, VP and ATM Interconnection). For each of these wholesale services, Ofcom has selected a small number of KPIs that are representative of key business processes, and where the need for transparency regarding the Quality of Service is paramount. Ofcom has not attempted to define a complete set of KPIs that cover all aspects of operational performance, since to do so would place a disproportionate reporting burden on BT.

3.8 The Quality of Service report produced under the Condition 65 included a great deal of detailed analysis of individual operators' performance, down to the level of individual line faults. Ofcom believes it would be disproportionate to require this level of analysis on a routine basis. The proposed KPIs are intended to be high level

indicators, used to identify potential discrimination in areas which are business critical for BT's wholesale customers. A more detailed analysis would only be required if the KPIs revealed a potential concern.

3.9 To ensure maximum transparency and to minimise the need for regulatory intervention, Ofcom proposes that the KPIs should be published in such a manner as is necessary for bringing the KPIs to the attention of industry, for example on BT's website. The proposed frequency of publication should be monthly or quarterly, dependent upon the product (see table 3). In addition, Ofcom may publish a non-confidential version of the results on its website, in order to provide greater visibility, and may provide a commentary on emerging trends.

Timing of consultation

3.10 This consultation is being undertaken in accordance with Ofcom's consultation principles, which are outlined in Annex 1. The consultation period ends at 5.00 pm on Friday, 6 August 2004. Ofcom would particularly welcome comments from BT and communications providers who compete with BT in the relevant product markets for which KPIs are being proposed.

Section 4

Summary of consultation responses and Ofcom's responses

Initial proposals

4.1 In the July Consultation the Director proposed that BT should publish KPIs for:

- (i) Wholesale Broadband Origination (ATM Interconnect)
- (ii) Wholesale Line Rental (WLR)
- (ii) Interconnection circuits
- (iv) FRIACO

These were proposed as wholesale remedies for the relevant market in which a Quality of Service condition has been imposed, as detailed in Annex 3

4.2 Consistent with the duty under section 6 (1) of the Act not to impose unnecessary regulatory burdens or maintain burdens that have become unnecessary, the Director's proposals for the product specific KPIs took into account:

- Recent product developments, particularly where quality is a major issue.
- The appropriate scope for the requirement.
- Optimal frequency of publication.
- Appropriate level of detail in the published data, balancing transparency with commercial confidentiality.

4.3 In making its proposals for specific KPIs, Oftel/Ofcom have sought to ensure that the proposals constitute an appropriate level of regulation. A regulatory option appraisal is outlined in chapter 4 of the July Consultation. In addition, Oftel/Ofcom have undertaken an extensive consultation process designed to ensure that stakeholders' views were taken into account before specifying the detail, manner and form that the publication of the KPIs should take. This included a stakeholder workshop, held on 12 September 2003, followed by a series of individual work stream meetings held in October to December 2003. The work streams explored in detail the product specific aspect of KPIs and those discussions have been taken into account in the draft Directions. The costs of implementation of the proposed KPIs are covered in paras 4.49 – 4.52 below.

Specific wholesale services

4.4 Respondents to the July Consultation were broadly supportive of the Director's initial proposals. Those responses can be found on Ofcom's website, (see <http://www.ofcom.org.uk/static/archive/oftel/publications/responses/2003/kpis0703/index.htm>).

4.5 Respondents agreed that both FRIACO and WLR should be included in the scope of the requirement.

4.6 Respondents were asked whether they agreed that Local Loop Unbundling (LLU), Carrier Pre-Selection (CPS), Indirect Access (IA) and Number Translation Services (NTS) should not be included within the scope of the proposed Directions.

Local Loop Unbundling (LLU)

4.7 In its response, Bulldog expressed its concerns regarding discrimination in the provision of LLU. Ofcom acknowledges those concerns and has considered Quality of Service reporting for LLU within the local access market review, published 13 May 2004, (<http://www.ofcom.org.uk/consultations/current/rwlam/>).

Carrier Pre-Selection (CPS)

4.8 In the July Consultation, it was noted that BT currently provides performance data on CPS on a voluntary basis. CPS data covers total forecast and actual order volumes, order reject rates, cumulative lines with communications providers, total churn and performance statistics related to speed of electronic order processing and switchover dates. In its response, Centrica stated that the current data set was insufficiently comprehensive to enable providers to compare the equivalent performance of BT's retail arm. ACSP stated it would support a more tailored KPI for CPS and WLR. Other communications providers have stated that the current process is beneficial, enabling them to discern trends and identify potential problems. Given that BT is already providing data, Ofcom considers that it would not be proportionate to intervene.

Indirect Access (IA) and Number Translation Services (NTS)

4.9 In its consultation response, SPC Network stated that both IA and NTS were covered by the measures proposed for Interconnect circuits. Ofcom agrees and does not propose to include additional KPIs for IA or NTS.

Wholesale Broadband Origination

4.10 In its response, Bulldog considered that BT should publish KPIs for IP Stream as well as Data Stream, a view which is shared by SPC Network. Ofcom acknowledges the concerns expressed by these providers, but notes that IPStream is currently assumed to fall outside the scope of the SMP obligations imposed on BT in the Broadband Review and cannot therefore be the subject of a specific KPI publication obligation in the context of the Broadband Review.

4.12 Following discussion with the work stream asked to consider KPIs for DataStream, Ofcom proposes that BT should publish KPIs for all three elements that make up this service: the End User Access (EUA), Virtual Paths (VPs), and ATM Interconnect circuits (considered in section 6).

Data Management Amendments (DMAs)

4.13 In addition to those KPIs proposed by the Director, respondents to the consultation proposed there should be a KPI for DMAs. DMAs are required in order to modify the way in which calls are routed, both at the Digital Local Exchange (DLE) and at the tandem switches. DMAs may be required when new number ranges are made available, or when the routing of existing number ranges is modified. Throughout the consultation, communications providers have stressed the importance of having visibility of the time taken by BT to complete DMAs for its own services, in order to determine whether discrimination exists. Ofcom accepts this view and therefore proposes to include a KPI for DMAs. As DMAs are part of the operational management of the Interconnect circuit product, Ofcom proposes they should be included as a subset of those KPIs.

Responses to initial proposals

4.14 In the July 2003 consultation, the Director proposed that the KPIs should capture the following processes:

- Pre-ordering response time (in days).
- Ordering response time (in days).
- Percentage of orders rejected.
- Percentage of orders provisioned on time.
- Average provisioning time (in days).
- Percentage of new provisions reported as faulty.
- Percentage of installed base reported as faulty.
- Average time to restore service (in hours).
- Percentage of repeat faults

The Director did not propose that each indicator should be published for each product and each aspect of operational performance, as this would not be a proportionate requirement.

4.15 Respondents were asked whether they agreed with the proposed list of KPIs and the Director's proposed rankings in terms of importance, as outlined in table 1. They were invited to propose suitable alternatives where appropriate (asking that those proposals be substantiated). The responses are summarised in table 1 below. A tick indicates overall consensus with the Director's proposals. A cross indicates where there were differing views and these are discussed below. Not all respondents commented on individual indicators.

Table 1: Summary of responses to Director's initial proposals for KPIs

Proposed options	ATM Interconnect	Interconnect circuits	FRIACO	WLR
Pre-ordering response time	3v	3v	2x	3v
Ordering response time	3v	3v	2x	3v

% of orders rejected	1v	1x	2x	1x
% of orders provisioned on time	1v	1v	1v	1v
Average provisioning time	2x	1v	2x	2x
% of new provisions reported as faulty	2x	2x	2x	2x
% of installed base reported as faulty	1x	1x	2x	1x
Average time to restore service	1v	1v	2x	1v
% of repeat faults	2v	2x	2x	2v

4.16 BT's DataStream product consists of three basic network elements, the End User Access (EUA) the Virtual Path (VP) and an ATM Interconnection circuit. As explained in section 6, following consultation with stakeholders KPIs are being proposed for the three elements, but it is not proposed that each KPI be published for each element, as discussed below.

4.17 Throughout the consultation, stakeholders have made clear to Ofcom that the key areas for potential discrimination are service provision and fault repairs. Given that it would not be proportionate to require BT to publish a full set of data for those products where volumes tend to be low (eg Interconnect circuits, FRIACO and ATM Interconnect Circuits), (as compared to WLR and EUA where volumes scale directly with the number of end users) Ofcom proposes that BT should only be required to publish KPIs for the two pivotal KPIs, namely the percentage of orders provisioned on time and the average time to restore service.

Pre-ordering and ordering response times

4.18 Following consideration of the consultation responses, Ofcom proposes not to include KPIs for pre-ordering response times for the services listed here. This is because there is not a formal pre-ordering process for the services discussed here.

4.19 Ofcom also proposes not to include KPIs for ordering response times. Ordering response time is not an issue for automated processes where the response is essentially immediate. In such cases Ofcom considers that the level of availability of the ordering gateway is a more relevant KPI than the response time. (See also discussion about availability at paragraph 4.33).

Percentage of orders rejected

4.20 Order rejections for wholesale services provided by BT are a major concern for communications providers. An order can be rejected for several reasons, including, for example, an incorrectly completed form, a failed line test, service incompatibly, or

postcode validation failure. Although the reason why an order is rejected is not always under BT's control, this KPI provides a powerful means of highlighting where there may be potential problems in the ordering process.

4.21 In its response, SPC Network's general view was that this is a critical measure as order rejections may result in a loss of its customers. It also requested that BT should record the reason for the rejection.

4.22 Ofcom's view it that this is clearly an important KPI, given that order rejections can lead to a loss of customers, and increased customer acquisition costs. Ofcom proposes to include the KPI for DataStream (EUAs and VPs) and for WLR. Ofcom does not consider it would be proportionate to require BT to provide a breakdown of reasons for rejection. However BT should be in a position to provide this information should the KPI indicate that there may be potential problems. This KPI is not proposed for ATM Interconnect circuits, interconnect circuits and FRIACO due to the relatively low volumes associated with these services.

Percentage of orders provisioned on time

4.23 BT and other respondents agreed that this is a decisively important measure. Delays in the provisioning of services have a clear impact on the Quality of Service experienced by end-users, and hence on the ability of communications providers to win new customers. Ofcom agrees this is a key KPI and proposes to include it for all products included in this consultation.

Average provisioning time

4.24 BT considered the metric to be a low priority for all products. SPC network considered its value may be limited without either a full data set or descriptive statistics but proposed its inclusion for Interconnect circuits. Ofcom agrees that this KPI is a lower priority than the "percentage of orders provisioned on time" measure described above. The reason for this is that when a new service is provisioned, certainty is generally more important than speed, unlike fault repair, where the speed of response is vital. Ofcom therefore considers it would be disproportionate to require publication of a KPI for average provisioning time

Percentage of new provisions reported as faulty

4.25 BT considered that this KPI was a low priority for all products. SPC Network ranked it highly for DataStream. It was noted that it was commonplace to experience faults in the provisioning of new products. In BT's view, the KPI would not be relevant for Interconnect circuits as each circuit is tested with the customer before provisioning is completed.

4.26 Ofcom considers that incidence of faults for new provisions provides a good indicator of potential problems. Ofcom therefore proposes to include a KPI for DataStream (EUAs) and WLR. Ofcom does not consider a KPI for VPs would be appropriate, given that most faults are reported by end users and it is not therefore possible to separate out faults associated with the VP. Ofcom does not consider it proportionate to require BT to publish a KPI for Interconnect circuits (including ATM Interconnect circuits) or for FRIACO, due to the low volume of new provisions

Percentage of installed base reported as faulty

4.27 BT considered this to be a low priority KPI, whereas SPC Network ranked it highly. Ofcom considers fault incidence to be a key area for potential discrimination, which impacts on the operational costs associated with in-life service management, as well as on the general customer experience.

4.28 Ofcom proposes that this measure be included for DataStream (EUA) and for WLR. Ofcom does not propose that BT should publish the KPI for VPs for the reasons stated under “percentage of new provisions reported as faulty.” Ofcom does not consider it proportionate to require BT to publish a KPI for Interconnect circuits (including ATM Interconnect circuits) or for FRIACO, due to the low volume of such circuits.

Average time to restore service

4.29 The time taken to fix a fault is a fundamental discrimination issue. Whereas Ofcom accepts that fault clearance may sometimes be outside BT’s control, excessive fault clearance times may indicate a different level of service offering as compared to that offered to BT’s retail arm. As end users are highly sensitive to fault repair timeframes, this could result in BT’s competitors experiencing high levels of churn in their customer base.

4.30 Respondents to the July Consultation agreed that a measure of service restoration should be a priority. At the Stakeholder workshop, held at Oftel in September 2003, BT subsequently proposed an alternative measure for WLR, namely the percentage of faults cleared on time. The disadvantage of this approach is that “on time” would need to be defined, and this would require Ofcom to set an absolute standard for BT’s performance. Ofcom’s preference is therefore for BT to measure the average time to restore service. Ofcom considers this would be a proportionate requirement for all products.

Percentage of repeat faults

4.31 Ofcom considers this is a key measure for determining the quality of BT’s fault repair service. If the percentage of repeat faults is high, this would have a detrimental impact on the Quality of Service BT’s competitors could provide to their customers.

4.32 Respondents agreed with the proposed ranking for this KPI. Ofcom therefore considers it should be included for DataStream (EUAs) and for WLR. Ofcom does not propose that BT should publish the KPI for VPs for the reasons stated under “percentage of new provisions reported as faulty.” Ofcom does not consider it proportionate to require BT to publish a KPI for Interconnect circuits (including ATM Interconnect circuits) or for FRIACO, due to the low volume of circuits.

Gateway availability

4.33 BT is required as part of the proposed specification for WLR (see section 5.2) to provide transparency of its operational performance in relation to key business processes. With specific reference to WLR, respondents made clear that both pre-ordering response and ordering response times are not priority concerns, provided that gateway availability is assured. The ordering gateway used by communications providers represents an additional process overhead, which BT's retail arm is not subject to. Without high availability, BT's competitors are unable to obtain an equivalent level of service. Ofcom therefore considers that a KPI for gateway availability should be published.

Non-product specific proposals

4.34 In addition to the product specific proposals discussed above, respondents' proposals for additional KPIs included the statement of requirements (SOR) process, appointments, billing timeliness and billing accuracy.

4.35 A communications provider wishing to request a new product from BT must use an SOR, which BT is obliged to consider due to its obligation to provide Network Access in all markets in which it has SMP. BT's retail arm does not have to go through the same process when it wishes to launch a new product, and therefore there is the possibility that it may receive preferential treatment. In the Fixed Narrowband Review, Ofcom found evidence 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. The Director agreed that transparency is likely to lead to greater co-operation between BT and other communications providers and reduce the need for regular regulatory intervention. BT indicated to Ofcom that it would be willing to publish KPIs on a voluntary basis. Having carefully considered BT's draft guidelines, published 28 January 2004, www.btinterconnect.com/wwwman1s.htm Ofcom has proposed that BT should proceed on this basis. Ofcom believes that this should allow other communications providers a greater insight into the development of SORs and the information required. Should the guidelines fail to lead to a satisfactory outcome, Ofcom would consider extending the KPI requirement to the SOR process.

4.36 Centrica suggested a KPI measuring the percentage of appointments kept for both BT's retail arm and other communications providers. Also, metrics to cover the percentage of queries/problems resolved within a specified time period and the average length of time taken to resolve queries. Whilst acknowledging that these KPIs are important, Ofcom believes that the proposed "average time to restore service" and "percentage of orders provisioned on time" measures should partly capture these aspects of Quality of Service. It does not therefore at this stage propose a requirement for publication of these additional KPIs.

4.37 Respondents were asked if they were aware of a KPI that would provide useful additional information on call accounting accuracy. SPC Network referred to the ETSI (European Telecommunications Standards Institute) Quality of Service measures, which include a measure for the rate of claims per point of billing per annum and a survey of call accounting accuracy (*ETSI User Group: Quality of Telecoms Services; Part 2: user related parameters on a service specific basis (ETSI EG 202 009-02)*). The ETSI approach to Quality of Service focuses on users and

user satisfaction. Ofcom believes it may be difficult to interpret the measure in the wholesale context, where a high proportion of accounts are subject to query. Ofcom does not therefore propose to include this KPI but would welcome stakeholders' views.

Comparators

4.38 In those circumstances where BT's retail arm purchases the same wholesale product from BT as its competitors, and does so using the same processes, it is proposed that BT will be required to publish a KPI showing the aggregate data for all providers (including BT itself) together with data showing BT's performance in relation to its retail arm. Ofcom believes that this will provide the maximum transparency of the comparative Quality of Service provided in the operational management of these processes. This applies to FRIACO, which is purchased by BT's retail arm, and forms the basis of its Surfport 24 service.

4.39 There are other circumstances where there is no explicit wholesale transaction between BT and BT's retail arm, but where there is an implicit transaction. WLR and DataStream are both examples of this. BT implicitly purchases WLR from itself in order to provide retail exchange lines, and BT implicitly purchases DataStream from itself in order to provide the downstream IPStream service. For these services a wholesale comparator may be derived from BT's downstream performance. Ofcom acknowledges that this will not be possible for all KPIs. Specifically, this will not be possible in the case of order rejection rates and gateway availability. In those cases Ofcom does not require publication in relation to service provided by BT to its retail arm.

4.40 There are some circumstances where BT's retail arm does not purchase the same wholesale product from BT as its competitors, and nor is there any equivalent implicit transaction. For example, with the exception of FRIACO, BT does not interconnect with itself, and so does not purchase interconnect circuits from itself. BT's performance in relation to interconnect circuits should be broadly comparable with its performance in relation to the transmission links between its own switches, but a precise comparison would not be appropriate. In this case Ofcom proposes that BT should publish an aggregate figure for its performance in relation to interconnect links, but that BT should not publish a comparator. BT's competitors also provide interconnect links, so should be able to detect potential problems from the published data.

Proposals for publication

4.41 Respondents were asked whether they agreed with the options for the process of publication (outlined in table 2 below), and if they had any concerns regarding confidentiality with regard to the proposed indicators and/or process.

Table 2: Director's proposals for publication options, for consultation

Option 1	BT provides the Director with data on its own performance in relation to wholesale services provided to individual providers and where relevant data on its provision of wholesale services to its retail business
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Option 2	BT publishes data on its performance in relation to wholesale services provided to all other providers. Included within this aggregated total would be BT's provision of wholesale services to its retail business. In addition BT provides data to the Director on its provision of wholesale services to its retail business separately.
Option 3	BT publishes data on its performance in relation to wholesale services provided to all other providers and separately publishes data on its provision of wholesale services to its retail business.
Option 4	BT publishes data on its own performance in relation to wholesale services provided to individual providers. Removing the names of providers other than BT would however anonymise the data.]

4.42 In its response, BT suggested that the options should vary according to product but believes that overall option 2 provides the best balance between transparency and commercial confidentiality. SPC Network proposed a modification to option 3, whereby in addition to BT publishing KPIs on its performance to its retail arm, it would also provide individual performance data to the communications provider. Centrica requested data on "best and worst performance" by provider, to facilitate a "like for like" comparison. ACSP was strongly in favour of option 4, which it believes will ensure transparency and non-discrimination.

4.43 Ofcom's objective is to ensure that the transparency of the KPIs allows communications providers to make a judgement whether discrimination is taking place. Each of the options proposed in the July Consultation have been considered in the light of the consultation responses received. Ofcom considers that Options 1 and 2 are the least transparent, given the reliance on Ofcom's analysis of the data provided. Given Ofcom's bias against intervention, its preference would be Options 3 or 4.

4.44 Option 3, including the modification proposed by SPC, would enable individual providers to compare the KPIs with individual performance on a "like for like" basis. However, it might result in a number of "false alarms" as many of the proposed KPIs will be affected not only by BT's performance, but also by other providers' performance eg in data entry or process inefficiencies. Option 4 provides an estimate not just of the average performance, but of the variance in the performance between different providers.

4.45 Ofcom's preference is therefore for a combination of Options 3 and 4, but with the proviso that any data that might reasonably be regarded as commercially sensitive should be removed from the publicly available data, and provided separately to Ofcom. Specifically, providers other than BT's retail arm should not be identified by name, and all volume information should be removed.

4.46 Ofcom proposes that the following information be published:

- An aggregate figure for each KPI, showing BT's performance to all communications providers (including BT, where relevant), plus the total volume associated with each of these aggregate KPIs.
- Where available (as specified by Ofcom in the draft Directions), a separate comparator for each KPI, showing BT's performance in relation to its retail arm. The associated volume data should not be published, but should be provided to Ofcom separately.
- Disaggregated data for each KPI showing BT's performance in relation to each of the "top 10" providers, measured by installed base. In addition BT should publish an aggregate figure showing its performance in relation to all other providers not included in the "top 10." This data should be anonymised, and the associated volume information should not be published. The names of the providers, and associated volume data, should be provided to Ofcom separately.

Frequency of publication

4.47 Respondents were asked how frequently the KPIs should be published to ensure undue discrimination is detected and responded to in a timely manner. Respondents were also asked whether there is a case for applying different frequency criteria to different indicators.

4.48 In its response BT stated it was prepared to take a flexible approach to publication frequency. It provides data on CPS voluntarily on a monthly basis and accepts that for new products more frequent publication may be appropriate. Other respondents agreed and proposed that frequency should be product specific and dependent upon the state of the market. Ofcom considers it essential that BT's competitors have timely and transparent information about the Quality of Service provided so that any potential discriminatory practice can be identified as soon as possible. On the basis of these opinions, Ofcom therefore proposes that the frequency of publication should be monthly or quarterly, dependent upon the product, as outlined in table 3 below.

Costs of implementation

4.49 Respondents were asked whether there were likely to be disproportionate costs involved in the collection and publication of the proposed KPIs. They were asked to indicate, where possible, how the proposals could be modified to reduce the costs of implementation and the number of changes needed to existing systems.

4.50 In its response, BT stated that it believes there would be significant costs involved in the development of systems were the KPIs to be applied uniformly across all specified products. The estimates ranged from £50,000 to segment the KPIs for the DataStream metrics to £500,000 to implement the full range of KPIs for FRIACO. Ofcom has not seen sufficient evidence to determine whether this is the case. Other respondents believe that the additional cost burden is justifiable, and that it is essential that data be made available to demonstrate transparency of no undue discrimination.

4.51 In order to ensure that the KPI requirement is proportionate, Ofcom has proposed a small number of KPIs that are representative of key business processes,

which provide transparency of the Quality of Service provided. For FRIACO and Interconnect circuits (including ATM Interconnection circuits), Ofcom has selected two headline KPIs only, covering the timeliness of order provisioning and service restoration, both of which impact significantly on the service BT's competitors can provide to their customers. Where practicable, the proposed indicators are in line with BT's legacy systems. If respondents have evidence to support whether or not a specific KPI should be imposed, Ofcom will consider that evidence for the final Directions.

4.52 If the provision of the proposed system of KPIs were to cause BT to incur significant costs, then Ofcom would be likely to conduct an analysis to determine the appropriate means of cost recovery on a case-by-case basis. It is likely that any such analysis would be conducted with reference to the principles of optimal cost recovery used by Ofel in setting charges for Carrier Pre-Selection (http://www.ofcom.org.uk/static/archive/ofel/publications/1995_98/competition/cps298.htm), and by Ofel and the Monopolies & Mergers Commission in the context of Number Portability (http://www.competition-commission.org.uk/rep_pub/reports/1995/374telephone.htm#full)

Summary of proposed indicators

4.55 Table 3 below summarises Ofcom's proposals for KPIs. These are described in greater detail in sections 5 and 6 and in the draft Directions in Annexes 4 and 5.

Table 3

Proposed KPIs for publication	DataStream		WLR	FRIACO	Interconnection circuits (excluding FRIACO but including ATM interconnection)
Proposed frequency	Monthly	Quarterly	Monthly	Quarterly	Quarterly
	<i>End User Access (EU orders/fault measures)</i>	<i>CP Access (Virtual Path orders/fault measures)</i>			
% orders rejected	% of total orders submitted that are rejected	% of total orders submitted that are rejected	% of total orders submitted that are rejected, split between residential and business end users, and by the type of exchange line (analogue, ISDN2, ISDN30)		

% orders provisioned on time	% of orders completed by CDD	% of orders completed by CDD	% of orders provisioned by CDD, split between residential and business end users, and by the type of exchange line (analogue, ISDN2, ISDN30) for new and transferred lines	% of all orders provisioned to CDD (ie new routes and augmented routes)	% of orders provisioned to CDD
% new provisions reported as faulty	% orders provisioned where fault reported within 28 calendar days		% of orders reported as faulty within 30 calendar days of completion, split between residential and business end users, and by the type of exchange line (analogue, ISDN2, ISDN30)		
% installed base reported as faulty	EU faults per line per quarter x 4 expressed as a percentage of the installed base		Number of faults that occur during the 30 calendar days reporting period in relation to completed orders, expressed as average of installed base of WLR, split between residential and business end users, and by the type of exchange line (analogue, ISDN2, ISDN30)		
Average time to restore service	Average time to clear fault in clock hours, excluding parked time	Average time to clear fault in clock hours, excluding parked time	Average time to clear fault in clock hours, excluding parked time, split by care	Average time to clear fault in clock hours, excluding	Average time to clear fault in clock hours, excluding parked time

			levels I II and III and by business and residential end users, and by the type of exchange line (analogue, ISDN2, ISDN30)	parked time	
% of repeat faults	% of faults reported where further fault reported within 28 days of restored service		% of faults reported as having a further fault registered within 30 days of service restoration, split between residential and business end users, and by the type of exchange line (analogue, ISDN2, ISDN30)		
Gateway availability			% of actual availability vs. total availability of gateway during reporting period, (i) excluding and (ii) including scheduled outages		
DMA					% of total DMAs provisioned within 30 days for new number ranges. (Interconnection circuits only)

Section 5

Proposals for draft Direction for KPIs under the Quality of Service Condition (AA7) in the Fixed Narrowband Review

Wholesale Line Rental

5.1 Wholesale line rental (“WLR”) is a service whereby competing providers effectively lease an exchange line from BT and decide how best to route their customer’s calls. Providers therefore take on the full retail relationship with the customer and offer a ‘single bill’ for all basic communications services.

5.2 In August 2002, Oftel required BT to provide a Wholesale Line Rental (WLR) product to competing providers. Although BT introduced a basic analogue WLR product in September 2002, Oftel was of the view that this basic product needed to be enhanced in order for it to be an effective mass-market product that was commercially attractive to service providers and end-users. Oftel developed with industry a product and process specification. In March 2003, the Director issued a statement setting out the proposed specification for an enhanced WLR product that BT would be required to provide, which is set out in the annex to the statement http://www.ofcom.org.uk/static/archive/oftel/publications/whole_line/2003/wlr_1_0303.htm. Part of that specification proposed that BT should provide transparency of its operational performance in relation to key business processes by publishing such KPIs, to be defined by Oftel. Also that BT should publish data on its performance in relation to its retail arm (where appropriate) as well as in relation to communications providers in sufficient detail to show whether they are receiving an equivalent Quality of Service to that provided to BT’s retail arm. BT has developed with Ofcom a set of KPIs that Ofcom will use to assess whether the product is “fit-for-purpose.” However, Ofcom wishes to identify a set of KPIs for publication on an ongoing basis, taking into account the views of stakeholders. Those KPIs should be representative of key business processes but not disproportionate for BT to collect and publish data on. It is the ongoing KPIs which are the subject of this consultation.

5.3 In the Fixed Narrowband Review, Oftel/Ofcom concluded that BT has SMP in a number of UK markets (excluding the Hull area) including the following:

- Wholesale residential analogue exchange line services
- Wholesale business analogue exchange line services
- Wholesale residential ISDN2 exchange line services
- Wholesale business ISDN 2 exchange line services
- Wholesale business ISDN30 exchange line services

5.4 The KPIs being proposed in this consultation apply to wholesale residential and business analogue exchange line services; and wholesale business ISDN2 and ISDN30 exchange line services. The KPIs are **not** proposed in relation to wholesale residential ISDN2 exchange line market as in the Fixed Narrowband Review (para

7.3) the Director decided not to require BT to provide WLR in response to the finding of SMP in that market.

Description of proposed KPIs for WLR

5.5 The measures proposed for WLR take into account stakeholder views expressed during the previous consultation exercise. For each of the measures listed, the data should be split between:

- Wholesale analogue line rental (residential)
- Wholesale analogue line rental (business)
- Wholesale business ISDN 2 line rental
- Wholesale business ISDN30 line rental

as these are the different markets identified in the Fixed Narrowband Market Review, for which the SMP obligation to publish provide WLR applies. It is in relation to those markets therefore that Ofcom proposes that BT should publish Quality of Service KPIs. Following the WLR launch, Ofcom expects there to be sufficient data for the KPIs to be statistically meaningful.

Publication requirement

5.6 In order to provide transparency of the Quality of Service provided, it is proposed that BT should publish:

- An aggregate figure showing performance by BT to all providers, including BT.
- A figure showing the equivalent level of performance provided to BT only.
- A disaggregated figure for the 'top 10' providers measured by installed base. The names of the providers should be removed from the published information, and provided to Ofcom separately.
- An aggregate figure for the remaining providers.

for each of the KPIs outlined in this section.

5.7 In addition, Ofcom proposes that BT should publish the volume information for the following:

- the volume of orders submitted;
- the volume of orders completed;
- the volume of installed base; and
- the volume of faults where service is restored.

Ofcom considers that publication/provision to Ofcom of this underlying volume data is important in order for Ofcom to assess the statistical significance of the KPIs which are published.

It is proposed that publication should be required in relation to aggregate volume figures but that volumes in relation to "top ten" providers and BT's provision to itself should be provided separately to Ofcom.

5.8 Although BT does not purchase WLR from itself explicitly, there is an implicit wholesale transaction that is necessary in order for BT's retail arm to be able to offer retail exchange lines. If it is not possible to measure the operational performance in relation to this wholesale transaction directly, then it may be derived from the performance at the retail level. It will not be possible to derive a comparator in this manner for all KPIs – in particular, this will not be possible in the case of the KPIs relating to gateway availability and order rejection rates. Ofcom is therefore not proposing such a requirement.

Percentage of wholesale access orders that are rejected

5.9 Ofcom proposes that an appropriate KPI would be the number of orders accepted by the Gateway, allocated an order number and subsequently rejected, based on pre-determined business rules. This data would be published as a percentage of validated orders rejected.

5.10 Orders submitted by the communications providers but rejected at the pre-validation stage (before an order number has been generated) would be excluded from this measure. Reasons for rejecting orders at the pre-validation stage include incorrectly formatted orders (e.g. wrong address, wrong telephone number etc).

Percentage of orders provisioned on time

5.11 Ofcom proposes that BT should provide a KPI showing percentage of orders provisioned within the confirmed Contractual Delivery Date (CDD). The CDD is determined by adding the standard lead time for the product to the order entry date.

Percentage of new provisions reported as faulty

5.12 Ofcom proposes that BT should publish a KPI showing the percentage of lines reported as faulty (via BT's electronic fault management system) within the first 30 calendar days after being provisioned.

Percentage of installed base reported as faulty

5.13 Ofcom proposes that BT should publish a KPI showing the total number of network faults (reported via BT's electronic fault management system), expressed as a percentage of the average of the installed base of the exchange line types as listed in para 5.5 above.

Average time to restore service

5.14 Ofcom proposes that BT should publish a KPI showing the average time to clear faults. This should be measured as the average time in hours between when the fault is reported and when service is restored, excluding any parked time. Given that BT offers communications providers three different levels of service care for wholesale access, ie standard (level 1), prompt (level 2) and total (level 3), Ofcom considers BT should also split the data by care level.

Percentage of repeat faults

5.15 Ofcom proposes this measure should show the percentage of faults reported by communications providers to BT which recur within 30 calendar days of the clearance of an immediately preceding qualifying fault report.

Gateway availability

5.16 Ofcom proposes that BT should publish a monthly figure showing the total time that the gateway is potentially available over that period. In addition, it is proposed that BT should demonstrate the impact of planned as opposed to unplanned outages by providing two measurements:

- Gateway availability excluding scheduled outages. For this measure, scheduled outages would be deducted from the potential availability figure.
- Gateway availability including scheduled outages. For this measure, scheduled outages would not be deducted from the potential availability figure.

Volumes

As mentioned above, Ofcom has also proposed that the underlying volume information be published/provided to Ofcom.

Frequency of publication

5.17 It is proposed that the KPIs should be published monthly.

Interconnection circuits

5.18 An interconnection circuit provides a circuit between the exchanges of two interconnecting communications providers in order to allow traffic to pass between their networks. There are several forms of interconnection circuits:

- In-Span Interconnection (ISI).
- Customer Sited Interconnection (CSI).
- Interconnection Extension Circuit (IEC).
- Customer Sited Handover (CSH)
- In-Span Handover (ISH)

These are explained in the glossary in Annex 7.

5.19 In the Fixed Narrowband Review, the Director concluded it would be insufficient to regulate only one type of Interconnection circuit product as they each perform very

different functions. Regulation of CSI is considered essential to ensure that barriers for entry for new interconnection communications providers are low as there are significant costs involved in building ISI circuits to the BT exchange. Regulation of ISI is necessary to ensure that providers have the option of building out their own networks and connecting closer to BT's exchange. IECs are used when an interconnecting provider has connected to one exchange in a given area and is seeking to interconnect to other exchanges in the same area. It would be difficult to justify constructing ISI circuits to all these exchanges where traffic volumes are low (such as at local exchanges).

5.20 Ofcom considers that BT should be able to demonstrate transparency as to the Quality of Service provided for interconnection circuits, especially given their importance to smaller operators. The circuits are effectively sub-products and are related to the following products as follows:

- PSTN - (ISI, CSI and IEC)
- Flat Rate Internet Access Call Origination (FRIACO) - (ISI, CSI and IEC)

which are covered in this section.

- ATM Interconnect (Data Stream) – ISH

which are part of the Broadband Review and are therefore covered in section 6.

- Partial Private Circuits (PPC) – ISH and CSH

which are covered separately in the Leased Lines Review.

KPIs proposed for Interconnect circuits

5.21 The KPIs proposed cover key processes, namely order provision and service restoration. As mentioned below, Ofcom has also proposed that the underlying volume information be published/provided to Ofcom. Ofcom considers this information is important for the same reasons set out in relation to WLR.

Publication requirement

5.22 Ofcom's aim is that the KPIs demonstrate transparency of the performance BT provides to its retail arm and that provided to communications providers who compete downstream. BT does not interconnect to itself (with the exception of FRIACO) but it should nevertheless be possible for its competitors to detect from the aggregated total where there may be potential problems. It is therefore proposed that BT should publish KPIs showing:

- Aggregate performance for all providers.
- A figure showing the equivalent level of performance provided to BT, but only in relation to the KPI for DMAs.
- A disaggregated figure for 'top 10' providers measured by installed base. The names of the providers should be removed from the published information, and provided to Ofcom separately.
- An aggregate figure for the remaining providers.

Percentage of orders provisioned on time

5.23 Ofcom proposes that BT should publish a KPI measuring the percentage of orders provisioned within the confirmed CDD.

5.24 Ofcom also proposes that BT should publish the total volume of orders on which this measure is based. The volume of orders for each of the “top 10” providers should not be published but should be provided to Ofcom separately.

Average time to restore service

5.25 Ofcom proposes that BT should publish a KPI showing the average time to clear faults. This should be measured as the average time in hours between when the fault is reported and when service is restored, excluding any parked time.

5.26 Ofcom also proposes that BT should publish the total volume of reported faults on which this measure is based. The number of faults reported by each of the “top 10” providers should not be published but should be provided to Ofcom separately.

Data Management Amendments (DMAs)

5.27 BT does not currently track average time to complete a DMA, only the performance against the customer required date (CRD). The delivery for BT’s retail arm is not tracked in the same way but is subject to a 30 day delivery policy. Ofcom proposes that BT should publish a KPI showing the percentage of DMAs that are completed within 30 days for all providers including BT. BT should publish the total volume of DMAs on which this measure is based. The volume of DMAs carried out by BT and by each of the “top 10” providers should not be published but should be provided to Ofcom separately.

Frequency of publication

5.28 Ofcom proposes that the data for these KPIs should be published quarterly.

Flat Rate Internet Access Call Origination (FRIACO)

5.29 BT currently provides FRIACO at the local exchange (DLE FRIACO) and tandem exchange (Single Tandem (ST) FRIACO). Volumes for ST FRIACO are low and therefore Ofcom does not propose that BT should include KPIs for ST FRIACO as the data would not be statistically meaningful.

5.30 There is a close relationship between the supply of FRIACO services and competition in the narrowband unmetered Internet termination market. The ability to compete in the unmetered Internet termination market is highly dependent on the

level of utilisation that can be achieved on a Communications Provider's FRIACO network, and also on the speed at which it can respond to changes in demand. Both of these are affected by the speed (and the confidence in the speed) at which orders can be provisioned.

5.31 FRIACO is both an Interconnect circuit (and therefore measurement of the performance of the circuits needed to support FRIACO is required) and a product on its own (hence the proposals for a separate KPI). FRIACO is one type of Interconnect circuit that BT buys from itself and therefore it is possible to provide an explicit wholesale comparator.

5.32 In the July Consultation, the Director proposed that a priority KPI for the FRIACO product would be the "percentage of orders provisioned on time", to be split between new routes and route augmentation. In view of the fact volumes of new provisioning may diminish but that there is likely to be substantial switching between suppliers, Ofcom proposes that the KPI should include new routes and route augmentation.

KPIs proposed for FRIACO

Publication requirement

5.33 BT provides FRIACO to its retail arm on the same basis as it supplies it to other providers. Ofcom therefore proposes that BT should publish the proposed KPIs as:

- An aggregate figure including provision by BT to itself.
- A separate figure showing BT's performance to the retail arm of BT

5.34 As there are only a few providers using FRIACO in any volume, BT will not be required to publish a disaggregated figure for the "top 10" providers.

Percentage of orders provisioned on time

5.35 Ofcom proposes that BT should publish a KPI showing the percentage of orders provisioned to CDD for all routes (including new routes and route augmentation).

5.36 Ofcom also proposes that BT should publish the total volume of orders provisioned. The volume of orders provisioned for BT's retail arm should not be published, but should be provided to Ofcom separately.

Average time to restore service

5.37 Ofcom proposes that BT should publish a KPI showing the average time to clear faults. This should be measured as the average time in hours between when the fault is reported and when service is restored, excluding any parked time.

5.38 Ofcom also proposes that BT should publish the total volume of faults on which this measure is based. This is currently the total number of Faults registered during the Reporting Period. The volume of faults for BTs retail arm should not be published, but should be provided to Ofcom separately.

Frequency of publication

5.39 Fairly long maximum delivery timescales apply to the provision of FRIACO. This is 65 working days for new routes on existing transmission and 25 working days for augmentation. For this reason, and because volumes are low, Ofcom proposes that the FRIACO KPIs should be published quarterly.

Rationale for selection of specific KPIs

5.40 As mentioned at paragraph 2.10 above, in accordance with section 49(2) of the Act Ofcom considers that the proposed KPIs are **objectively justifiable** because they have been selected to detect where there may potentially be discrimination in the Quality of Service provided. They also reflect key business processes which In Ofcom's view are important in the promotion of competition. The ability of competing providers to address the business and retail wholesale access markets depends critically on the availability of, and Quality of Service provided for Wholesale Line Rental. BT is the only provider able to provide Interconnect circuits, which are particularly important to smaller operators. The ability to compete in the unmetered Internet termination market depends on utilisation of the provider's FRIACO network and the speed at which it can respond to changes in demand, thus transparency of the Quality of Service provided is paramount.

5.41 It is Ofcom's view that the individual KPIs selected reflect processes that have a significant impact on the customer experience on the end-user. For example, if there are problems with BT's ordering process, then its competitors will experience a high level of order rejections which can lead to a loss of customers, which is particularly important when BT's competitors are offering a new service ie WLR. Speed of response at which orders are provisioned is also crucial for both new and established products as it will affect the speed at which BT's competitors can respond to changes in demand. Ofcom therefore believes that transparency as to the quality of the service provided in these areas is key.

5.42 BT's competitors have to process orders for WLR through BT's gateway, which BT's retail arm does not. As gateway availability is therefore crucial, a KPI is being proposed.

5.43 KPIs are also proposed which relate to the speed at which faults are repaired/service restored. Excessive fault clearance times may result in BT's competitors experiencing a high level of churn in their customer base and may indicate potential discrimination in favour of BT's retail arm – transparency is also therefore key in this respect.

5.44 Ofcom considers its proposal for a KPI for DMAs (part of the operational management of the Interconnect circuit product) is justifiable as BT's competitors

consider visibility of the time taken by BT to complete DMAs for its own services is crucial for determining whether discrimination may exist.

5.45 Ofcom considers that the proposed KPIs do not **discriminate unduly** against BT. Although an equivalent condition is not proposed for Kingston, it does not unduly discriminate as the condition only applies where there is sufficient demand for the wholesale service in question such that the data provided will be statistically meaningful.

5.46 Ofcom considers that the KPIs are **proportionate** to what they are intended to achieve. Publication is only required where wholesale remedies have been imposed following the Fixed Narrowband Review, where BT is found to have SMP in the relevant markets and where the demand for the wholesale product or service is sufficient that the data provided would be statistically meaningful. BT is not required to publish each KPI for each product, nor is it required to drill down to a high level of granularity eg to provide a breakdown of order rejection codes (although Ofcom would expect BT to be able to justify a high level of order rejections in the event of a complaint). For established products, namely interconnect circuits and FRIACO, BT will be required to publish the two pivotal KPIs, namely the percentage of orders provisioned on time and the average time to restore service.

5.47 Ofcom considers that the measures are **transparent** as the requirements are clearly set out in the draft Directions and are further explained under the individual product areas ie WLR, Interconnect circuits and FRIACO. Ofcom also explains the reasons for the different frequency of publication requirements. For example, FRIACO is subject to maximum delivery timescales that would render it impractical to require monthly reporting and the low volumes associated with the product would make it difficult to obtain a statistically meaningful sample in a shorter reporting timeframe. The proposed reporting requirement for FRIACO KPIs is therefore quarterly.

5.48 Ofcom has considered its duties under section 3 of the Act and all the Community requirements set out in section 4. For example, the requirement for consistency is met by selecting one set of KPIs across all products and services, except where there is an objectively justifiable reason for doing otherwise. The KPIs are targeted at key business processes, rather than applying across the board. Transparency is provided by ensuring that all KPI information that is not commercially confidential is published.

5.49 Ofcom has also had regard to its duties under section 4 of the Act, in particular the requirement to promote competition. Ofcom considers that its proposals promote competition amongst providers of electronic communications networks and services as the KPIs are designed to ensure that alternative providers have an equivalent opportunity to compete with BT.

Section 6

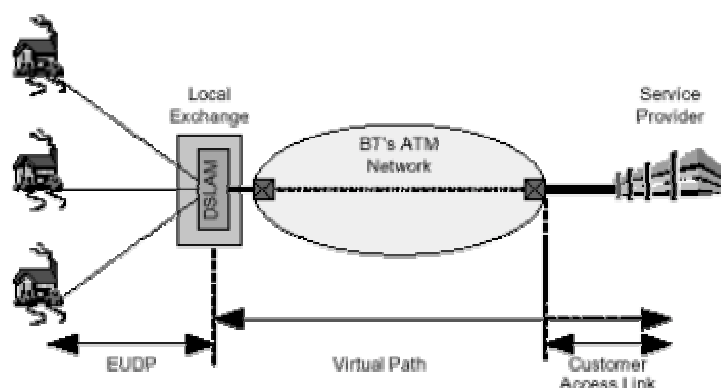
Proposals for a draft Direction for KPIs under the Quality of Service Condition (EA5) in the Broadband Review

Scope of requirement issues

6.1 BT's DataStream Product allows communications providers and business customers to gain broadband access to multiple end users using BT's ATM network. DataStream is a wholesale DSL-based broadband product. It consists of three basic network elements which are specified and priced separately. These are the End User Access (EUA), the Virtual Path (VP) and an ATM interconnection circuit. The interconnection circuit can either be a Customer Access Circuit (CAL) or an In-Span Handover (ISH). A DataStream customer is obliged to purchase at least one of each element in order to take the service.

6.2 A schematic of BT's DataStream Product identifying the three basic network elements is shown in Figure 1 below.

Figure 1: Schematic of BT's DataStream Product



Proposed options for KPIs following representations

6.3 Following consultation with stakeholders Ofcom proposes that BT should publish KPIs for each element of the DataStream product. Proposals for KPIs for ATM Interconnect circuits are in line with the proposals for Interconnect circuits in section 5. This section outlines proposals for End User Access (EUA) and Virtual Paths (VPs) (mentioning ATM Interconnection circuits where relevant). The End User access is the part of the network which is the DSL connection between the end user and the DSLAM. The Virtual Path is the established path from the DSLAM through to the point of network access with a communications provider's network. Ofcom believes there are a significant number of EUAs and VPs in operation.

Publication requirement

6.4 In order to provide transparency of the Quality of Service provided, Ofcom is proposing that BT should publish:

- An aggregate figure for the EUA, VP and ATM Interconnection circuits respectively, showing BT's performance to all providers including BT.
- A figure for the EUA and VP respectively showing the equivalent level of performance provided to BT only.
- A disaggregated figure for the EUA, VP and ATM Interconnection circuits respectively for the 'top 10' providers by installed base. The names of the providers should be removed from the published information, and provided to Ofcom separately.
- An aggregate figure for the EUA, VP and ATM Interconnection circuits respectively for the remaining providers.

6.5 Although BT does not purchase EUAs and VPs from itself explicitly, there is an implicit wholesale transaction that is necessary in order for BT to be able to offer the downstream service. If it is not possible to measure the operational performance in relation to this wholesale transaction directly, then it may be derived from the performance at the downstream level. It will not be possible to derive a comparator in this manner for all KPIs – in particular this will not be possible in the case of the KPI relating to order rejection rates.

As mentioned in section 5, Ofcom has also proposed that the underlying volume information be published/provided to Ofcom. Ofcom considers that this is important in order for Ofcom to assess the statistical significance of the KPIs which are published.

Percentage of orders rejected

EUA

6.6 Ofcom proposes that BT should publish a KPI showing the percentage of acknowledged orders submitted to BT that were rejected

VP

6.7 In the work stream discussions, BT suggested this measure is not relevant for VPs given the small number of orders that are rejected. However, as outlined above, Ofcom considers this measure to be extremely important for communications providers in the early stage of providing a service. Ofcom therefore proposes that BT should publish a KPI for VPs. If, over time, it appears that order rejections are inconsequential, Ofcom will reconsider the proportionality of the requirement.

6.8 For both the EUA and VP measures BT Ofcom proposes that should also publish the total number of orders submitted to which the KPI relates. The volume of orders submitted for BT Retail and each of the "top 10" providers should not be published, but should be provided to Ofcom separately.

Percentage of orders provisioned on time

EUA ,VP and ATM Interconnection Circuits

6.9 Ofcom proposes that BT should publish a KPI showing the percentage of orders provisioned over the reporting period that are completed by the CDD, for EUA, VP and ATM Interconnect circuits.

6.10 Ofcom also proposes that BT should also publish the total number of orders provisioned to which the KPI relates. The volume of orders provisioned for BT Retail and each of the “top 10” providers should not be published, but should be provided to Ofcom separately

Average time to restore service

EUA, VP and ATM Interconnect circuits

6.11 Ofcom proposes that BT should publish a KPI showing the average time to clear faults. This should be measured as the average time in hours between when the fault is reported and when service is restored. Given that there may be incidents whereby the ability to progress the repair is outside of BT’s control, (known as “parked time”), it is proposed that the KPI should exclude parked time. The KPI should be published for EUA, VPs and ATM Interconnect circuits.

6.11 Ofcom also proposes that BT should also publish the total volume of faults on which the measure was derived. The volume of faults for BT’s retail arm and each of the “top 10” providers should not be published, but should be provided to Ofcom separately

Percentage of new provisions reported as faulty

EUA

6.12 Ofcom proposes that BT should publish a KPI showing the percentage of provisioned orders in the reporting period, which subsequently experienced a fault within the first 28 calendar days (which is in line with BT’s current reporting period).

6.13 Ofcom also proposes that BT should publish the total number of new provisions from which the measure was derived. The volume of orders provisioned for BT’s retail arm and each of the “top 10” providers should not be published, but should be provided to Ofcom separately.

VP

6.14 Ofcom considers that an end fault occurring in the VP should be reflected in the EUA measure. It believes that it would therefore not be proportionate to require BT to publish this KPI for VPs.

Percentage of installed base reported as faulty

EUA

6.15 Ofcom proposes that BT should publish a KPI showing the total number of network faults, expressed as a percentage of the average of the installed base of EUA.

6.16 BT should also publish the total installed base on which the measure was derived. The installed base for BT's retail arm and each of the "top 10" providers should not be published, but should be provided to Ofcom separately

VP

6.17 Ofcom considers that a fault occurring in the VP is likely to be reflected in the EUA measure. It believes that it would therefore not be proportionate to require BT to publish this KPI for VPs as well.

Percentage of repeat faults

EUA

6.18 Ofcom proposes that BT should publish a KPI showing the percentage of faults reported that are repeats of faults reported within 28 days of the original report (in line with BT's current reporting period).

6.19 BT should also publish the total volume of faults on which the measure was derived. The volume of faults for BT's retail arm and each of the "top 10" providers should not be published, but should be provided to Ofcom separately.

VP

6.20 Ofcom considers that as the volume of faults on VPs is lower than the volume for end-user access, BT should not be required to publish a KPI in relation to the volume of repeat faults for VPs, since this is unlikely to be statistically significant.

Frequency of publication

6.22 EUAs have high volumes with a fast turnaround. In order to identify potential discrimination Ofcom proposes that the data should be published monthly. It is proposed that KPIs for VPs should be published quarterly.

Rationale for the selection of specific KPIs

6.23 In accordance with section 49(2) of the Act Ofcom considers that the KPIs proposed are **objectively justifiable** because the proposed KPIs have been selected to detect where there may potentially be discrimination in the Quality of Service provided. They also reflect key business processes which in Ofcom's view are important in the promotion of competition. BT's competitors are obliged to purchase at least one element of BT's DataStream product in order to gain broadband access to multiple end users using BT's ATM network therefore their ability to compete with BT depends, among other things, on the Quality of Service provided.

6.24 The individual KPIs proposed could have, in Ofcom's view, a significant impact on the customer experience. For example, the ordering process is extremely important for communications providers in the early stages of providing the service and if there are problems this could lead to a loss of customers. As a result Ofcom considers that it is important to have transparency as to the Quality of Service provided for such services.

6.25 KPIs are also proposed which relate to the speed at which faults are repaired/service restored. The time taken to fix a fault is a fundamental potential discrimination issue and although fault clearance may sometimes be outside of BT's control, excessive fault clearance times may result in BT's competitors experiencing a high level of churn in their customer base. Ofcom therefore considers it essential that BT's competitors should have transparency of the process.

6.26 Ofcom considers that the proposed KPIs do not **discriminate unduly** against BT. Although an equivalent condition is not proposed for Kingston, it does not unduly discriminate as the condition only applies where there is sufficient demand for the wholesale service in question such that the data provided will be statistically meaningful.

6.27 Ofcom considers that the KPIs are **proportionate** to what they are intended to achieve. Publication is only proposed where wholesale remedies are proposed in relation to the Broadband Review and will only apply where BT is found to have SMP in the relevant market and where the demand for the wholesale product or service is sufficient that the data provided would be statistically meaningful. BT will not be required to publish each KPI for each element of the DataStream product, nor is it required to drill down to a high level of granularity. For example BT is not required to publish a KPI for VPs in respect of faulty new provisions, installed base reported as faulty or repeat faults. This is because most faults are reported by end users and as it would not be possible for BT to separate out the faults associated with VP Ofcom does not consider that it would be proportionate to require BT to report such a KPI. As required for Interconnect circuits under the Fixed Narrowband Review, BT is only required to publish the two pivotal KPIs for ATM Interconnect circuits, namely the percentage of orders provisioned on time and the average time to restore service.

6.28 Ofcom considers that the measures are **transparent** as the requirements are clearly set out in the draft Directions and are further explained in relation to the individual elements of DataStream.

6.29 Ofcom has considered its duties under sections 3 and 4 of the Act. For example, the requirement for consistency is met by selecting one set of KPIs across all products and services, except where there is an objectively justifiable reason for doing otherwise. The KPIs are targeted at key business processes, rather than applying across the board. Transparency is provided by ensuring that all KPI information that is not commercially confidential is published.

6.30 Ofcom has also had regard to its duties under section 4 of the Act, in particular the requirement to promote competition. Ofcom considers that its proposals promote competition amongst providers of electronic communications networks and services as the KPIs are designed to ensure that alternative providers have an equivalent opportunity to compete with BT

Section 7

Responding to this consultation

How to respond

7.1 Ofcom invites written views and comments on the issues raised in this document, to be made by **5pm on Friday 6 August 2004**.

7.2 Ofcom strongly prefers to receive responses as e-mail attachments, in Microsoft Word format, as this helps us to process the responses quickly and efficiently. We would also be grateful if you could assist us by completing a response cover sheet to indicate whether or not there are confidentiality issues. The cover sheet is attached or can be downloaded from the 'Consultations' section of our website.

7.3 Please can you send your response to rosalind.stevens-strohmenn@ofcom.org.uk.

7.4 Responses may alternatively be posted or faxed to the address below, marked with the title of the consultation.

Rosalind Stevens-Strohmenn
Competition Policy Manager
Ofcom
Riverside House
2a Southwark Bridge Road
London SE1 9HA

Fax: 020 7981 3333

7.5 Note that we do not need a hard copy in addition to an electronic version. Also note that Ofcom will not routinely acknowledge receipt of responses.

7.6 It would be helpful if your response could include direct answers to the questions listed together at Annex 2. It would also help if you can explain why you hold your views, and how Ofcom's proposals would impact on you.

Further information

7.7 If you have any questions about the issues raised in this consultation, or need advice on the appropriate form of response, please contact Rosalind Stevens-Strohmenn tel 020 7783 4339.

Confidentiality

7.8 Ofcom thinks it is important for everyone interested in an issue to see the views expressed by consultation respondents. We will therefore usually publish all responses on our website, www.ofcom.org.uk, as soon as possible after the consultation period has ended.

7.9 All comments will be treated as non-confidential unless respondents specify that part or all of the response is confidential and should not be disclosed. Please place any confidential parts of a response in a separate annex, so that non-confidential parts may be published along with the respondent's identity.

7.10 Ofcom reserves its power to disclose certain confidential information where this is necessary to fulfil its functions, although in practice it would do so only in limited circumstances.

7.11 Please also note that copyright in responses will be assumed to be assigned to Ofcom unless specifically retained.

Next steps

7.12 Following the end of the consultation period, Ofcom intends to publish a final statement and notification in autumn 2004.

7.13 Please note that you can register to get automatic notifications of when Ofcom documents are published, at http://www.ofcom.org.uk/static/subscribe/select_list.htm.

Ofcom's consultation processes

7.14 Ofcom is keen to make responding to consultations easy, and has published some consultation principles (see Annex 1) which it seeks to follow, including on the length of consultations.

7.15 This consultation is Ofcom's standard 10 week period for giving a direction under an SMP condition.

7.16 If you have any comments or suggestions on how Ofcom conducts its consultations, please call our consultation helpdesk on 020 7981 3003 or e-mail us at consult@ofcom.org.uk. We would particularly welcome thoughts on how Ofcom could more effectively seek the views of those groups or individuals, such as small businesses or particular types of residential consumers, whose views are less likely to be obtained in a formal consultation.

7.17 If you would like to discuss these issues, or Ofcom's consultation processes more generally, you can alternatively contact Philip Rutnam, Partner, Competition and Strategic Resources, who is Ofcom's consultation champion:

Philip Rutnam
Ofcom
Riverside House
2A Southwark Bridge Road
London SE1 9HA
Tel: 020 7981 3585
Fax: 020 7981 3333
E-mail: philip.rutnam@ofcom.org.uk

Cover sheet for response to an Ofcom consultation

BASIC DETAILS

Consultation title:

To (Ofcom contact):

Name of respondent:

Representing (self or organisation/s):

Address (if not received by email):

CONFIDENTIALITY

What do you want Ofcom to keep confidential?

Nothing

☐

**Name/contact details/
job title**

☐

Whole response

☐

Organisation

☐

Part of the response

☐

If there is no separate annex, which parts?

If you want part of your response, your name or your organisation to be confidential, can Ofcom still publish a reference to the contents of your response (including, for any confidential parts, a general summary that does not disclose the specific information or enable you to be identified)?

Yes

☐

No

☐

DECLARATION

I confirm that the correspondence supplied with this cover sheet is a formal consultation response. It can be published in full on Ofcom's website, unless otherwise specified on this cover sheet. If I have sent my response by email, Ofcom can disregard any standard email text about not disclosing email contents and attachments.

Name

Signed (if hard copy)

Annex 1

Ofcom's consultation principles

Ofcom has published the following seven principles that it will follow for each public written consultation:

Before the consultation

1 Where possible, we will hold informal talks with people and organisations before announcing a big consultation to find out whether we are thinking in the right direction. If we do not have enough time to do this, we will hold an open meeting to explain our proposals shortly after announcing the consultation.

During the consultation

2 We will be clear about who we are consulting, why, on what questions and for how long.

3 We will make the consultation document as short and simple as possible with a summary of no more than two pages. We will try to make it as easy as possible to give us a written response. If the consultation is complicated, we may provide a shortened version for smaller organisations or individuals who would otherwise not be able to spare the time to share their views.

4 We will normally allow ten weeks for responses, other than on dispute resolution.

5 There will be a person within Ofcom who will be in charge of making sure we follow our own guidelines and reach out to the largest number of people and organisations interested in the outcome of our decisions. This individual (who we call the consultation champion) will also be the main person to contact with views on the way we run our consultations.

6 If we are not able to follow one of these principles, we will explain why. This may be because a particular issue is urgent. If we need to reduce the amount of time we have set aside for a consultation, we will let those concerned know beforehand that this is a 'red flag consultation' which needs their urgent attention.

After the consultation

7 We will look at each response carefully and with an open mind. We will give reasons for our decisions and will give an account of how the views of those concerned helped shape those decisions.

Annex 2

Consultation Questions

1. Respondents are asked to indicate whether they agree with the proposed indicators as outlined in table 3. If not please provide justification and outline alternative proposals, which must meet the requirements under Section 49(2) of the Act, ie that the KPIs are:

- Objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which they relate;
- Not such as to discriminate unduly against particular persons or against a particular description of persons;
- Proportionate to what they are intended to achieve; and
- In relation to what they are intended to achieve, transparent.

2. Respondents are asked whether they agree with the proposals for publication.

- An aggregate figure for each KPI, showing BT's performance to all communications providers (including BT, where relevant), plus the total volume associated with each of these aggregate KPIs.
- Where available (as specified by Ofcom in the draft Directions), a separate comparator for each KPI, showing BT's performance in relation to its retail arm. The associated volume data should not be published, but should be provided to Ofcom separately.
- Disaggregated data for each KPI showing BT's performance in relation to each of the "top 10" providers, measured by installed base, or to all providers (whichever is less). In addition BT should publish an aggregate figure showing its performance in relation to all other providers not included in the "top 10." This data should be anonymised, and the associated volume information should not be published. The names of the providers, and associated volume data, should be provided to Ofcom separately.

3. Respondents are asked whether they agree with the proposed frequency of publication for the specific KPIs, as explained in sections 5 and 6 and summarised in table 3.

4. Respondents are asked whether they are satisfied with Ofcom's proposal that it would not be appropriate to include a KPI for call accounting accuracy, for reasons explained in section 4.37.

5. Respondents are asked whether they agree that the proposed set of KPIs should not require BT to incur disproportionate implementation costs as described in section 4.49 - 4.52. If respondents do not agree they are asked to provide evidence of the costs involved in order that Ofcom may conduct an analysis to determine the most appropriate means of cost recovery on a case by case basis.

Annex 3

Overview of EU Market Reviews

List of Markets where Quality of Service Condition imposed where KPIs are proposed in this document

Market Review condoc	Markets where condition proposed/imposed	Cond. No.	Market in which KPI would be (is) required	Wholesale remedy
Review of the Wholesale Broadband Access Market – Final Explanatory Statement and Notification published 13 May 2004	<ul style="list-style-type: none"> Asymmetric broadband origination in the UK, except Hull Broadband conveyance in the UK 	EA5	<ul style="list-style-type: none"> Asymmetric broadband origination in the UK, except Hull Broadband conveyance in the UK 	End User Access Virtual Paths ATM Inter-connection circuits
Review of the fixed narrowband wholesale exchange line, call origination, conveyance and transit markets (Final Explanatory Statement and Notification published 28 November 2003)	<ul style="list-style-type: none"> Wholesale residential analogue exchange line services Wholesale business analogue exchange line services Wholesale business ISDN2 exchange line services Wholesale ISDN30 exchange line services Call origination on fixed public narrowband networks Local-tandem conveyance and transit on fixed public narrowband networks Inter-tandem conveyance and transit on fixed public narrowband networks Single transit on 	AA7	<ul style="list-style-type: none"> Wholesale residential analogue exchange line services Wholesale business analogue exchange line services Wholesale business ISDN2 exchange line services Wholesale ISDN30 exchange line services Call origination on fixed public narrowband networks Local-tandem conveyance and transit on fixed public narrowband networks Inter-tandem conveyance and transit on fixed public narrowband networks Single transit on fixed public narrowband networks 	WLR Inter-connection circuits and FRIACO

fixed public narrowband networks		
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KPIs for leased lines will be dealt with separately in the Leased Lines Review.

Annex 4

Proposals for draft Directions under the Quality of Service Condition (AA7) in the Fixed Narrowband Review

Draft direction

Notification of proposals under section 49 of the Communications Act 2003

Proposal for making a direction under section 49 of the Communications Act 2003 and Condition AA7 imposed on British Telecommunications plc ('BT') as a result of the market power determinations made by Ofcom that BT has significant market power in the markets listed in recital (A) of the Schedule to this notification

1. Ofcom hereby makes, in accordance with section 49 of the Communications Act 2003 ('the Act'), the following proposal for a Direction to be given under Condition AA7.
2. The draft Direction is set out in the Schedule to this notification.
3. The effect of the draft Direction, and the reasons for making the proposal, is set out in the accompanying explanatory statement.
4. Representation may be made to Ofcom about the proposed draft Direction by 6 August 2004.
5. In accordance with section 50 of the Act, copies of this notification have been sent to the Secretary of State, the European Commission and to the regulatory authorities of every other Member State.

For and on behalf of Ofcom

27 May 2004

Schedule

Draft Direction under section 49 of the Communications Act 2003 and Condition AA7 imposed on the Dominant Provider as a result of the analysis of the markets listed in recital (A) of this Schedule in which the Dominant Provider has been found to have significant market power

Whereas:

(a) as a result of a market analysis carried out by the Director he proposed on 17 March 2003 and 26 August 2003 in accordance with sections 48(2) and 80 of the Act that the Dominant Provider has significant market power in, amongst others, the following markets in the United Kingdom excluding the Hull Area:

- (i) wholesale residential analogue exchange line services;
- (ii) wholesale business analogue exchange line services;
- (iii) wholesale business ISDN2 exchange line services;
- (iv) wholesale ISDN30 exchange line services;

(b) by virtue of the Transitional Provisions the Director was able to exercise the powers under the Act for an interim period. Ofcom has now assumed those powers as of 29 December 2003;

(c) Ofcom having considered every representation duly made, and thereafter on 28 November 2003 pursuant to sections 48(1) and 79 of the Act by way of a publication of the Notification identified the relevant services markets, made market power determinations to the effect referred to in Recital (A) above and set certain SMP Services Conditions on the Dominant Provider to take effect on 28 November 2003, such as Condition AA7;

(d) this Direction concerns matters to which Condition AA7 relates;

(e) for the reasons set out in section 5 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:

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

(f) for the reasons set out in Section 5 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that it has acted in accordance with the relevant duties set out in Sections 3 and 4 of the Act;

(g) on 27 May 2004 Ofcom published a notification of the proposed Direction in accordance with section 49 of the Act;

(h) Ofcom has considered every representation about the proposed Direction duly made to it; and

NOW, therefore, pursuant to section 49 of the Act and Condition AA7 in Schedule 1 to the Notification, Ofcom gives the following Direction:

1. The Dominant Provider shall publish or provide to Ofcom (as appropriate) the information specified in Parts 1 and 2 of Annex A to this Direction in relation to the provision of Wholesale Line Rental (“the Wholesale Line Rental KPIs”).
2. The Dominant Provider shall first publish or provide to Ofcom (as appropriate) the Wholesale Line Rental KPIs within 14 Working Days of [a date four months from publication of the Direction] in relation to the last month of that period and subsequently within 14 Working Day of the last Working Day of every month in respect of that month.
3. The Dominant Provider shall publish (as appropriate) the Wholesale Line Rental KPIs in such manner as is necessary for bringing the KPIs to the attention of persons who are likely to be affected by the contents of the KPIs.
4. The Annex to this Direction forms part of the Direction.
5. Nothing in this Direction shall require the Dominant Provider to publish confidential information relating to its business or that of a Third Party.
6. For the purpose of interpreting this Direction the following definitions shall apply:

“Act” means the Communications Act 2003;

“Committed Order” means an Order which has passed validation and has been registered on the Dominant Provider’s operational support system and a Contract Delivery Date has been confirmed;

“Completed Order” means an Order which has been provisioned and for which all other related work has been carried out;

“Contract Delivery Date” means the date agreed between the Dominant Provider and a Third Party for an Order to become a Completed Order;

“Director” means the Director General of Telecommunications;

“Dominant Provider” means British Telecommunications plc, whose registered company number is 1800000, and any British Telecommunications plc 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;

“Exchange Line” means Apparatus comprised in the Dominant Provider’s Electronic Communications Network and installed for the purpose of connecting a telephone exchange run by the Dominant Provider to a Network Termination Point comprised in Network Termination and Testing Apparatus installed by the Dominant Provider for the purpose of providing Electronic Communications Services at the premises at which the Network Termination and Testing Apparatus is located;

“Fault” means a degradation or problem or with Wholesale Line Rental which is identified by the Dominant Provider or a Third Party and which is registered on the Dominant Provider’s operational support system;

“Hull Area” means the area defined as the ‘Licensed Area’ in the license 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;

“Installed Base” means the average number of Wholesale Line Rental lines that are in use during the Reporting Period;

“ISDN” means the integrated services digital network which is an Electronic Communications Network evolved from the telephony integrated digital network that provides for digital end-to-end connectivity to support a wide range of Public Electronic Communications Services, including voice and non-voice service to which End Users have access by a limited set of standard multi-purpose customer interfaces;

“KPI” means key performance indicator;

“Level 1 Care” means the level of care provided by the Dominant Provider which provides the standard level of response to a Fault on an Exchange Line, provided as part of the basic line rental;

“Level 2 Care” means the level of care provided by the Dominant Provider which provides an enhanced level of response to a Fault on an Exchange Line, guaranteeing a response within a specified time;

“Level 3 Care” means the level of care provided by the Dominant Provider which provides an enhanced level of response to a Fault on an Exchange Line, guaranteeing a response within a specified time and providing cover 24 hours per day, seven days a week including public and bank holidays;

“Newly Provisioned Lines” means an Order where any Wholesale Line Rental product/Exchange Line Service is not being provided by the Dominant Provider to the Third Party at the time of order;

“Notification” means the Notification referred to in recital (C) of this Direction above, as published on 28 November 2003;

“Order” means a request for Wholesale Line Rental submitted to the Dominant Provider by a Third Party;

“Parked Time” means any time during repair of a Fault whereby the ability to progress the repair is outside of the control of the Dominant Provider;

“Pending Order” means an Order which has been approved by the Dominant Provider and is awaiting a Contractual Delivery Date;

“Rejected Order” means an Order which cannot be placed by the Dominant Provider on its operational support;

“Reporting Period” means the month in respect of which the Dominant Provider is required to publish or provide to Ofcom (as appropriate) the Wholesale Line Rental KPIs;

“Restored Service” means the point at which the Wholesale Line Rental in relation to which a Fault was registered becomes available again for use by the Third Party;

“Scheduled Outages” means the defined periods of time whereby the Dominant Provider’s operational support system is not available for use by Third Parties in order for the Dominant Provider to perform certain tasks including, but not limited to,

routine maintenance, changing configurations, software upgrades and updating facilities and may include specific maintenance activities whereby the Dominant Provider must have given as much notice as reasonably practicable and in any event not less than seven calendar days;

“Third Party” means either:

- a) a person providing a Public Electronic Communications Network;
- or
- b) a person providing a Public Electronic Communications Service;

“Top Ten” means the top ten largest Third Parties, excluding the Dominant Provider, requesting Wholesale Line Rental from the Dominant Provider during the Reporting Period measured by Installed Base;

“Transitional Provisions” means sections 408 and 411 of the Act, Article 3(1) of the Communications Act 2003 (Commencement No. 1) Order 2003 and Article 3(2) of the Office of Communications 2002 (Commencement No. 3) and Communications Act 2003 (Commencement No. 2) Order 2003;

“Transferred Lines” means an Order where Wholesale Line Rental is being provided to the Third Party by another Third Party (including those provided by the Dominant Provider) at the time of order;

“Wholesale Analogue Line Rental” means an Electronic Communications Service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an analogue Exchange Line;

“Wholesale Business ISDN2 Line Rental” means an Electronic Communications Service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an ISDN2 Exchange Line (business quality of service);

“Wholesale ISDN30 Line Rental” means an Electronic Communications Service provided by the Dominant Provider to a Third Party for the use and Ordinary Maintenance of an ISDN30 Exchange Line;

“Wholesale Line Rental” means each of the following provided by the Dominant Provider:

- a) Wholesale Analogue Line Rental provided to Third Parties’ residential End Users;
- b) Wholesale Analogue Line Rental provided to Third Parties’ business End Users;
- c) Wholesale Business ISDN2 Line Rental;
- d) Wholesale ISDN30 Line Rental;

and, for the avoidance of doubt, any requirement to publish or provide to Ofcom (as appropriate) the Wholesale Line Rental KPIs shall be a requirement to publish or provide that information separately in relation to each of the above;

“Working Day” means any day other than Saturdays, Sundays, public holidays or bank holidays in the United Kingdom.

7. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act, or if it has no meaning there, in Part 1 of Schedule 1 to the Notification.

8. For the purpose of interpreting this Direction:

- (i) headings and titles shall be disregarded; and
- (ii) the Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament.

9. This direction shall take effect on the day it is published.

For and on behalf of Ofcom

[Date]

Annex A

Wholesale Line Rental KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs **(i) to (viii)** below in relation to the provision of Wholesale Line Rental to:

- a) all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of Wholesale Line Rental to itself);
- b) the Top Ten Third Parties (as separate figures, save that individual Third Party names should not be published); and
- c) all Third Parties excluding the Top Ten Third Parties (as an aggregate figure).

2. The Dominant Provider shall publish the information required in KPIs **(ii) to (vi)** below in relation to the provision of Wholesale Line Rental to itself.

3. The Dominant Provider shall provide to Ofcom the information required in KPIs **(i) to (vi)** in relation to the provision of Wholesale Line Rental to the Top Ten Third Parties (as separate figures, including individual Third Party names).

4. Where the Dominant Provider does not provide Wholesale Line Rental to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to End Users.

Percentage of orders rejected

- (i) the percentage of Orders that became Rejected Orders during the Reporting Period;

Percentage of orders provisioned on time

- (ii) the percentage of Completed Orders that were completed by the Contract Delivery Date during the Reporting Period in relation to each of:
 - (a) Newly Provisioned Lines; and
 - (b) Transferred Lines;

Percentage of new provisions reported as faulty

- (iii) the percentage of Completed Orders that were reported as having a Fault during the Reporting Period whereby that Fault was reported within 30 calendar days of the date that it became a Completed Order;

Percentage of installed base reported as faulty

(iv) the number of Completed Orders that were registered as having a Fault during the Reporting Period, measured as a percentage of the mean of the Installed Base;

Average time to restore service

(v) the average time (in hours), excluding any Parked Time, during the Reporting Period to achieve Restored Service after a Fault has been registered in relation to each of:

- a) Level 1 Care;
- b) Level 2 Care; and
- c) Level 3 Care;

Percentage of repeat faults

(vi) the percentage of Faults that were reported as having a further Fault during the Reporting Period whereby the further Fault was registered within 30 calendar days of the Dominant Provider achieving Restored Service of the previous Fault;

Gateway availability

(vii) the percentage of actual availability of the Dominant Provider's ordering gateway during the Reporting Period compared to the potential availability during the same period as published by the Dominant Provider, excluding any Scheduled Outages;

(viii) the percentage of actual availability of the Dominant Provider's ordering gateway during the Reporting Period compared to the potential availability during the same period as published by the Dominant Provider, including any Scheduled Outages.

Annex A

Wholesale Line Rental KPIs

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs **(i) to (iv)** below in relation to the provision of Wholesale Line Rental to all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of Wholesale Line Rental to itself);

2. The Dominant Provider shall provide to Ofcom the information required in KPIs **(i) to (iv)** below in relation to the provision of Wholesale Line Rental to:

- a) Top Ten Third Parties (as separate figures, including individual Third Party names); and
- b) itself.

3. Where the Dominant Provider does not provide Wholesale Line Rental to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to End Users.

Volume of orders submitted

- (i) the total number of Orders that became Pending Orders during the Reporting Period;

Volume of orders completed

- (ii) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of installed base

- (iii) the Installed Base during the Reporting Period;

Volume of faults where service is restored

- (iv) the number of Faults where the Dominant Provider subsequently achieves Restored Service during the Reporting Period in relation to each of:
 - a) Level 1 Care;
 - b) Level 2 Care; and
 - c) Level 3 Care.

Draft Direction for KPIs under the Quality of Service Condition (AA7) in the Fixed Narrowband Review: Interconnection circuits, DMAs and FRIACO

Draft direction

Notification of proposals under section 49 of the Communications Act 2003

Proposal for making a direction under section 49 of the Communications Act 2003 and Condition AA7 imposed on British Telecommunications plc ('BT') as a result of the market power determinations made by Ofcom that BT has significant market power in the markets listed in recital (A) of the Schedule to this notification

1. Ofcom hereby makes, in accordance with section 49 of the Communications Act 2003 ('the Act'), the following proposal for a Direction to be given under Condition AA7.
2. The draft Direction is set out in the Schedule to this notification.
3. The effect of the draft Direction, and the reasons for making the proposal, are set out in the accompanying explanatory statement.
4. Representation may be made to Ofcom about the proposed draft Direction by 6 August 2004.
5. In accordance with section 50 of the Act, copies of this notification have been sent to the Secretary of State, the European Commission and to the regulatory authorities of every other Member State.

For and on behalf of Ofcom

27 May 2004

Schedule

Draft Direction under section 49 of the Communications Act 2003 and Condition AA7 imposed on the Dominant Provider as a result of the analysis of the markets listed in recital (A) of this Schedule in which the Dominant Provider has been found to have significant market power

Whereas:

(a) as a result of a market analysis carried out by the Director he proposed on 17 March 2003 and 26 August 2003 in accordance with sections 48(2) and 80 of the Act that the Dominant Provider has significant market power in, amongst others, the following markets in the United Kingdom excluding the Hull Area:

- (i) call origination on fixed public narrowband networks;
- (ii) local-tandem conveyance and transit on fixed public narrowband networks;
- (iii) inter-tandem conveyance and transit on fixed public narrowband networks; and
- (iv) single transit on fixed public narrowband networks;

(b) by virtue of the Transitional Provisions the Director was able to exercise the powers under the Act for an interim period. Ofcom has now assumed those powers as of 29 December 2003;

(c) Ofcom having considered every representation duly made, and thereafter on 28 November 2003 pursuant to sections 48(1) and 79 of the Act by way of a publication of the Notification identified the relevant services markets, made market power determinations to the effect referred to in Recital (A) above and set certain SMP Services Conditions on the Dominant Provider to take effect on 28 November 2003, such as Condition AA7;

(d) this Direction concerns matters to which Condition AA7 relates;

(e) for the reasons set out in Section 5 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:

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

(f) for the reasons set out in Section 5 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that it has acted in accordance with the relevant duties set out in Sections 3 and 4 of the Act;

(g) on 27 May 2004 Ofcom published a notification of the proposed Direction in accordance with section 49 of the Act;

(h) Ofcom has considered every representation about the proposed Direction duly made to it; and

NOW, therefore, pursuant to section 49 of the Act and Condition AA7 in Schedule 1 to the Notification, Ofcom gives the following Direction:

1. The Dominant Provider shall publish or provide to Ofcom (as appropriate) the information specified in:

a) Parts 1 and 2 of Annex A to this Direction in relation to the provision of Interconnection Circuits ("the Interconnection Circuit KPIs");

b) Parts 1 and 2 of Annex B to this Direction in relation to the provision of DLE FRIACO ("the DLE FRIACO KPIs");

2. The Dominant Provider shall first publish or provide to Ofcom (as appropriate) the Interconnection Circuit KPIs and the DLE FRIACO KPIs within 14 Working Days of [a date six months from publication of the Direction] in relation to the last three months of that period and subsequently within 14 Working Day of each successive period of three calendar months in respect of those months.

3. The Dominant Provider shall publish (as appropriate) the Interconnection Circuit KPIs and the DLE FRIACO KPIs in such manner as is necessary for bringing the KPIs to the attention of persons who are likely to be affected by the contents of the KPIs.

4. The Annexes to this Direction form part of the Direction.

5. Nothing in this Direction shall require the Dominant Provider to publish confidential information relating to its business or that of a Third Party.

6. For the purpose of interpreting this Direction the following definitions shall apply:

"Act" means the Communications Act 2003;

"Augmented Route" means an Order where any Interconnection Circuit is being provided to the Third Party by another Third Party (including those provided by the Dominant Provider) at the time of order and the effect of that order is to modify the capacity of the route;

"Committed Order" means an Order for which a Contract Delivery date has been confirmed;

"Completed Order" means an Order which has been provisioned and for which all other related work has been carried out;

"Contract Delivery Date" means the date agreed between the Dominant Provider and a Third Party for an Order to become a Completed Order;

“CSI” means customer sited Interconnection links;

“DMA” (Data Management Amendments) means the routing amendment which a Third Party requests the Dominant Provider to make in order to modify the way in which calls are routed both at the Digital Local Exchange and at the tandem switches;

“Director” means the Director General of Telecommunications;

“DLE FRIACO” means the provision of FRIACO at the digital Local Exchange;

“Dominant Provider” means British Telecommunications plc, whose registered company number is 1800000, and any British Telecommunications plc 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;

“Fault” means a degradation or problem with the Interconnection Circuit or DLE FRIACO, as appropriate, which is identified by the Dominant Provider or a Third Party and which is registered on the Dominant Provider’s operational support system;

“FRIACO” means flat rate internet access call origination;

“Hull Area” means the area defined as the ‘Licensed Area’ in the license 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;

“IEC” means Interconnection extension circuits;

“Installed Base” means the average number of Interconnection Circuits or DLE FRIACO circuits (as appropriate) that are in use during the Reporting Period;

“Interconnection Circuits” mean any and all of the following specific services provided by the Dominant Provider:

- a) CSI;
- b) ISI;
- c) IEC;

“ISI” means in-span Interconnection links;

“KPI” means key performance indicator;

“New Route” means an Order where any Interconnection Circuits are not being provided by the Dominant Provider to the Third Party at the time of order;

“Notification” means the Notification referred to in recital (C) of this Direction above, as published on 28 November 2003;

“Order” means a request for Interconnection Circuits or DLE FRIACO, as appropriate, submitted to the Dominant Provider by a Third Party;

“Parked Time” means any time during repair of a Fault whereby the ability to progress the repair is outside of the control of the Dominant Provider;

“Reporting Period” means the period of three calendar months in respect of which the Dominant Provider is required to publish or provide to Ofcom (as appropriate) the Interconnection Circuit KPIs or the DLE FRIACO KPIs, as appropriate;

“Restored Service” means the point at which either the Interconnection Circuit or DLE FRIACO (as appropriate) in relation to which a Fault was registered becomes available again for use by the Third Party;

“Third Party” means either:

- a) a person providing a Public Electronic Communications Network; or
- b) a person providing a Public Electronic Communications Service;

“Top Ten” means the top ten largest Third Parties, excluding the Dominant Provider, requesting Interconnection Circuits or DLE FRIACO (as appropriate) from the Dominant Provider during the Reporting Period measured by Installed Base;

“Transitional Provisions” means sections 408 and 411 of the Act, Article 3(1) of the Communications Act 2003 (Commencement No. 1) Order 2003 and Article 3(2) of the Office of Communications 2002 (Commencement No. 3) and Communications Act 2003 (Commencement No. 2) Order 2003;

“Working Day” means any day other than Saturdays, Sundays, public holidays or bank holidays in the United Kingdom.

7. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act, or if it has no meaning there, in Part 1 of Schedule 1 to the Notification.

8. For the purpose of interpreting this Direction:

- (i) headings and titles shall be disregarded; and
- (ii) the Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament.

9. This Direction shall take effect on the day it is published.

For and on behalf of Ofcom

[Date]

Annex A

Interconnection Circuit KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs (i) to (iii) below in relation to the provision of Interconnection Circuits and Data Management Amendments to:

- a) All Third Parties (as an aggregate figure);
- b) The Top Ten Third Parties (as separate figures, save that individual Third Party names should not be published); and
- c) all Third Parties excluding the Top Ten Third Parties (as an aggregate figure).

2. The Dominant Provider shall publish the information required in KPI (iii) below in relation to the provision of Data Management Amendments to itself.

3. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (iii) in relation to the provision of Interconnection Circuits and Data Management Amendments to the Top Ten Third Parties (as separate figures, including individual Third Party names).

Percentage of orders provisioned on time

- (i) the percentage of Completed Orders that were completed by the Contract Delivery Date during the Reporting Period;

Average time to restore service

- (ii) the average time (in hours), excluding any Parked Time, during the Reporting Period to achieve Restored Service after a Fault has been registered;

Data Management Amendments

- (iii) the percentage of DMAs for new and existing numbers that become Completed Orders during the Reporting Period whereby they are completed within 30 calendar days of the Order becoming a Committed Order.

Annex A

Interconnection Circuit KPIs

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs (i) to (iii) below in relation to the provision of Interconnection Circuits and Data Management Amendments to all Third Parties (as an aggregate figure);
2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (iii) below in relation to the provision of Interconnection Circuits and Data Management Amendments to Top Ten Third Parties (as separate figures, including individual Third Party names).
3. The Dominant Provider shall provide to Ofcom the information required in KPIs (iii) below in relation to the provision of Data Management Amendments to itself.

Volume of orders provisioned

- (i) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of faults reported

- (ii) the number of Faults where the Dominant Provider subsequently achieves Restored Service during the Reporting Period;

Volume of data management amendments

- (iii) the total number of DMAs for new and existing number ranges that became Completed Orders during the Reporting Period.

Annex B

DLE FRIACO KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs (i) and (ii) below in relation to the provision of DLE FRIACO to:

a) all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of DLE FRIACO to itself); and

b) itself.

Percentage of orders provisioned on time

(i) the percentage of Completed Orders that were completed by the Contract Delivery Date during the Reporting Period in relation to each of:

a) New Routes; and

b) Augmented Routed;

Average time to restore service

(ii) the average time (in hours), excluding any parked time, during the Reporting Period to achieve Restored Service after a Fault has been registered;

Annex B

DLE FRIACO KPIs

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs (i) and (ii) below in relation to the provision of DLE FRIACO to all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of DLE FRIACO to itself).

2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) and (ii) below in relation to the provision of DLE FRIACO to itself.

Volume of orders provisioned

- (i) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of faults reported

- (ii) the total number of Faults registered during the Reporting Period.

Annex 5

Proposals for KPIs for the Wholesale Broadband Access market, under the Quality of Service Condition EA5: End User Access, Virtual Paths and ATM Interconnection Circuits

DRAFT DIRECTIONS

Notification of proposals under section 49 of the Communications Act 2003

Proposal for making a direction under section 49 of the Communications Act 2003 and Condition EA5 imposed on British Telecommunications plc ('BT') as a result of the market power determinations made by Ofcom that BT has significant market power in both the market for asymmetric broadband origination in the United Kingdom (excluding the Hull Area) and the market for broadband conveyance market in the United Kingdom

1. Ofcom hereby makes, in accordance with section 49 of the Communications Act 2003 ('the Act'), the following proposal for a Direction to be given under Condition EA5.
2. The draft Direction is set out in the Schedule to this notification.
3. The effect of the draft Direction, and the reasons for making the proposal, are set out in the accompanying explanatory statement.
4. Representation may be made to Ofcom about the proposed draft Direction by 6 August 2004.
5. In accordance with section 50 of the Act, copies of this notification have been sent to the Secretary of State, the European Commission and to the regulatory authorities of every other Member State.

For and on behalf of Ofcom

Schedule

Draft Direction under section 49 of the Communications Act 2003 and Condition EA5 imposed on the Dominant Provider as a result of the analysis of both the market for asymmetric broadband origination in the United Kingdom (excluding the Hull Area) and the market for broadband conveyance in the United Kingdom in which the Dominant Provider has been found to have significant market power

Whereas:

- (a) as a result of a market analysis carried out by the Director he proposed on 28 April 2003 and on 16 December 2003 in accordance with sections 48(2) and 80 of the Act that the Dominant Provider has significant market power in both the market for asymmetric broadband origination market in the United Kingdom (excluding the Hull Area) and the market for broadband conveyance in the United Kingdom;
- (b) by virtue of the Transitional Provisions the Director was able to exercise the powers under the Act for an interim period. Ofcom has now assumed those powers as of 29 December 2003;
- (c) Ofcom having considered every representation duly made, and thereafter on 13 May 2004 pursuant to sections 48(1) and 79 of the Act by way of publication of the Notification identified the relevant services markets, made market power determinations to the effect referred to in Recital (A) above and set certain SMP Services Conditions on the Dominant Provider to take effect on 13 May 2004, such as Condition EA5;
- (d) this Direction concerns matters to which Condition EA5 relates;
- (e) for the reasons set out in Section 6 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that, in accordance with section 49(2) of the Act, this Direction is:
 - (i) objectively justifiable in relation to the networks, services, facilities, apparatus or directories to which it relates;
 - (ii) not such as to discriminate unduly against particular persons or against a particular description of persons;
 - (iii) proportionate to what it is intended to achieve; and
 - (iv) in relation to what it is intended to achieve, transparent.
- (f) for the reasons set out in Section 6 of the explanatory memorandum accompanying this Direction Ofcom is satisfied that it has acted in accordance with the relevant duties set out in Sections 3 and 4 of the Act;
- (g) on 27 May 2004 Ofcom published a notification of the proposed Direction in accordance with section 49 of the Act;
- (h) Ofcom has considered every representation about the proposed Direction duly made to it; and

NOW, therefore, pursuant to section 49 of the Act and Condition EA5 in Schedule 1 to the Notification, Ofcom gives the following Direction:

1. The Dominant Provider shall publish or provide to Ofcom (as appropriate) the information specified in:

a) Parts 1 and 2 of Annex A to this Direction in relation to the provision of End User Access ("the End User Access KPIs");

b) Parts 1 and 2 of Annex B to this Direction in relation to the provision of Virtual Paths ("the Virtual Path KPIs");

c) Parts 1 and 2 of Annex C to this Direction in relation to the provision of ATM Interconnection Circuits ("the ATM Interconnection Circuit KPIs").

2. The Dominant Provider shall first publish or provide to Ofcom (as appropriate) the End User Access KPIs within 14 Working Days of [a date four months from publication of the Direction] in relation to the last month of that period, and subsequently within 14 Working Days of the last Working Day of every month in respect of that month.

3. The Dominant Provider shall first publish or provide to Ofcom (as appropriate):

a) the Virtual Path KPIs; and

b) the ATM Interconnection Circuit KPIs;

within 14 Working Days of [a date six months from publication of the Direction] in relation to last three months of that period, and subsequently within 14 Working Days of each successive period of three calendar months.

4. The Dominant Provider shall publish (as appropriate) the End User Access KPIs, the Virtual Path KPIs and the ATM Interconnection Circuit KPIs in such manner as is necessary for bringing the KPIs to the attention of persons who are likely to be affected by the contents of the KPIs.

5. The Annexes to this Direction form part of the Direction.

6. Nothing in this Direction shall require the Dominant Provider to publish confidential information relating to its business or that of a Third Party.

7. For the purpose of interpreting this Direction the following definitions shall apply:

"Act" means the Communications Act 2003;

"Acknowledged Order" means an Order which the Dominant Provider has acknowledged receipt of to the Third Party;

"ATM Interconnection Circuit" means an Interconnection circuit provided by the Dominant Provider to a Third Party for the purpose of conveying Asynchronous Transfer Mode (ATM) traffic between the Dominant Provider's and a Third Party's network;

"Committed Order" means an Order for which a Contract Delivery Date has been confirmed;

“Completed Order” means an Order which has been provisioned and for which all other related work has been carried out;

“Contract Delivery Date” means the date agreed between the Dominant Provider and a Third Party for an Order to become a Completed Order;

“Director” means the Director General of Telecommunications;

“Dominant Provider” means British Telecommunications plc, whose registered company number is 1800000, and any British Telecommunications plc 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;

“DSL” (Digital Subscriber Line) means a group of technologies known as DSL or xDSL, capable of transforming ordinary phone lines (also known as “local loops”) into high speed digital lines;

“DSLAM” (Digital Subscriber Loop Access Multiplexer) means apparatus sited in the same exchange building as is used to terminate DSL enabled local loops, which comprises a bank of DSL Modems and a multiplexer which combines many customer lines into one data path;

“End User Access” means that part of the network which is the DSL connection between the End User and the DSLAM and includes the situation where the Dominant Provider supplies and installs the End User Modem and where the supply and installation of the End User Modem is not carried out by the Dominant Provider;

“Fault” means a degradation or problem with the Completed Order which is identified by the Dominant Provider or a Third Party and which is registered on the Dominant Provider’s operational support system;

“Hull Area” means the area defined as the ‘Licensed Area’ in the license 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;

“Installed Base” means the average number of End User Access, Virtual Paths or ATM Interconnection Circuits (as appropriate) that are in use during the Reporting Period;

“KPI” means key performance indicator;

“Modem” (modulate-demodulate) means a device that converts a digital signal into an analogue Signal for transmission purposes and which also receives analogue Signals and converts them back to digital Signals;

“Notification” means the Notification referred to in recital (C) of this Direction above, as published 13 May 2004;

“Order” means a request for End User Access or Virtual Paths, as appropriate, submitted to the Dominant Provider by a Third Party;

“Parked Time” means any time during repair of a Fault whereby the ability to progress the repair is outside of the control of the Dominant Provider;

“Rejected Order” means an Order which the Dominant Provider is unable to deliver and which is cancelled at the instigation of the Dominant Provider;

“Reporting Period” means the month in respect of which the Dominant Provider is required to publish or provide to Ofcom (as appropriate) the End User Access KPIs and the period of three calendar months in respect of which the Dominant Provider is required to publish or provide to Ofcom (as appropriate) the Virtual Path KPIs or the ATM Interconnection Circuit KPIs (as appropriate);

“Restored Service” means the point at which the End User Access, Virtual Path or ATM Interconnection Circuit (as appropriate) in relation to which a Fault was registered becomes available again for use by the Third Party;

“Third Party” means either:

- a) a person providing a Public Electronic Communications Network; or
- b) a person providing a Public Electronic Communications Service;

“Top Ten” means the top ten largest Third Parties, excluding the Dominant Provider, requesting End User Access, Virtual Paths or ATM Interconnection Circuits (as appropriate) from the Dominant Provider during the Reporting Period measured by Installed Base;

“Transitional Provisions” means sections 408 and 411 of the Act, Article 3(1) of the Communications Act 2003 (Commencement No. 1) Order 2003 and Article 3(2) of the Office of Communications 2002 (Commencement No. 3) and Communications Act 2003 (Commencement No. 2) Order 2003;

“Virtual Path” means an established path from the DSLAM through the network to the point of Network Access with a Communications Provider’s network;

“Working Day” means any day other than Saturdays, Sundays, public holidays or bank holidays in the United Kingdom.

8. Except insofar as the context otherwise requires, words or expressions shall have the meaning assigned to them and otherwise any word or expression shall have the same meaning as it has in the Act.

9. For the purpose of interpreting this Direction:

- (i) headings and titles shall be disregarded; and
- (ii) the Interpretation Act 1978 shall apply as if this Direction were an Act of Parliament.

10. This direction shall take effect on the day it is published.

For and on behalf of Ofcom

[Date]

Annex A

End User Access KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs (i) to (vi) below in relation to the provision of End User Access to:

- a) all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of End User Access to itself);
- b) the Top Ten Third Parties (as separate figures, save that individual Third Party names should not be published);
- c) all Third Parties excluding the Top Ten Third Parties (as an aggregate figure; and
- d) itself.

2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (vi) in relation to the provision of End User Access to the Top Ten Third Parties (as separate figures, including individual Third Party names).

3. Where the Dominant Provider does not provide End User Access to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services.

Percentage of orders rejected

(i) the percentage of Acknowledged Orders that became Rejected Orders during the Reporting Period;

Percentage of orders provisioned on time

(ii) the percentage of Committed Orders that became Completed Orders by the Contract Delivery Date during the Reporting Period;

Percentage of new provisions reported as faulty

(iii) the percentage of Completed Orders that were reported as having a Fault during the Reporting Period whereby that Fault was reported within 28 calendar days of the date that it became a Completed Order;

Percentage of installed base reported as faulty

(iv) the number of Completed Orders that were registered as having a Fault during the Reporting Period, measured as a percentage of the mean of the Installed Base;

Average time to restore service

(v) the average time (in hours), excluding Parked Time, during the Reporting Period to achieve Restored Service after a Fault has been registered;

Percentage of repeat faults

(vi) the percentage of Faults that were reported as having a further Fault during the Reporting Period whereby the further Fault was registered within 28 calendar days of the Dominant Provider achieving Restored Service of the previous Fault.

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs (i) to (iv) below in relation to the provision of End User Access to all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of End User Access to itself);

2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (iv) below in relation to the provision of End User Access to:

a) Top Ten Third Parties (as separate figures, including individual Third Party names); and

b) itself.

3. Where the Dominant Provider does not provide End User Access to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services.

Volume of orders submitted

(i) the total number of Orders submitted to the Dominant Provider that became Acknowledged Orders during the Reporting Period;

Volume of orders provisioned

(ii) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of installed base

(iii) the number of Installed Base during the Reporting Period;

Volume of faults reported

(iv) the number of Faults where the Dominant Provider subsequently achieved Restored Service during the Reporting Period.

Annex B

Virtual Path KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs (i) to (iii) below in relation to the provision of Virtual Paths to:

- a) all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of Virtual Paths to itself);
- b) the Top Ten Third Parties (as separate figures, save that individual Third Party names should not be published);
- c) all Third Parties excluding the Top Ten Third Parties (as an aggregate figure); and
- d) itself.

2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (iii) in relation to the provision of Virtual Paths to the Top Ten Third Parties (as separate figures, including individual Third Party names).

3. Where the Dominant Provider does not provide Virtual Paths to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services.

Percentage of orders rejected

- (i) the percentage of Acknowledged Orders that became Rejected Orders during the Reporting Period;

Percentage of orders provisioned on time

- (ii) the percentage of Committed Orders that became Completed Orders by the Contract Delivery Date during the Reporting Period;

Average time to restore service

- (iii) the average time (in hours), excluding any Parked Time, during the Reporting Period to achieve Restored Service after a Fault has been registered.

Annex B

Virtual Path KPIs

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs (i) to (iii) below in relation to the provision of Virtual Paths to all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of Virtual Paths to itself);
2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) to (iii) below in relation to the provision of Virtual Paths to:
 - a) Top Ten Third Parties (as separate figures, including individual Third Party names; and
 - b) itself.
3. Where the Dominant Provider does not provide Virtual Paths to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to End Users.

Volume of orders submitted

- (i) the total number of Orders submitted to the Dominant Provider that became Acknowledged Orders during the Reporting Period;

Volume of orders provisioned

- (ii) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of faults reported

- (iii) the number of Faults where the Dominant Provider subsequently achieved Restored Service during the Reporting Period;

Annex C

ATM Interconnection Circuit KPIs

Part 1: Indicators

1. The Dominant Provider shall publish the information required in KPIs (i) and (ii) below in relation to the provision of ATM Interconnection Circuits to:
 - a) all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of ATM Interconnection Circuits to itself);
 - b) the Top Ten Third Parties (as separate figures, save that individual Third Party names should not be published); and
 - c) all Third Parties excluding the Top Ten Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of ATM Interconnection Circuits to itself).
2. The Dominant Provider shall publish the information required in KPI (i) and (ii) below in relation to the provision of ATM Interconnection Circuits to itself.
3. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) and (ii) in relation to the provision of ATM Interconnection Circuits to the Top Ten Third Parties (as separate figures, including individual Third Party names).
4. Where the Dominant Provider does not provide ATM Interconnection Circuits to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services.

Percentage of orders provisioned on time

- (i) the percentage of Completed Orders that were completed by the Contract Delivery Date during the Reporting Period;

Average time to restore service

- (ii) the average time (in hours), excluding any Parked Time, during the Reporting Period to achieve Restored Service after a Fault has been registered.

Annex C

ATM Interconnection Circuit KPIs

Part 2: Volumes

1. The Dominant Provider shall publish the information required in KPIs (i) and (ii) below in relation to the provision of ATM Interconnection Circuits to all Third Parties (as an aggregate figure which, for the avoidance of doubt includes provision by the Dominant Provider of ATM Interconnection Circuits to itself);
2. The Dominant Provider shall provide to Ofcom the information required in KPIs (i) and (ii) below in relation to the provision of ATM Interconnection Circuits to Top Ten Third Parties (as separate figures, including individual Third Party names).
3. Where the Dominant Provider does not provide ATM Interconnection Circuits to itself, it shall instead publish or provide (as appropriate) the information required in relation to the equivalent implicit wholesale product provided by the Dominant Provider to itself in order for it to provide downstream services to.

Volume of orders provisioned

- (i) the total number of Committed Orders that became Completed Orders during the Reporting Period;

Volume of faults reported

- (ii) the number of Faults where the Dominant Provider subsequently achieved Restored Service during the Reporting Period.

Annex 6

List of representations received in response to previous consultation dated 11 July 2003

ACSP
BT
Bulldog
Centrica
Kingston
SPC

Annex 7

Glossary of terms

Analogue: the direct representation of a waveform, as opposed to digital, which is a binary coded representation

ATM Access Port: Connectivity between the Customer's site and the BT DataStream service can be provided by an ATM Access Port. The ATM Access Port is connected to the Customer by means of the BT ATM In-Span Handover product between the ATM Access Port and a point of hand-over with the Customer (typically in a BT footway box).

ATM Service: data services using Asynchronous Transfer Mode technology such as BT's DataStream family of products

BT: British Telecommunications plc.

CAL (Customer Access Circuit) – physical connection between a switch in BT's ATM network and the Communications Provider.

CP (Communications Provider): a provider of electronic communications services to third parties whether over its own network or otherwise.

CPS (Carrier pre-selection): A mechanism which allows users to select, in advance, alternative communications providers to carry their calls without having to dial additional codes (while keeping their existing phone line).

CSI (Customer Sited Interconnection): The Interconnection circuit established 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, by providing a 2 Mbit/s circuit up to the site of the operator

CSH (Customer Sited Handover): 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 circuit along with CSH POC equipment; and

DMAs (Data Management Amendments): Changes necessary for BT to set up new services and routes under the operator's request.

DMSU (Digital Main Switching Unit): a tandem exchange primarily used for connecting calls between DLEs.

DSL (digital subscriber line): a family of technologies generically referred to as DSL, or xDSL, capable of transforming ordinary phone lines (also known as "twisted copper pairs") into high-speed digital lines, capable of supporting advanced services such as fast Internet access and video-on-demand. ADSL (Asymmetric Digital Subscriber Line), HDSL (High data rate Digital Subscriber Line) and VDSL (Very high data rate Digital Subscriber Line) are all variants of xDSL.

DSLAM (Digital subscriber line access multiplexer) An apparatus sited in the same exchange building as is used to terminate DSL enabled copper loops, which comprises a bank of DSL modems and a multiplexer which combines many customer lines into one data path.

DLE FRIACO: digital local exchange FRIACO. The provision of Flat Rate Internet Access Call Origination via a wholesale unmetered Internet access product from BT at the local exchange.

End User Access (EUA) previously known as “End User Data Path” – the ADSL connection between the end user and the DSLAM in the local serving exchange

FRIACO (Flat Rate Internet Access Call Origination): the provision of Flat Rate Internet Access Call Origination via wholesale unmetered Internet access product from BT.

IEC (Interconnection Extension Circuit) An IEC allows an interconnecting communications provider with an existing ISI to extend this point of interconnection to a new building. In order to do this, BT will provide a 2MBit/s circuit between the two buildings.

Indirect access: where a customer establishes a connection with a particular operator's network by dialling a short code to switch through the network on which his exchange line terminates. Such calls are usually billed by the Indirect Access operator.

Interconnection: the circuiting (whether directly or indirectly by physical or logical means, or by a combination of physical or logical means) of one Public Electronic Communications Network to another for the purpose of enabling the persons using one of them to be able:

(a) to communicate with users of the other one; or

(b) to make use of services provided by means of the other one (whether by the provider of that Network or by another person);

IP (Internet Protocol): the packet data protocol used for routing and carriage of messages across the Internet and similar networks.

Integrated Services Digital Network (ISDN): a network evolved from the digital PSTN which provides digital exchange lines to customers and 64kbps end to end digital connectivity between them. Two or more 64kbps connections can be combined to provide a higher speed connection, eg 128kbps.

ISH (In Span Handover circuits)/ISI (In Span Interconnection) ISH/ISI is when two communications providers build out their networks to a handover point located between their switches. The handover point is normally close to the BT exchange and therefore most of the responsibility of the build is the responsibility of the interconnecting communications provider

Kingston: Kingston Communications (Hull) PLC – communications company which operates in the Hull area.

Leased lines (also known as private circuits) a permanently connected communications circuit between two premises dedicated to the customers' exclusive use.

Local loop unbundling (LLU): a process by which an incumbent's exchange lines (local loops) are physically disconnected from its network and connected to other providers' networks. This enables operators other than the incumbent to use the local loop to provide services directly to customers.

Narrowband: a service or connection allowing only a limited amount of information to be conveyed, such as for telephony. This compares with broadband which allows a considerable amount of information to be conveyed.

NRAs: the body or bodies, legally distinct and functionally independent of the telecommunications organisations, charged by a Member State with the elaboration of, and supervision of compliance with, communications authorisations.

NTS (Number Translation Services): telephone services using non-geographic numbers, where that number is translated to a geographic or mobile number for final delivery to the called party.

PPCs (Partial Private Circuits): a generic term used to describe a category of private circuits that terminate at a point of connection between two operators' networks. It is therefore the provision of transparent transmission capacity between a customer's premises and a point of connection between the two operators' networks. It may also be termed a part leased line. It includes terminating segments.

PSTN: Public Switched Telephone Network

SMP: The Significant Market Power test is set out in European case law, the new Directives and the Commission's SMP Guidelines. It is used by the National Regulatory Authorities (NRA) such as Ofcom to identify those operators who must meet additional obligations under the relevant Directive.

Standard Service: An interconnection service which BT is required to provide.

SurfPort24: An unmetered port-based package offered by BT Global Services that enables remote access between end-users and host computers using IP technology. SurfPort24 enables ISPs and communications providers to provide unmetered Internet access to their users for a fixed monthly fee on a national basis in the UK.

ST FRIACO: Single Tandem FRIACO. The provision of Flat Rate Internet Access Call Origination via a wholesale unmetered Internet access product from BT at the tandem exchange.

Voice: Service originally provided on an analogue exchange line (single 64 kbit/s channel). Most residential consumers obtain their voice telephony service via either analogue exchange lines, or cable telephony.

VP (Virtual Path): ATM virtual path connection between the DSLAM and the hand-over point. This includes; the backhaul circuit between the DSLAM and the 'first' ATM switch, conveyance across BT's ATM network (if required) and a path through the customer access circuit which connects the 'last' ATM switch to the communications providers.

Wholesale ISDN30 Line Rental: an Electronic Communications Service provided by BT to a Third Party for the use and Ordinary Maintenance of an ISDN30 Exchange Line;

Wholesale line rental (WLR): Wholesale Line Rental (WLR) is a facility offered to communications providers that allows them to rent an exchange line from BT on wholesale terms, and resell it to an end-user. The provider can also rent those Supplementary Services normally made available by BT over an exchange line. The term here refers to any and all of the following provided by BT:

- (i) Wholesale Residential Analogue exchange line services;
- (ii) Wholesale Business Analogue exchange line services;
- (iii) Wholesale Business ISDN2 Line Rental; and
- (iv) Wholesale ISDN30 Line Rental;