

Consultation on undertakings offered by British Telecommunications plc in lieu of a reference under Part 4 of the Enterprise Act 2002.

Comments from Cable & Wireless

12<sup>th</sup> August 2005



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# 1 Executive Summary

Cable & Wireless supports Ofcom's analysis of the UK telecommunications market and agrees that the structural, incentive and suspected conduct features described by Ofcom restrict competition. In particular Ofcom has identified problems in the supply of adequate wholesale products. BT's ability and incentive to discriminate in favour of its downstream operations is likely to remain for the foreseeable future. Hence there is an immediate need for regulatory intervention and Cable & Wireless supports Ofcom's intention to make a market investigation reference to the Competition Commission unless BT offers binding undertakings that comprise as comprehensive solution to the problem identified as is reasonable and practicable.

We welcome BT's offer of undertakings, and the commitment and engagement that BT has shown in offering these undertakings. Whilst the undertakings could result in some improvements from the status quo, we have significant concerns in three important areas:

- the exclusion of full MPFs as an Equivalence of Inputs based input to BT's downstream asymmetric IPStream and WLR products results in the failure to apply the benefits of these undertakings to Full MPF based competition in many important consumer markets;
- the Equivalence of Inputs commitments in relation to BT's NGN are subject to
  a broad carve out which means that they will not apply where it is not
  'reasonably practicable'. Whilst we recognise that it will not always be
  appropriate to supply all services on an equivalence of inputs basis the
  undertakings do not provide any guidance, materiality or process for
  determining what might be reasonably practical; and
- elements of the undertakings require greater clarity as the letter, not the spirit, of the undertakings will be the actual constraint on BT's behaviour over the implementation period. The absence of structural and legal separation means that BT's incentives to discriminate in favour of its own downstream businesses remain intact, although its ability is constrained by the undertakings.

We believe the issues we have raised in this document can be addressed. BT has clearly shown their desire and willingness to provide a solution to the problems identified by Ofcom. Cable & Wireless is committed to working in a constructive manner with both BT and Ofcom to support with the implementation. In this document we describe in section 5 those areas of the undertakings that require further clarification and in the annex we provide specific suggestions to clarify the drafting to facilitate better understanding.

# 2 Structure of this Response

This response starts with a summary.

Section 3 of this response reviews Ofcom's analysis of the issues. We then comment on how BT's proposed undertakings address these issues and discuss the need for greater clarity in the proposed undertakings.

Section 4 is a discussion of how the proposed undertakings fit within the wider regulatory environment and their impact.

Section 5 reviews the undertakings in detail from an implementation and policy perspective and discusses our concerns and issues by topic.

Finally, Annex 1 proposes drafting changes. These fall into two groups

- pure "drafting" changes that are only designed to add clarity, and
- drafting changes that are proposed to address issues identified elsewhere in this response.

## 3 Ofcom's Analysis of the Competitive Environment

Cable & Wireless supports Ofcom's analysis of the UK telecoms market. It is clear that there are both structural and conduct features that present significant barriers to the effective functioning of the competitive process.

#### 3.1 Structural features

As Ofcom has identified, there are two features of the market, which, in combination, give rise to serious concerns:

- BT's enduring market power in access and backhaul; and
- BT's vertically integrated structure.

Together these structural features provide BT with both the ability and the incentive to engage in discriminatory behaviour.

#### 3.2 Conduct features

Ofcom has also highlighted behaviour by BT that gives rise to suspicions that BT has acted in accordance with its incentives to discriminate in favour of its downstream businesses. In particular, Ofcom has detailed:

- a reluctance to supply wholesale products;
- the supply of inferior wholesale products; and
- delays in supplying wholesale products.

Ofcom recognises that this conduct has had a detrimental impact on the UK telecoms market. It has constrained the ability of operators to compete with BT and has undermined existing investment and deterred new investment in competitive networks. Of course, all this has been at the cost of customers and the UK economy generally.

Cable & Wireless fully supports Ofcom's conclusion that BT's ability and incentive to discriminate in favour of its downstream operations is likely to remain for the foreseeable future and hence there is an immediate need for regulatory intervention.

#### 3.3 The Undertakings

Cable & Wireless welcomes BT's commitment to address many of the issues raised by Ofcom in the TSR process by voluntarily offering undertakings to Ofcom. It is seen by Cable & Wireless as more than a token gesture, and does represent a serious attempt to resolve many of the issues raised by Ofcom. We hope that the significance of the offer and the crucial importance of BT delivering on these commitments will be recognised by all to ensure effective and clear delivery.

It is clear that the undertakings offered by BT offer the potential for a significant improvement in today's market environment. Whilst BT may understandably have been reticent about letting go of the benefits that came from its past approach, nevertheless there are very clear benefits for BT, for customers and for the UK economy that will flow from its new approach. However, it is important to recognise

that the undertakings being offered do not offer a structural solution, and thus largely leave in place the underlying economic incentives for BT to discriminate.

Nevertheless, the undertakings represent a package of measures that have the potential to ensure an improvement in BT's conduct as long as the momentum BT has developed in proposing the undertakings is maintained and translated into a high level of execution.

Equivalence of inputs ("Eol") is at the core of the changes being proposed and this unquestionably represents an excellent development. Eol seeks to address the issue of discrimination at its source through requiring BT to provide exactly equivalent upstream products, using the same processes, and at the same prices, both internally (to downstream divisions) and externally (to downstream competitors). Such arrangements should, in theory, ensure that BT treats all of its customers, including its own downstream operations, on an equal basis. However, because BT continues to have economic incentives to discriminate, additional measures are needed to ensure that BT's ability to discriminate is effectively constrained. These measures include enhanced transparency in the internal operations of BT.

The creation of the Access Services Division (ASD), the arrangements for BTWS and BTW and the creation of the EAB (Equality of Access Board) and EAO (Equality of Access Office) can play an important role in this respect: they are consistent with what can be thought of as a monitoring and transparency model. They can help to constrain BT's ability to discriminate by increasing transparency within the still vertically integrated BT. The new arrangements, rather than allowing the EAB to exert any direct control over BT, instead attempt to ensure that it is able to monitor for compliance with the undertakings, and particularly for compliance with the new obligations for wholesale equivalence. If the EAB is to effectively fulfil its role, a significant time commitment is required by its members in the early years of its set-up and establishment.

Although the undertakings contain a significant set of new regulatory measures, they do not address all eventualities. This poses a particular challenge given that BT still largely retains an underlying economic incentive to discriminate. Nevertheless, we believe that the undertakings do provide a viable means to address the concerns identified by Ofcom and discussed above, provided that two interrelated factors are adequately addressed by BT:

- Cultural change setting up the ASD with a separate brand identity and providing some limited financial incentives for senior ASD, BTWS and BTS employees offers the potential for cultural change within BT. BT must also use the publication of the proposed Code of Practice to emphasise to employees that it has voluntarily offered the undertakings and that they are now central to its business strategy and that the code should be viewed in that light.
- Compliance with the spirit of the undertakings where there are "gaps" in the undertakings, BT and Ofcom have a clear understanding today of what is intended and how issues should be addressed when they arise. This will only work, of course, if BT complies with the spirit rather than the just the letter of the undertakings. However, we must recognise that to rely too heavily on the 'spirit' of the undertakings would give the potential for conflict between BT's Board's fiduciary duties and these undertakings. This makes it imperative that we achieve as much clarity about the undertakings as is possible today.

Cable & Wireless believes that BT is committed to cultural change and to delivering on the spirit of the undertakings. It will be essential that the rest of the industry also undergo cultural change to ensure that all parties are able to work effectively in this new environment. Cable & Wireless is committed to working with BT in a constructive manner to ensure that past disagreements and disputes do not poison future working relationships. Key to this, however, will be to move towards greater clarity and shared understanding of the undertakings.

Progress on this can be made in two ways, through:

- Achieving greater clarity in the undertakings some reasonably minor redrafting, that is entirely consistent with the policy intentions, will be of benefit to all parties as it will help to avoid possible areas of contention in the future. We make suggestions in Annex 1 of this document to facilitate this.
- Achieving greater shared understanding and trust outside of the actual undertakings – the undertakings deliberately leave some areas open to interpretation in the future. These are obviously a cause for concern but positive engagement by the industry with BT, and where appropriate Ofcom, can help to minimise future disputes. In section 5 of this document we discuss the issues that we believe need further clarification.

# 4 The Wider Regulatory Environment

## 4.1 Existing powers and the undertakings

The undertakings (accepted under UK competition law) are designed to sit on top, and complement, the ex-ante regulatory framework for electronic communications services. It is therefore important that Ofcom continues to use all its existing powers to regulate BT, where necessary using the most appropriate tool, rather than relying solely on the undertakings. For instance, we believe the principles for cost recovery and apportionment described in the undertakings on recovering costs associated with BT's migration to 21CN are not consistent with the standard six principles of cost recovery used in the past by the regulator to determine how costs should be allocated. In order to fully address the problems identified, Ofcom must ensure that existing obligations and regulatory principles are not subsumed by the undertakings.

Alongside this consultation, Ofcom is undertaking a consultation on new guidelines on undue discrimination. These guidelines outline how Ofcom intends to interpret the "no undue discrimination" obligation imposed on communications providers (including BT) in ex-ante SMP conditions. Ofcom has told us that they will use these powers to ensure Equivalence of Outcomes (EoO) for those products not provided on an EoI basis. There is a very strong expectation in the industry that we will move to a full EoO basis for CPS, PPCs and DataStream in a short timeframe. It is important that this expectation is fulfilled, not least as much work has been undertaken by BT, UKCTA and Ofcom during the period of the TSR to identify those areas of non-equivalence.

Similarly, there is an expectation that Ofcom will ensure EoO on EoI products in the interim period prior to EoI being fully implemented. There are important areas of non-equivalence that can be addressed before full EoI is implemented, and Ofcom must ensure that BT is not able to "sidestep" its obligations on no undue discrimination by virtue of its commitment to deliver EoI at a later date.

### 4.2 Measuring the effectiveness of the undertakings

We believe that the undertakings should have a positive effect on the competitive framework and therefore provide a benefit to consumers. However Ofcom should put in place systems to measure the effectiveness of the undertakings compared with the market today. This means that data about the competitiveness of the market should be collated today to act as a benchmark, and updated measures taken on a periodic, ongoing basis to record progress against this benchmark.

## 4.3 Deregulation

The undertakings could change the way industry and BT interacts and the products and services bought and sold. However as the changes are not structural, they do not create underlying incentives to promote the desired behaviour, rather the behaviour expected is prescribed in the undertakings. Consequently, there should be no automatic presumption that delivery on the undertakings will be a trigger for deregulation. Downstream deregulation should be considered if, and only if, the broader market is operating competitively and Ofcom has carried out an appropriate market review.

## 5 Implementation

Greater clarity is needed on a number of issues to ensure the appropriate expectations are set from the outset and to build industry confidence. These issues are discussed in detail in this section. Improved clarity could come from changes to the drafting of the undertakings or during, and as part of, the implementation process. For instance, if compliance training were to reflect the need for all staff to interpret the undertakings in a manner which is consistent with the intent, this would demonstrate steps towards creation of a positive culture within BT which embraced the spirit of the undertakings, rather than seeing them as an external constraint and a pure compliance matter.

Furthermore, the undertakings mean what they say on their face and are not open to later reinterpretation or (without BT's agreement), modification. The creation of a separate ASD, and the various constraints on BT's behaviour will make it much harder for BT to discriminate. In contrast, the undertakings do not in any meaningful way change BT's incentive to discriminate. BT's board remain under a fiduciary duty to act in the best interests of the company as a whole (i.e. BT's shareholders). The undertakings constrain what actions BT may take to maximise shareholder value since the board is also under a duty to comply with applicable legal obligations. However BT, as a well-managed company, will take every advantage of its vertical integration to increase BT's value, except to the extent expressly prohibited by the undertakings. It is questionable whether BT's management could act within the "spirit" of the undertakings if to do so would negatively impact shareholder value. As a result, it is important that the undertakings are drafted in a manner where understanding is clear to everyone as is possible, so interpretation does not become a major issue at a later date. Furthermore for the EAO and EAB to be effective, the compliance standard must be clear from the outset.

In this part of our response: "Sections" refer to sections of the proposed BT undertakings except where it is indicated that they refer to sections of this response and "notes" refers the numbered drafting notes in the table in annex 1 to this response.

#### 5.1 Equivalence of Inputs

Equivalence of Inputs, as argued earlier, represents an important step forward in addressing concerns about discrimination by BT. It is essential, therefore, that we have complete clarity about what EoI will amount to when it is implemented and how it will work in practice. There are a number of issues with the way EoI is treated in the undertakings and these need to be addressed as a top priority.

Eol features in a number of parts of the undertakings and the language used differs between the sections. In Section 3.1 it is outlined that "BT shall apply Equivalence of Inputs", whereas in Section 11.7 it is outlined that in relation to its NGN BT will provide access on "an Equivalence of Inputs basis". This raises a possible confusion about whether Eol is a process or an output to be achieved. There is also a concern that as Eol is presently used in the undertakings it does not fully capture the idea that there should be an internal "transaction" within BT that is equivalent to the external transaction with other operators. We have suggested some drafting changes in Annex 1 that address these issues (see notes 9, 20 and 22).

Eol is about more than just using the same processes to deliver the same products at the same prices. Effective Eol implementation requires performance measures that

identify whether equivalence is actually being achieved: we discuss in Section 5.4.1.2 of this response the critical importance of KPIs.

The undertakings establish EoI for a number of existing products and also offer the potential of EoI being the basis for future access products, but they fall short of establishing EoI as the default basis for all future SMP Network Access products. Given that the undertakings require BT to redesign existing products to an EoI basis it would be a significant missed opportunity if the undertakings did not ensure that such redesigns would not be required in the future by ensuring that all new relevant products would be designed on an EoI basis.

At present there is not total clarity about what the undertakings require in terms of EoI. There are clear provisions in Section 3.1 on the existing products that will be on an EoI basis and also on the presently envisaged new services to be introduced. However, Section 5.41 includes a more general provision on the ASD being generally required to offer products on an EoI basis. These two separate provisions raise one specific possible tension in relation to Associated Services. Whereas the list of services in Section 3.1 does not include Associated Services, Section 5.41 allows that such Associated Services as agreed with Ofcom will not be provided on an EoI basis, which implies that all other Associated Services will be applied on an EoI basis. We offer some drafting changes in Annex 1 to address this issue (see notes 21, 23 and 82).

How would the undertakings be interpreted were BT ever to be required, following an SMP market review, to introduce a dark fibre Network Access product? Such a product is not included in the list of specific future products to be provided on an Eol basis (Section 3.1.2), however it would appear that under Section 5.41 BT would be required to offer it on an Eol basis, unless otherwise agreed with Ofcom.

The undertakings contain further provisions in relation to BT's NGN and raise very real concerns. These fall into two areas. Firstly, BT will not be obliged to provide NGN Network Access products on an Eol basis where it would not be reasonably practicable to do so. Although this appears quite reasonable, in practical terms it provides a potentially significant "carve out" from the basic obligation. At the very least there is a need for greater clarity about how we can interpret the test of "reasonably practicable" and we offer some drafting suggestions on this in Annex 1 (see note 74). Secondly, Section 11.20 appears to provide a further very significant "carve out" of BT's obligations in relation to its NGN. The first part of this section appears to mean that any obligation that might have been assumed to apply to the NGN, but which lies outside of Section 11, will not actually apply in relation to the NGN. So, for example, under this interpretation Section 3.7 on migration processes will not apply to migrations to NGN products. We again suggest drafting changes that address this concern in Annex 1 (see note 79).

There is one further general area of concern about EoI implementation. Although the provision in Section 3.5 to provide improved access to the engineering appointments books is welcomed, it represents just one area of lack of equivalence. There is a need to eliminate all areas of non-equivalence to deliver an improvement on a complete end-to-end basis.

#### 5.2 Equivalence of Inputs and Full MPF

Equivalence of Inputs is at the core of the undertakings. We expect EoI to provide BT with the appropriate incentives to ensure that fit for purpose products and services

are provided on a non-discriminatory basis to all communications providers. However the linkage of particular upstream products (that must be provided on an EoI basis) with a single downstream product creates a risk that the input product will not be suitable for other appropriate downstream uses. The most striking and important example of this relates to Full MPF, described below.

The undertakings require BT to provide:

- Shared MPF on an Equivalence of Inputs basis by 30th June 2006.
   Equivalence of Inputs means equivalent to the service that is provided as an input to asymmetric (ADSL) IPStream; and
- Full MPF on an Equivalence of Inputs basis by 30th June 2006. Equivalence means equivalent to the service that is used as an input to symmetric (SDSL) IPStream.

The problem is that whilst full MPF is often used (e.g. by Bulldog) to compete with Asymmetric IPStream, the undertakings do not require Full MPFs to be provided on an equivalence of inputs basis with respect to asymmetric IPStream. There is therefore no incentive or obligation on BT to make full MPF fit for purpose for mass market ADSL based services. As a result, there is no obligation to deliver scaleable, industrialised and supported OSS and associated processes in a way that permits other communications providers to compete with BT's asymmetric IPStream using full MPFs as an input.

We believe that this is solvable by including in the undertakings obligations that:

- Full MPF is to be provided on an Equivalence of Inputs basis to Wholesale Line Rental, as well as symmetric IPStream (see drafting notes 24 and 82); and
- Full MPF to be provided to all communications providers so that they are fit for purpose for mass-market consumer broadband services (see drafting note 24).

The undertakings must include the appropriate incentives and obligations to address this issue, as relying on ex-ante obligations to provide the incentives for BT to provide fit for purpose products has, as Ofcom has recognised, failed to achieve all our aims in the past.

#### 5.3 Scope of the ASD

The ASD will consist of around 30,000 BT staff and the physical assets associated with BT's access and backhaul network. Although the undertakings provide some detail on what is included a significant amount is left to the detail of later implementation.

The assets that the ASD will control and operate will be just physical assets. Although this doesn't align particularly well with the products that the ASD provides (many of which include electronics) we believe that the asset split is logical. We note that the ownership of the assets remains with BT Group but the division that controls and operates the assets should account for the capital employed and the associated capex spend. There will be issues of cost allocation that arise and we discuss those in our comments on transparency (Section 5.4.1.1) and backhaul (Section 5.11) in

this response. Also, the definition of the physical layer should specifically include building space and we have made a drafting suggestion (see note 13) accordingly.

There is further clarification required in respect of the people who will be part of the ASD. It is not clear whether the ASD field engineers will also undertake installation and configuration of NTE and CPE and if so how that capability will be made available to other communications providers. Although the undertakings do not explicitly say, we understand that the ASD will include product management and sales staff. We have made a drafting suggestion on this point (see note 30). It is also our understanding that the support staff referred to in paragraph 5.13.3 include all the main functions such as finance, legal, HR, etc. This is an important point, the use of BT Group functions must be kept to a minimum if the transparency and culture change required is to be achieved (see note 31).

The ASD will sell products that are primarily based upon the physical access and backhaul assets. This could result in some specific implementation issues and we raise some that specifically relate to PPCs in section 5.10. The inclusion of WLR in the ASD also has the potential to create co-ordination issues as the supply of WLR is so closely linked with CPS, which is sold from within BT Wholesale. Careful consideration of this issue will be required during the implementation of the ASD and Ofcom should specifically monitor subsequent performance.

We note the proposal to establish the ASD and separate BT's upstream and downstream businesses does not extend to Northern Ireland. We understand that this may make sense but care must be taken to ensure that this does not weaken the rest of the undertakings. Clearly the Code of Practice will be vital in this respect and the EAB should specifically monitor the impact of excluding Northern Ireland.

## 5.4 Transparency

#### **5.4.1.1 Financial and Regulatory Accounts**

Establishment of the ASD as a separate division provides, among other things, a delivery mechanism for equivalence of inputs for some key enduring bottleneck services. These services are typically subject to cost based charge controls. The creation of the ASD provides us with an excellent opportunity to better understand the costs of supplying these services. Therefore, the financial reporting associated with the ASD will be important to ensure compliance with existing SMP cost orientation obligations, the equivalence of input obligations in the undertakings and the SMP no-undue discrimination obligations.

There are three forms of accounts mentioned within the undertakings (Sections 5.27 to 5.29) offered by BT:

- Management Accounts BT has committed to produce management accounts that are consistent with the delivery of equivalence. They will detail payments to and from other parts of BT as well as revenues from other communications providers. They will also include the relevant access and backhaul assets. Crucially these accounts do not need to be audited or made available publicly;
- Statutory Accounts BT will provide segmental financial results for the ASD consistent with the format used for other divisions. BT's current practice is to provide headline figures only, with no breakdown of revenues (apart from BT Retail) or costs and no balance sheet or cash flow. These accounts will be reconciled with the regulatory accounts;
- Regulatory Accounts BT has committed to present the results of the ASD separately in the regulatory accounts but it is not clear what information this will provide over and above the existing presentation on a product by product basis (i.e. adding together all of the ASD products). A potential drawback with the regulatory accounts is that they are produced annually and often with some delay.

Cable & Wireless believe that further clarification is required in the area of financial reporting. We discuss each of the forms of accounts in turn below.

The undertakings do not state who will see the management accounts. However, we believe that those management accounts should be made available to the EAB and to Ofcom and that information should be reconciled to the statutory results published for the ASD. See drafting suggestions in notes 36 and 37 of the Annex.

In view of the frequency and potential delays associated with regulatory accounts we believe that greater clarity is required in terms of what will be provided within the financial results (which should include the quarterly updates). We believe that the following information should be provided:

- The usual headline revenue, cost of sales (or gross margin), SG&A, EBITDA, depreciation operating profit and capital expenditure which is provided for all divisions of BT;
- ASD revenues should be broken down into the broad product groups that the ASD provides (currently BT does provide some breakdown for BT Retail) and

further split between internal and external sales (as already done for BT Wholesale);

- Payments to other parts of BT for products and services that form inputs to ASD products (e.g. electronics) should also be separately identified in these accounts;
- A commentary that explains any changes in the basis within which the above figures are presented;
- Although Section 5.11 does not say that the ASD will 'own' assets they should be responsible for the capital spend associated with them and the capital employed by them; the treatment of this is an important implementation issue. As a one off exercise, to coincide with either the first or second quarter of ASD results, a breakdown of the asset values for those assets that are under the control of the ASD should be made available. This will provide a clearer understanding of those assets and capital employed in advance of the first set of regulatory accounts which probably will not be published until two years from now.

We believe this information, with the exception of the final point, is consistent with the sort of information normally provided by BT's segmental analysis however we have made some drafting suggestions (see notes 38, 39 and 40). This information is required to monitor ASD performance on a more frequent and timely basis than can be achieved through the regulatory accounts.

The regulatory accounts are a fundamental part of the process for monitoring BT's compliance with these undertakings and their SMP obligations. BT's undertaking to separately present the results of the ASD within its regulatory accounts will enable Ofcom to address these through their existing powers. An important aspect of the implementation of the ASD will be a detailed exercise undertaken by Ofcom and BT to determine how best to reflect this split within the accounts. We believe that the following points will be important:

- The component list should be clearly split between BT divisions and the costs
  of any one component should fall entirely within a single division. Many
  components will already fit into a specific division but this will require some to
  be further split (e.g. remote-local transmission will have a fibre (ASD) element
  and an electronics (BTW) element);
- There will be three types of 'transaction' between the ASD and other parts of BT. One will be for products and services that are (or will become) Eol in which case the accounts should record the transaction at the 'price' of the relevant product. The second will be for inputs to other products (e.g. core fibre falling within the ASD but used by BTW or electronics controlled by BTW but required as an input to an ASD product) in which case the accounts should record the transaction at 'cost.' The latter could be achieved using specific components. The third type of transaction relates to non-Eol products, such as PPCs, where an analysis will be required comparing the product pricing in the internal reference offer with the details of the specific components used. The regulatory accounts will need to clearly identify these different transactions, the associated volumes and costs;
- A review of attribution methodologies will be required where costs or assets fall between the ASD and BTW. In particular this will include the way that duct, fibre and building costs are allocated between access, backhaul (both

- ASD) and trunk/core (BTW). In addition a requirement to report comparator driver results from previous accounting periods would enhance visibility;
- The details of the component costs, transfer charges and revenues need to be consolidated and reconciliation provided with the ASD results within the financial reporting. We have suggested a drafting change to Section 5.29.2 to reflect the need for the reconciliation to be published within the regulatory accounts (note 40).

Cable & Wireless would welcome the opportunity to engage in further debate on the best way to reflect the ASD within the regulatory accounts. We believe we will be in a better position to comment once we have seen the new format for regulatory accounts when this is published shortly.

#### 5.4.1.2 Key Performance Indicators

In the undertakings, BT commits to report performance on appropriate KPIs and the EAB will review BT's performance against KPIs and the areas that the KPIs will cover (Sections 10.11.2, 10.18 & 10.19). However, it appears that it is BT and not the EAB or Ofcom who decide exactly what those KPIs will be and whether they are 'appropriate.' Cable & Wireless believe that the KPIs should be set by either the EAB or by Ofcom and if it is the EAB then it should be done in consultation with Ofcom, BT and the rest of the industry.

The monitoring and publication of KPIs is clearly an area of vital importance. The KPIs must cover not only performance for existing products but also the way BT responds to requests for new ones. We also believe that a critical source of performance monitoring comes from customers themselves and how their perception changes over time. A regularly undertaken survey of customer's views specifically designed with the intent of these undertakings in mind would be a valuable tool for BT and the industry as a whole.

#### 5.5 Who pays for implementation?

Cable & Wireless recognise that there are considerable costs associated with the implementation of the ASD and other aspects of the undertakings offered by BT. However, the costs will not solely lie within BT. Other communications providers will also incur costs resulting from these changes in terms of the systems and processes that they use to interface with BT. Clearly we expect that these costs will be offset by the benefits brought about by these changes.

How should these implementation and certain ongoing costs will be dealt with within BT? It may be appropriate for certain costs to become part of the regulated BT assets base and then recovered via regulated, cost orientated, charges that the rest of BT and other communications providers pay for products and services. However, in assessing whether it is appropriate to deal with costs in this way, care must be taken that communications providers other than BT do not pay twice: once for BT implementation costs and again for their own.

We have given some thought as to the various ways in which different types of costs should be treated and hence ultimately who will pay for them and how. We envisage the following scenarios:

- Exceptional costs of implementation these costs should be borne centrally
  and not allocated to any division and hence not included in the regulatory cost
  base used to set charges. An example of the costs falling into this category
  would be legal costs associated with the settlement;
- General implementation costs these costs should be allocated across divisions of BT and Ofcom may wish to refer to its general principles of cost allocation for guidance. As an example, when separating IT systems for the ASD the systems development required will also bring benefits to other divisions of BT where the remainder of the systems are used. The costs should be allocated according to where all of the resultant systems reside and not just allocated to the ASD;
- Specific implementation costs these costs would be directly relevant to a specific division. An example would be the ongoing re-branding of ASD vans;
- Exceptional ongoing costs like the implementation costs these should be borne centrally and not allocated to any division. Any allowances or penalties associated with non-compliance together with all legal costs of any compliance cases should not be recoverable in product charges.

We believe that the ASD should become as autonomous to the rest of BT as is possible and therefore there should not be a generic transfer of 'central' or 'overhead' costs from BT group into the ASD. Clearly there will be cases where it is more sensible to make use of a central resource rather than duplicate it within the ASD but in such cases the transfer of costs should be specifically identified and as a result it will be clear which aspects and to what extent the use of group resources occurs. This will also prevent any costs arising from penalties or allowances falling back into the ASD.

Where the ASD does bear implementation costs, they can only be recovered through the charges for ASD products. It is important that an appropriate allocation and apportionment of those costs takes place across all products, including those that are not Equivalent of Inputs such as PPCs in order that the downstream divisions of BT bear their share of such costs.

#### 5.6 Who can sell what to whom?

The undertakings offered by BT contain no restraints on sales activity (i.e. line of business restrictions) within each business unit. As it stands it appears possible that any division could sell any product. We believe that it is important to clarify whether any constraints are required or should be put in place.

There are various issues that need to be considered:

- Some, possibly most, customers will not be large enough to justify an interface into more that one part of BT;
- Some products are designed to work together and operators may wish to rely on one supplier to manage the interdependencies between them. Such examples are CPS and WLR or the trunk and access components of PPCs;
- BT should have freedom in its downstream divisions to the extent that divisions further upstream are adequately regulated. In general, BT Wholesale should be able to buy and resell products from the ASD, and BT Retail should be able to buy and resell products from ASD and BT Wholesale - indeed these internal transactions lie at the heart of the concept of EoI. In

contrast, the ASD should not be free, in general, to resell products from downstream divisions as this would reintroduce the incentive within BT's existing vertically integrated structure to not aggressively sell upstream inputs to others that would cannibalise higher margin downstream products - one of the problems that the undertakings seek to address.

- The incentives for each division should be to develop their businesses using their own product sets. This is particularly important for the ASD, if the ASD could sell higher value-add products such as ADSL access then they may be tempted to focus their efforts on that rather than selling the underlying metallic path; and
- It would not seem efficient to have all divisions maintaining the skills and capability to sell all products.

In considering how we believe this should work we think it is valuable to also consider product management separately from sales. Product management for any given product should only be done once, in one specific division as identified within the undertakings. Where a division resells a product it may be necessary to do additional product management in order to package it with something else but that product management should be 'additional' and should not extend back to duplicate any of the product management associated with the input product. To do otherwise would not be consistent with the concept of equivalence of inputs but it should not just relate to EoI products: for example with PPCs, the product management of the trunk PPCs within BTWS should relate only to the packaging of the trunk network with the ASD access and backhaul products and not any development of alternative access and backhaul capabilities. We have suggested some revised drafting to reflect this in the Annex (note 27).

The sales function is guite different. With reference to the points above it is clearly important that in some circumstances one division can resell products from another division. The issue of efficiency is really one for BT and in reality some combinations are unlikely to be required, for example we do not think it is likely that customers wishing to be managed by BT Retail will want to buy many ASD products. The issue of incentives is more important and we believe that it is far more relevant between ASD and wholesale products rather than retail products. It is important that the ASD is entirely focused on delivering its core products, which are the underlying bottleneck products, as efficiently as possible. These products typically form the input into higher value products and services sold by downstream divisions and therefore if the ASD could resell those products it would have the opportunity to drive increased revenue without affecting is core business. Therefore it is likely that the ASD would favour sales of higher value-added products rather than putting all its effort into its own product portfolio. In view of this we believe that the ASD should be specifically prohibited from selling either BT Wholesale or BT Retail products (see note 46).

As long as the above restriction is in place we see no reason to restrict which type of customers each division wishes to sell to, although in practice to buy ASD products a customer will have to either have its own network capability, or buy it in from either BT Wholesale or another operator.

We note that ASD products will typically be SMP products for which BT has some form of cost orientation obligation. Where these products are re-sold through another division they must first be bought from the ASD and that must still be on an Eol basis. Any additional costs of reselling the products will have to be directly recovered to

avoid them being allocated to other SMP products. These costs should be small but they will impact the decision operators have to make concerning which BT division to buy ASD products from.

The figure below summarises our thoughts on sales.

	Can sell which Products?			to which Customers?		
	ASD	Wholesale	Retail	Network Providers	Service Providers	End Users
ASD	✓	*	*	✓	~	~
Wholesale	✓	✓	✓	✓	✓	~
Retail	~	✓	✓	~	~	✓

#### Key

- ✓ encouraged
- ~ allowed (but unlikely)
- x dis-allowed

#### 5.7 What does it mean for NGN?

BT's undertakings in relation to NGN deployment are necessarily at a high level. They relate to a network that has not been built, may not have been designed and services that have not been specified and are therefore hard to capture in any level of detail in legally binding commitments. This is of particular importance to the definition of NGNs. Whilst we recognise it is based on a technical standards definition and therefore has probably gone through some rigorous review, the scope of the NGN definition for technical standards purposes may be different to the application here. We are therefore conscious that we may need to revisit this definition at some point in the future if we find it is no longer altogether appropriate.

#### Consultation

We are encouraged by BT's commitment to consult on new service definitions and to design equivalence of inputs into the network at the outset (subject to consultation and feedback). To ensure that the consultation that leads to design is transparent, understood and provides an opportunity to all parties to participate we would expect BT to carry out some straight forward housekeeping such as ensuring publication of:

- The consultation and means of participation (email, meetings etc) via the Internet and/or email;
- Critical dates;
- Ownership within BT; and
- Outcome of the consultation.

This will ensure that industry does not miss out on the opportunity to influence the debate and so that it is clear that this process has clearly been followed. We have made a drafting suggestion (see note 69) in Annex 1.

### **Equivalence of Inputs and NGN**

We are concerned that there appears to be a wide exception to the commitment to provide NGN based Network Access on an Equivalence of Inputs basis. Section 11.9

allows BT to not provide NGN based services on an Equivalence of Inputs basis where it would not be reasonably practicable to do so. We recognise that it is unlikely to be reasonably practicable to provide all services on an equivalence of inputs basis, for instance where costs outstrip benefits to the industry and customers as a whole. However the exception provided in the undertakings does not include any guidance, materiality or process for determining what might be reasonably practicable. It would be for BT to interpret this, and then for others to challenge the interpretation in proceedings for breach of undertakings in the courts if they disagreed. Whilst, a court case could be used to test this, it would be preferable to set out in advance, clearly defined criteria for services not supplied on an equivalence of inputs basis. This would minimise any confusion in industry during consultation and negotiations with BT and provide industry, BT, the EAB and Ofcom with a clear understanding of the obligation to ensure and measure compliance with the undertakings.

We have made suggestions to clarify the drafting in Annex 1 of this document (see note 74).

Furthermore Section 11.20 casts some doubt over the validity of any commitments relating to NGN that are not included in Section 11 of the undertakings. We have understood that there are NGN related commitments in both Section 3 (e.g. 3.7, should apply to NGN products as well as existing products) and Section 5 (e.g. 5.4 refers to successor products which are most likely to be NGN based) of the undertakings. However Section 11.20 appears to constrain any commitments relating to BT's NGN to section 11. See drafting note 79.

#### **MSAN**

Section 5.6 lays out rules for determining whether an MSAN access product is provided by ASD or BT Wholesale. We have a number of concerns about this. It may not be straightforward to determine whether the MSANs contain any network layer functionality (if they contain it, but do not use it, would this count?). Furthermore we are concerned that these rules could be used to create perverse incentives on the design of MSANs. Whilst we recognise that the focus of the undertakings is on products provided from the ASD, the ownership of the product should not foreclose any regulatory remedies that may be required. See drafting note 28.

#### **Migration and Compensation**

The commitments made by BT relating to recovery of migration costs incurred by operators as a result of the migration to NGN are limited in a number of areas. For instance they do not address non-network costs incurred by operators, which have already been discussed in industry, and the principles used to determine how costs should be recovered are inconsistent with those principles used by regulators in the past to determine cost apportionment. We have made suggestions to the drafting in Annex 1 to this document in note 78.

### 5.8 Equality of Access Board and Office

In its June 23<sup>rd</sup> Statement Ofcom commented that the Equality of Access (EAB) has "independence, powers, resources and teeth". If the EAB is to be effective in its role of monitoring for compliance with the undertakings, it will need all of these things. It is not clear, however, that the undertakings really deliver satisfactorily on this promise.

There will be three independent members on the EAB. However, it is not clear that the undertakings guarantee independence as, although BT will consult with Ofcom, ultimately it is BT that will:

- determine the terms of reference and appointment of the independent members;
- appoint the independent members, taking account of, but not being bound by, the factors outlined in the undertakings, and
- be able to remove the independent members.

This is clearly an area where BT will need to work with the spirit of the undertakings. We know that BT has appointed "head-hunters" to manage the recruitment process and is already taking advice from other operators concerning possible independent members. This action is encouraging but only with time will we be able to judge the independence of the members.

We believe that there is presently a gap between the declared policy position of ensuring independence and the existing provisions in the undertakings. A number of changes relating to the terms of appointment and removal of the independent members and the duty owed by the members of the EAB could improve this situation and we have provided drafting suggestions to this effect in Annex 1 (see notes 60 - 69).

The main function of the EAB will be to monitor BT for compliance with the undertakings. The EAB will be able to instigate an investigation of BT and will be able to suggest to BT remedial action to ensure that it complies with the undertakings, but ultimately it will not have the power either to force BT to accept its suggestions or to force BT to comply. BT will be required to inform the EAB of any breach of the undertakings and where there is a non-trivial breach the EAB will inform Ofcom of that breach within 10 working days. There is also an escalation process for the EAB to raise concerns with the BT Group plc Board; it would be more effective for the escalation process to go directly to the Board (as opposed to ultimately to the Board) and we have suggested a drafting change to this effect (note 64). The EAB has a fairly limited set of powers, though again if BT works with the EAB in a constructive manner they could be effective.

One area with which we believe the EAB will need to be particularly concerned is the provision of new Network Access products. An essential part of EoI is that new product requests should be on an equivalent basis and that BT is not able to subvert its EoI obligations through offering new products that are not on an EoI basis. It is not entirely clear what the undertakings require in this respect. Section 5.38 requires that the ASD deals with new service requests for products where EoI applies on a non-discriminatory basis but for other SMP products only on a not unduly discriminatory basis. Although it is clear that BT intends that two different standards are being applied here, it is not clear how these terms should be interpreted. This poses a particular challenge, as there will be no obvious or certain basis for assessing whether BT is complying with its obligations. We suggest a drafting change in Annex 1 that could partially address this issue (see notes 44 and 49).

The Equality of Access Office (EAO) will undertake investigations on behalf of the EAB and appears to have the role of investigating complaints from operators, presumably related to suspected non-compliance with the undertakings. These functions are welcomed, though it must be recognized that the EAO does not have any independent members.

There is a serious concern about the resources of the EAB. It has been suggested that the members will only be working for around 8 days per annum, which is likely to limit the extent to which those members can act independently. This will need to be monitored and the effectiveness of the EAB assessed as it becomes established. It is likely that the EAO will play the primary, day-to-day role and it appears likely that the EAB's effectiveness will be dependent on the support that it receives from the EAO.

It is not yet clear what relationship other operators will have with the EAO and EAB. Again, this will only become clear over time, but it is essential that there is a high degree of trust in the operations of both the EAB and EAO and that these bodies are perceived to be effective in ensuring compliance with the undertakings. It would seem sensible for there to be regular consultation with and reporting to the industry, perhaps on a quarterly basis, to increase confidence in the performance of the EAB and EAO.

## 5.9 Equipment location / space

Whilst we welcome the intent of the undertakings relating to equipment location space (Sections 6.16 to 6.23), it is not clear whether these undertakings offer more than the existing 'commercial' collocation product?

As an LLU operator we see this capability as being very closely linked with LLU collocation space. We are most likely to want to install broadband servers or backhaul aggregation equipment at our existing collocation sites. For efficiency, why not amend the terms of use for existing LLU co-location space to allow it to be used for the additional purpose contemplated in the undertakings, rather than create a new, separate, product? In some cases operators already have two separate areas of LLU collocation space that has arisen due to space constraints. Each time physically separate locations are provided, not only does it introduce equipment inefficiencies for that operator, but they also have to rely on BT to provide the underlying connectivity between areas. Physically separate areas should be a last resort provided only if space constraints cannot be reasonably overcome.

Therefore we believe that the existing LLU co-location space product should form the starting point for any new BT product. If there are aspects of the existing product that BT and Ofcom agree are not appropriate to use for the wider equipment location capability then those aspects could be amended but it will be better to start there and work back than adopt a new concept.

We have listed here some specific points associated with the undertakings on equipment location:

- Section 6.18 says that BT will offer the space on 'reasonable commercial terms' but based upon past experience we may find it difficult to agree what it reasonable. A better solution would be to start with the LLU co-location space terms and specifically identify which of those terms are likely to require amendment;
- There appears to have been no attempt to consider equivalence when it comes to undertakings concerning equipment location space. As an example BT can effectively reserve space (Section 6.17.2) whereas other communications providers have a 'use it or lose it' clause (Section 6.19);

- The Communications Provider Property Users Group (Section 16.1) will
  consist of three representatives. This may prove to be too limiting, particularly
  if one or more of these representatives are from BT, and we believe further
  consideration should be given to the scope and make-up of this group via
  industry consultation;
- Where BT chooses to offer space in an alternative exchange it should cost the communications provider no more than it would have done if they were given space in the exchange where it was originally requested. We have suggested some drafting changes via notes 50 and 53 to reflect this;
- The undertakings do not make it clear from which division of BT the equipment location space will be sold. Space is part of the physical layer of the network and where that space is at a local exchange (which we would expect the vast majority to be) then we believe it should be sold from the ASD. We have suggested a drafting change to the definition of 'physical layer' in Section 2.1 which would make it clear that space within the access network is the remit of the ASD (see note 13).

## 5.10 Implementation issues relating to Partial Private Circuits

The inclusion of PPCs as an ASD product raises significant issues. Although in theory they are an access product, in practice they form part of a larger delivery mechanism that includes trunk network so they will naturally fall between the ASD and BT Wholesale resulting in significant issues of co-ordination. This has the potential to create complexity and inefficiency. Previously Cable & Wireless has argued that the true underlying bottlenecks are both the copper and the fibre upon which PPCs are based and if operators had access to the underlying fibre, as they do the copper, there would be no requirement to include PPCs within the ASD. This remains our preferred solution.

The proposal to put PPC access and backhaul in the ASD while the trunk remains in BT Wholesale may appear to make sense. However, as operators are likely to find it uneconomic to migrate away from the use of trunk network many are likely to end up continuing to buy PPCs from BT wholesale. There are a number of reasons why this may be so:

- Even for a large infrastructure operator with plenty of interconnects, a significant number of PPCs tend to be routed over trunk network. There are many reasons including the fact that the charging structure for PPCs has changed over time, BT's routing rules will have changed and interconnect hubs may have been full or simply not yet installed at the time of initial circuit deployment. In many cases the cost and resources associated with a subsequent circuit re-route are not justified by the cost saving;
- The location of trunk nodes may change as a result of 21CN (in fact we still need to identify which of SDH tier 1 nodes, MSH nodes, DPCN nodes, 21CN metro-nodes or something else will be used to define exactly where backhaul ends and trunk starts). Normally the best approach to avoid using trunk network would be to build interconnects at those trunk nodes but if they are to change as a result of 21CN that could leave stranded investment;
- PPCs are probably not a long term solution, to a large extent xDSL and Ethernet based services will substitute today's PPCs and where that is the case it may not be economic to re-arrange them.

As a result operators who have some trunk PPCs could be faced with significant operational complexity if they buy from two different organisations:

- The operator would need to determine whether the PPC will use trunk before deciding which organisation in BT to place the order with;
- Which part of BT do they buy the interconnects from and can those interconnects then be used to support PPCs bought from both ASD and BT Wholesale; and
- It could require two systems interfaces, two commercial interfaces and then to process two separate bills, essentially creating two different products.

Clearly these are issues that the industry still has to work through with BT and Ofcom but at present we are concerned that it is likely that most, if not all, operators will consider it more efficient to buy PPCs only from BT Wholesale if this is possible. In this case we risk introducing inefficiency in terms of a forced hand-off between the ASD and BT Wholesale without any benefit to offset it.

## 5.11 Implementation issues relating to Backhaul

Backhaul is the part of the network that connects the local access network to the core. The extent to which it can be considered to be competitive, as opposed to being an economic bottleneck, will vary significantly from place to place depending upon a variety of factors. This makes the regulatory treatment of backhaul a particularly difficult issue.

We believe that achieving the appropriate structure and regulation of backhaul is one of the keys to sustainability in the market for competitive communications providers. If backhaul is regulated too tightly then it will encourage too many small competitors to invest and compete amongst themselves but not form effective competition to BT. On the other hand too little regulation prevents real competition being viable. We have not been able to find an objective measurement to judge the approach that BT and Ofcom are proposing and to indicate whether it strikes the right balance. However, we are broadly comfortable with the proposals although there are a several issues that need to be clarified.

The definition of core nodes (Section 2.1) is not clear, it could legitimately be considered to cover BT's tier 1 SDH nodes, its MSH nodes, its DPCN nodes, tandem switch nodes and 21CN metronodes or some combination. More worryingly it could change over time due to the deployment of 21CN. Investment required to develop connectivity to BT's network is both large and long term so it is vital that a clear and stable set of core nodes can be identified and we can work through any intermediate issues that arise as a result.

An issue related to this is the treatment of backhaul circuits that are in fact longer than the definition suggests are covered. Today BES circuits have a limit of 25km and that means some may actually be longer than the product proposed to be sold by the ASD. While we are not arguing for a wider definition of backhaul to be adopted it will be necessary to consider the implications of this. Does it mean that BES circuits that are longer than the strict definition of backhaul are sold through BT Wholesale? If so, what input would the ASD sell to BT Wholesale for it to be able to create the longer backhaul product?

The undertakings (Section 5.14.2) give scope for backhaul circuits to be sold in a way that enables several BT local exchanges to be linked together in the form of a 'daisychain' or presumably via a 'hub and spoke' arrangement (see note 32). We welcome this but it raises an important question on cost-oriented pricing. Although we are not totally familiar with the topology of the BT network we understand that the local exchanges are not fully meshed with direct routes. If that is so then the actual route distance taken by a backhaul circuit could be significantly longer than the straight-line distance between the nodes. If this is the case, pricing should be based upon the actual distance for the specific circuit rather than the average over all circuits. This will ensure that operators who make the most efficient use of BT's network do not get penalised because some other operators may not use it as efficiently.

The inclusive definition of backhaul will in practice capture a significant amount of core fibre. This cannot be avoided as core, backhaul and access services will often share the same duct and whatever definition is adopted similar issues will arise. However it is important that the methodologies used to allocated costs between the ASD and other parts of BT are reviewed in order to ensure that ultimately the ASD bears only the access and backhaul costs. We have included a drafting suggestion (see note 3) to make it clear that the cost allocation issue needs to be addressed.

## **5.12 Implementation of System Changes**

BT has committed to undertake a variety of changes to its systems to deliver Equivalence of Inputs and interim milestones to logically and physically separate out its systems. The commitments are listed in various sections of the undertakings and there is likely to be an overlap between many of the undertakings when implementing the commitments. This could cause confusion, impact operationally and create uncertainty within industry if planned changes are not communicated effectively and consultation carried out at the appropriate point in time.

To enable industry members to plan and implement the results of such changes in their own environment, we would expect BT to establish a project to manage the implementation of these system changes as soon as practicable and provide information to industry such as:

- Project definition, scope, managements, and ownership within BT
- Specific project plans at an appropriate levels of details
- Technical specifications
- System specifications etc

We would further expect BT to provide appropriate updates on an ongoing basis.

# **Annex 1 - Drafting Suggestions**

#	Reference	Current Drafting	Proposed Drafting	Rationale	Just Drafting (D) or mixed Policy and Drafting (P)?
1.	Whereas (c)	Ofcom, instead of making a reference to the Competition Commission, has decided to accept BTs undertakings.	Ofcom, instead of making a reference to the Competition Commission, has decided to accept BTs undertakings [pursuant to Section 154 of the Enterprise Act 2002].	Addition would make it clearer that these are Undertakings accepted in lieu of reference and expressly subject to enforcement regime set out in Enterprise Act, as opposed to voluntary assurances which would not be enforceable by third parties.	D
2.	1.1	These Undertakings shall be binding on BT and its subsidiaries in the United Kingdom except the Hull Area.	These Undertakings shall be binding on BT {and its subsidiaries} in the United Kingdom except the Hull Area.	"Subsidiaries" not required - see definition of BT which covers all group companies.	D
3.	2.1	"Backhaul Product" means a Network Access service which runs from a BT Local Access Node to: a) another BT Local Access Node; or b) a BT Core Node; or c) another Communications Provider's point of handover provided that the straight line distance to any of the above is no more than the greater of d) 15km (or such other distance as may be mutually agreed between BT and Ofcom); e) or the straight line distance from BTs Local Access Node to the nearest BT Core Node.  For the avoidance of doubt this definition does not include backhaul services to nodes outside the UK.	"Backhaul Product" means a Network Access service which runs from a BT Local Access Node to: a) another BT Local Access Node; or b) a BT Core Node; or c) another Communications Provider's point of handover provided that the straight line distance to any of the above is no more than the greater of d) 15km (or such other distance as may be mutually agreed between BT and Ofcom); e) or the straight line distance from BTs Local Access Node to the nearest BT Core Node.  For the avoidance of doubt: f) this definition does not include backhaul services to nodes outside the UK [; and g) nothing in this definition shall be interpreted as allocating the costs of BT's trunk network to BT's backhaul products.]	We are concerned that this inclusive definition may include parts of the trunk network. See 5.4.1.1 of this response.	P

4.	2.1	"BT Wholesale" is the current designation of the division (including any successors) within the BT organisation that predominantly manages upstream products and services, apart from those which will be provided by ASD, designed for use by other Communications Providers, as inputs to their own products.	["BT Upstream" has the same meaning as "the upstream division" defined in Section 8.1.]	Why use BT Wholesale in some sections of document and "upstream division" in section 8? To give flexibility, perhaps better to use BT Upstream throughout as this focuses on essential characteristics of what the non-ASD upstream division does, rather than current names.	D
5.	2.1	"Carrier Price List" means the price list having that name which contains charges for certain products and services provided by BT to Communications Providers and certain products and services provided by Communications Providers to BT, as such price list is amended from time to time, and which is published at www.btwholesale.com.	"Carrier Price List" means the price list [or lists] having that name which contains charges for certain products and services provided by BT to Communications Providers and certain products and services provided by Communications Providers to BT, as such price list [or lists] is amended from time to time, and which is [at the date these Undertakings are offered] published at www.btwholesale.com.	To allow for separate lists to be published by ASD and BT Wholesale.	D
6.	2.1	"Commercial Information" means information of a commercially confidential nature relating to SMP Products or other products and services to which Equivalence of Inputs applies or, in the case of sections 6.10.3 and 6.13 and 6.14 relating to products and services described in section 6.1.2, and which to product development, pricing, marketing strategy and intelligence, product launch dates, cost, or network coverage and capabilities, excluding any such information as agreed by Ofcom from time to time.	"Commercial Information" means information of a commercially confidential nature relating to SMP Products or other products and services to which Equivalence of Inputs applies or, in the case of sections 6.10.3 and 6.13 and 6.14 relating to products and services described in section 6.1.2, and which [includes information relating] {relates} to product development, pricing, marketing strategy and intelligence, product launch dates, cost [,payments and forecasts] or network coverage and capabilities, excluding any such information as agreed by Ofcom from time to time.	To be clear what is included. Addition of payments and forecasts is to be consistent with Commercial Policy definition.	D

7. 2.1	"Commercial Policy" means policies and plans in relation to SMP Products or, in the case of section 8.5, relating to products and services described in section 6.1.2, and which relate to product development, pricing, marketing strategy and intelligence, product launch dates, cost, payment terms and forecasting or network coverage and capabilities, excluding any such policies and plans as agreed by Ofcom from time to time. For the avoidance of doubt this excludes commercial policy of general application across BT such as termination provisions.	"Commercial Policy" means [strategy,] policies and plans in relation to SMP Products or, in the case of section 8.5, relating to products and services described in section 6.1.2, and which relate to product development, pricing, marketing strategy and intelligence, product launch dates, cost, payment terms and forecasting or network coverage and capabilities, excluding any such policies and plans as agreed by Ofcom from time to time. For the avoidance of doubt this excludes commercial policy of general application across BT such as termination provisions. [except in to the extent that such commercial policy could be used to circumvent the letter and/or intent of these Undertakings.]	To ensure that all relevant policies are caught and that general commercial policies are not used to circumvent the undertakings.	D
8. 2.1	"Customer Confidential Information" means any information, in whatever form, which, in the case of written or electronic information, is clearly designated by a Communications Provider as commercially confidential and which, in the case of information disclosed orally, is identified at the time of disclosure as such or is by its nature commercially confidential, but excluding any information which:  a) enters the public domain otherwise than by reason of a breach of confidentiality; b) is previously known to BT at the time of its receipt; c) is independently generated or discovered at any time by BT; or d) is subsequently received from a third party without any restriction on disclosure.	"Customer Confidential Information" means any information [received by ASD and/or Upstream divisions of BT as the case may be], in whatever form, which, in the case of written or electronic information, is clearly designated by a Communications Provider [including BT, except the ASD and Upstream divisions of BT in their capacity as recipient of such information] as commercially confidential and which, in the case of information disclosed orally, is identified at the time of disclosure as such or is by its nature commercially confidential, but excluding any information which:  a) enters the public domain otherwise than by reason of a breach of confidentiality; b) is previously known to [the relevant ASD or Upstream divisions of] BT at the time of its receipt; c) is independently generated or discovered [without breach of these undertakings] at any time by [the relevant ASD or Upstream divisions of] BT; or d) is subsequently received [by the relevant ASD or Upstream divisions of BT] from a third party [or from another division of BT] without any restriction on disclosure.	These changes are required to make the definition work, and in particular to make clear that BT Retail's customer confidential information is protected.	D

9. 2.1 "Equivalence of Inputs" means the provision of the same products and services by BT to all Communications Providers (including BT) on the same timescales, terms and conditions (including price) by means of the same systems and processes, and includes the provision to all Communications Providers (including BT) of the same Commercial Information about such products, services, systems and processes. In particular, it includes the use by BT of such systems and processes in the same way as other Communications Providers and with the same degree of reliability and performance as experienced

by other Communications Providers.

In this context "the same" means exactly the same subject only to:

- a) trivial differences;
- b) such other differences as may be agreed by Ofcom in writing;
- c) differences relating to the following:
- i) credit vetting procedures;
- ii) payment procedures;
- iii) security requirements;
- iv) provisions relating to the termination of a contract; and
- v) contractual provisions relating to requirements for a safe working environment.
- d) such other differences as are specified elsewhere in these Undertakings, including where Commercial Information is provided in accordance with these Undertakings to any of the nominated individuals, and individuals occupying the roles and functional areas (and their relevant external advisers, subcontractors and agents) listed in Annex 2.

"Equivalence of Inputs" means Ithat a product or service is provided by BT ASD or BT Upstream (as the case may be)] {the provision of the same products and services by BT) to all Communications Providers (including fother parts of BT) [in the same way, including on the same timescales, terms and conditions (including price) fand service levels by means of the same systems and processes, and {includes the provision to all Communications Providers (including BT) of Ithat I the same Commercial Information about such products, services, systems and processes fis provided by BT ASD or BT Upstream (as the case may be) to all Communications Providers (including other parts of BT).] In particular, [all parts of BT other than BT ASD or BT Upstream (as the case may be) shall use the same (and no other)] {it includes the use by BT of such}-systems and processes {in the same way} as {other} Communications Providers fother than BT] and [obtain] {with} the same degree of reliability and performance as {experienced by other} Communications Providers fother than BT1.

In this context "the same" means exactly the same subject only to:

- a) trivial differences;
- b) such other differences as may be agreed by Ofcom in writing;
- c) differences relating to the following:
- i) credit vetting procedures;
- ii) payment procedures [but excluding, for the avoidance of doubt, the delivery of invoices even if those invoices are not actually paid];
- iii) [national security requirements; and] {security requirements};
- iv) provisions relating to the termination of a contract[.]  $\{\div$
- contractual provisions relating to requirements for a safe working environment.}
- d) such other differences as are [explicitly] specified elsewhere in these Undertakings [as being carve-outs from the principle of Equivalence of Inputs], including where Commercial Information is provided in accordance with these Undertakings to any of the nominated individuals, and individuals occupying the roles and functional areas (and their relevant external advisers, subcontractors and agents) listed in Annex 2.

There is confusion throughout the document whether "Equivalence of Inputs" is a noun (an output to be achieved) or a verb (i.e. a process). This is very important in assessing whether BT has complied. We suggest that it is used as a noun. i.e. the state to be achieved. throughout these consistently In addition, the undertakings. wording is unclear and does not specifically address transactions across the divisional boundaries within BT. This should be made clear, as it is these "cross-divisional" transactions that need to be "the same" as those with other CPs. Reliability and performance as drafted by BT referred only to systems and processes. WE see the need for a national security carve-out, but physical security requirements are an objective standard whatever vetting/procedures BT uses for its downstream staff should apply on the same basis to other CPs as with safe working environment. Changes to (d) are to ensure that e.g. 3.4, 3.5 are additions to, not relaxations of. Eol.

See discussion in section 5.1 of this response.

10.	2.1	"Exchange Line" means Apparatus comprised in BT's Electronic Communications Network and installed for the purpose of connecting a telephone exchange run by BT to a network termination point comprised in network termination and testing apparatus installed by BT for the purpose of providing Electronic Communications Services at the premises at which the network termination and testing apparatus is located.	"Exchange Line" means {A}[a]pparatus comprised in BT's Electronic Communications Network and installed for the purpose of connecting a telephone exchange run by BT to a network termination point comprised in network termination and testing apparatus installed by BT for the purpose of providing Electronic Communications Services at the premises at which the network termination and testing apparatus is located.	Apparatus not defined in Communications Act 2003 - Telecommunications Act 1984 definition.	D
11.	2.1	"Migration Process" means a process by which: a) a Communications Provider transfers from using one product or service to another product or service; b) an End-User transfers from using one product or service to another product or service; c) an End-User transfers from using a product or service supplied by a Communications Provider to the same product or service supplied by another Communications Provider; d) any combination of (a), (b) and (c) above; e) any combination of (a), (b) and (c) above which involves more than one End-User or two Communications Providers and the transfer takes place within a single process; or f) any combination of (a), (b) and (c) above which involves the synchronised transfer of multiple services or products.	"Migration Process" means a process by which: a) a Communications Provider transfers from using one product or service to another product or service; b) an End-User transfers from using one product or service to another product or service; c) an End-User transfers from using a product or service supplied by a Communications Provider to the same product or service supplied by another Communications Provider; d) any combination of (a), (b) and (c) above; e) any combination of (a), (b) and (c) above which involves more than one End-User [and/] or two [or more] Communications Providers and the transfer takes place within a single process; or f) any combination of (a), (b) and (c) above which involves the synchronised transfer of multiple services or products.	Drafting change to reflect presumed intent.	D

12.	2.1	"Operational Support Systems" means those support systems carrying out the functions and processes which help to run a network and business, including (but not limited to) preordering, taking a customers order, configuring network components, creating a bill and managing faults.	"Operational Support Systems" means those support systems carrying out the functions and processes which help to run a network and business, including {(but not limited to)} preordering, taking a customers order, configuring network components, creating a bill and managing faults.	Inclusion of "not limited to" here implies where "includes" is used elsewhere it is limited. Includes should not be limited - see suggested new Section 2.4 of undertakings (note 19).	D
13.	2.1	"Physical Layer" means the duct, fibre, copper, and other non-electronic assets in an Electronic Communications Network.	"Physical Layer" means the duct, fibre, copper, and other non- electronic assets in an Electronic Communications Network [including space and access to power, light and air- conditioning].	This doesn't refer out to OSI stack in the way that other layer definitions do - not clear why. In any event, this should include space, power, air-con etc (cf Associated Services).  See discussion in section 5.3 of this response.	P
14.	2.1	"Wholesale Analogue Line Rental" is an Electronic Communications Service provided for the use and ordinary maintenance of an analogue Exchange Line.	"Wholesale Analogue Line Rental" is an Electronic Communications Service provided for the use and [all forms of] {ordinary} maintenance of an analogue Exchange Line.	Although the original definition is taken from the relevant market review we understand the revised drafting to reflect the intent of all parties.	Р
15.	2.1	"Wholesale ISDN2 Line Rental" is an Electronic Communications Service provided for the use and ordinary maintenance of an ISDN2 Exchange Line.	"Wholesale ISDN2 Line Rental" is an Electronic Communications Service provided for the use and [all forms of] {ordinary} maintenance of an ISDN2 Exchange Line.	Although the original definition is taken from the relevant market review we understand the revised drafting to reflect the intent of all parties.	Р
16.	2.1	"Wholesale ISDN30 Line Rental" is an Electronic Communications Service provided for the use and ordinary maintenance of an ISDN30 Exchange Line.	"Wholesale ISDN30 Line Rental" is an Electronic Communications Service provided for the use and [all forms of] {ordinary} maintenance of an ISDN30 Exchange Line.	Although the original definition is taken from the relevant market review we understand the revised drafting to reflect the intent of all parties.	Р
17.	2.1	"Wholesale End-to-End Ethernet Service" means a Network Access service providing uncontended Ethernet bandwidth between an End-User premise and another End-User premise up to a maximum straight-line distance of 25km between each premise unless technical feasibility dictates otherwise	"Wholesale End-to-End Ethernet Service" means a Network Access service providing uncontended Ethernet bandwidth between an End-User premise and another End-User premise up to a maximum straight-line distance of 25km between each premise unless technical feasibility dictates otherwise[.]	Туро.	D

18.	2.2	Words or expressions shall have the meaning assigned to them in these Undertakings and otherwise any word or expression shall have the same meaning as it has in the Communications Act 2003.	Words or expressions shall have the meaning assigned to them in these Undertakings and otherwise any word or expression shall have the same meaning as it has in the Communications Act 2003 [and any subsidiary instruments enacted under the Communications Act 2003 including market reviews and SMP Conditions].	Some market review terms are used without definitions. Alternative approach is to de-capitalise undefined terms.	D
19.	New 2.4	n/a	[Any reference to "including" (or cognates) in these Undertakings shall be read as "including, without limitation"].	To ensure that all uses of "includes" are illustrative (not exhaustive) lists.	D
20.	3.1.1	BT shall apply Equivalence of Inputs for the following products and services in accordance with the timetable set out in Annex 1 to these Undertakings, and continue to apply it following the relevant IBMC dates:	BT shall [provide and use] {apply Equivalence of Inputs for} the following products and services [on an Equivalence of Inputs basis] in accordance with the timetable set out in Annex 1 {to these Undertakings}, and continue to [provide and use such products and services ]{apply it} following the relevant IBMC dates:	To be consistent with revised definition and to ensure that BT is actually under an obligation (as opposed to "applying" some external thing).  See discussion in section 5.1 of this response.	D
21.	3.1.1 e) and f)	e) Shared Metallic Path Facility; f) Metallic Path Facility;	e) Shared Metallic Path Facility [and Associated Services]; f) Metallic Path Facility [and Associated Services];	Presumably Associated Services are to be provided on Eol basis?  See discussion in section 5.1 of this response.	Р
22.	3.1.2	When BT provides in the future the following products and services it will do so applying Equivalence of Inputs:	When BT provides [or uses] in the future the following products and services it will do so {applying} [on an] Equivalence of Inputs [basis]:	To be consistent with revised definition and to ensure that BT is actually under an obligation (as opposed to "applying" some external thing).	D
23.	New 3.1.2 f)	n/a	[f) any other product or service product managed by the ASD pursuant to 5.41.]	For consistency and clarity with 5.41.  See discussion in section 5.6 of this response.	Р

24.	3.1.3	5.12.1 Nothing in this section 3.1 shall require BT when providing Wholesale Line Rental either to itself or to other Communications Providers to use Metallic Path Facility as an input to that service.	{Nothing in this section 3.1 shall require BT when providing Wholesale Line Rental either to itself or to other Communications Providers to use Metallic Path Facility as an input to that service.} [BT shall provide Metallic Path Facility to other Communications Providers in a way that is fit for the purpose of supporting such other Communications Providers' massmarket consumer broadband products. Without limitation, this shall include systems and processes that are not materially different from the systems and process that BT itself uses to supply and support its asymmetric IPStream product. For the avoidance of doubt, BT shall use Metallic Path Facility as an input to Wholesale Line Rental.]	See discussion in section 5.2 of this response.	P
25.	3.2	Notwithstanding the dates specified in Annex 1, BT will as a gesture of good faith:	Notwithstanding the dates specified in Annex 1, BT will {as a gesture of good faith}:	It is clear that obligation to pay allowances (as opposed to tighter RFS meeting dates) is binding. The "gesture of good faith" words introduce ambiguity and should be deleted.	D

26.	3.7	To the extent that the Migration Processes are either internal to BT or are otherwise within BTs control, BT shall apply Equivalence of Inputs to BTs Migration Processes where such processes involve at least one product or service for which BT must apply Equivalence of Inputs, and, where relevant, at the same time as BT is required to supply RFS for Equivalence of Inputs in accordance with the timetable in Annex 1.	To the extent that the Migration Processes are [(i)] either internal to BT or are otherwise within BTs control; [and (ii) such Migration Processes involve at least one product or service to which Equivalence of Inputs is applicable, BT shall provide such Migration Processes on an] {apply} Equivalence of Inputs [basis from the dates on which. {to BTs Migration Processes where such processes involve at least one product or service for which BT must apply Equivalence of Inputs, and, where relevant, at the same time as} BT is required to supply RFS for Equivalence of Inputs in accordance with the timetable in Annex 1.	Drafting clarity.	D
27.	5.3	ASD shall provide product management, sales (or equivalent internal supply between ASD and other parts of BT) and in-life service management for those SMP Products which are predominantly provided using the Physical Layer and/or Transmission Layer of BTs Access Network and/or BT's Backhaul Network, as set out in sections 5.4, 5.5 and 5.10. It shall specify the products and services and their functionality, develop new products and services, set prices, and sell (or internally supply within BT) its products and services to any Communications Provider.	ASD shall provide product management [as defined in section 6.5], sales (or equivalent internal supply between ASD and other parts of BT) and in-life service management for those SMP Products which are predominantly provided using the Physical Layer and/or Transmission Layer of BTs Access Network and/or BT's Backhaul Network, as set out in sections 5.4, 5.5[, 5.6] and 5.10. It shall specify the products and services and their functionality, develop new products and services, set prices, and sell (or internally supply within BT) its products and services to any Communications Provider [(including other divisions of BT). No other division of BT shall provide product management and in-life service management for those SMP Products which are predominantly provided using the Physical Layer and/or Transmission Layer of BTs Access Network and/or BT's Backhaul Network, as set out in sections 5.4, 5.5, 5.6 and 5.10.]	Product management definition should be consistent across document.  5.6 NGN Access (to the extent covered by 5.6) should be included here.  Finally, other divisions of BT need to be prohibited from parallel product management to avoid circumventing undertakings.  See discussion in sections 5.6 and 5.7 of this response.	Р

28.	5.6	If a new Network Access product is provided using BT's NGN:  a) which is based on MSAN access; and  b) BT is determined by Ofcom to have SMP in a market containing the new Network Access product; and  c) MSANs do not contain any Network Layer functionality; then if so required by Ofcom the new Network Access product will be provided by ASD.	If a new Network Access product is provided using BT's NGN:  a) which is based on MSAN access; and  b) BT is determined by Ofcom to have SMP in a market containing the new Network Access product; and  c) MSANs do not contain any [significant] Network Layer functionality [which is used in such Network Access product]; then if so required by Ofcom the new Network Access product will be provided by ASD.	Drafting change is to make sure that if MSANs contain any network layer functionality, the intent of undertaking still applies.  See discussion in section 5.7 of this response.	P
29.	5.12.1	the ASD requirements for new SMP Products which determine platform requirements shall be set out in product roadmaps and volume forecasts which shall be agreed with relevant platform managers. This includes new ASD SMP Products delivered over BT's NGN, as well as new SMP Products delivered over the current network. Where backhaul platforms support products and services supplied by ASD and other products and services supplied elsewhere in BT, ASD will have the principal role in determining delivery requirements where it is the predominant user of the platform or where ASD provides the only SMP Product using that platform;	the ASD requirements for new SMP Products which determine platform requirements shall be set out in [ASD] product roadmaps and volume forecasts which shall be agreed with relevant [ASD] platform managers. This includes new ASD SMP Products delivered over BT's NGN, as well as new SMP Products delivered over the current network. Where backhaul platforms support products and services supplied by ASD and other products and services supplied elsewhere in BT, ASD will have the principal role in determining delivery requirements where it is the predominant user of the platform or where ASD provides the only SMP Product using that platform;	We understand that this was the intent behind this clause.	D

30.	5.13.2	those people involved in the design, planning, implementation and in-life service management of products and services based upon the Physical Layer and/or Transmission Layer of BT's Access Network or the Physical Layer and/or Transmission Layer of BT's Backhaul Network, including their line management up to and including the ASD CEO;	those people involved in the [product management as defined in section 6.5, sales (or equivalent internal supply between ASD and other parts of BT)] design, planning, implementation and in-life service management of products and services based upon the Physical Layer and/or Transmission Layer of BT's Access Network or the Physical Layer and/or Transmission Layer of BT's Backhaul Network, including their line management up to and including the ASD CEO;	To align people moving to ASD with functions listed in 5.3.	D
31.	5.13.3	people who carry out activities which are ancillary to those described in section 5.13.1 and section 5.13.2 and those who support and manage them.	people who carry out activities which are ancillary to those described in section 5.13.1 and section 5.13.2 and those who support and manage them. [For the avoidance of doubt this shall include people in all those support functions required for the quasi-autonomous operation of a strategic business unit including finance, HR, legal and other support functions.]	In order to ensure ASD is quasi- autonomous strategic business unit.  See discussion in section 5.3 of this response.	Р
32.	5.14.2	ASD shall ensure that Communications Providers can purchase Backhaul Products which are SMP Products in such a way that they can join together (daisy-chain) multiple network nodes;	ASD shall ensure that Communications Providers can purchase Backhaul Products which are SMP Products in such a way that they can join together ([including by] daisy-chain [or hub and spoke]) multiple network nodes;	To reflect underlying intent.	D
33.	5.14.3	ASD shall develop solutions that provide the ability to pick-up aggregated traffic from smaller sites to a common handover point, including a managed transmission service. This section 5.14.3 shall apply to transmission services using either or both SDH and Ethernet technology in markets in which BT is determined by Ofcom to have SMP and any future technologies which enhance or replace these in Network Access Markets;	ASD shall develop solutions that provide the ability to pick-up aggregated traffic from smaller sites to a common handover point, including a managed transmission service. This section 5.14.3 shall apply to transmission services using either or both SDH and Ethernet technology in markets in which BT is determined by Ofcom to have SMP and any future technologies which enhance or replace these in Network Access {M}[m]arkets;	Market not defined term.	D

34.	5.14.4	ASD shall provide space in accordance with sections 6.16-6.23 at BTs Local Access Node sites for other Communications Providers to locate their own equipment which can be used to aggregate traffic from multiple services which originates or terminates on BT's Access Network, as well as traffic which originates or terminates on Communications Provider's own access networks. ASD shall provide Backhaul Products which are SMP Products which carry this aggregated traffic to a point of handover within the Communications Providers own networks. Such Backhaul Products shall include products and services based on SDH technology and products and services based on Ethernet technology, and any future technologies which enhance or	ASD shall provide space in accordance with sections 6.16-6.23 at BTs Local Access Node sites for other Communications Providers to locate their own equipment which can be used to aggregate traffic from multiple services which originates or terminates on BT's Access Network, as well as traffic which originates or terminates on Communications Provider's own access networks. ASD shall provide Backhaul Products which are SMP Products which carry this aggregated traffic to a point of handover within the Communications Providers own networks. Such Backhaul Products shall include products and services based on SDH technology and products and services based on Ethernet technology, and any future technologies which enhance or replace these; [and]	"and" required at end of list.	D
25	F 00	replace these;	The ACD CEO shall sepert feelely and directly the the DE Crown	Clarifying intent	
35.	5.22	The ASD CEO shall report to the BT Group plc CEO.	The ASD CEO shall report [solely and directly] to the BT Group plc CEO.	Clarifying intent.	D
36.	5.27	With effect from the start of BTs financial year 2006/2007, the charging approach, management accounts and management information associated with ASD shall be prepared on the following basis:	With effect from the start of BTs financial year 2006/2007, the charging approach, management accounts and management information associated with ASD shall be prepared on the following basis [and made available on a quarterly basis to the EAB and Ofcom]:	See discussion in section 5.4.1.1 of this response.	Р

37.	5.27 d)	the accounts should include the relevant parts of BT's Access Network and BT's Backhaul Network assets; and	the accounts [will] {should} include the relevant parts of BT's Access Network and BT's Backhaul Network assets [and be reconciled(with such reconciliation published) to BT's statutory accounts]; and	See discussion in section 5.4.1.1 of this response.	Р
38	5.27 e)	segmental financial information relating to ASD will be included in the audited BT Group plc accounts.	segmental financial information relating to ASD will be included in the audited BT Group plc accounts [ to include:  - headline revenue, cost of sales (or gross margin), SG&A, EBITDA, depreciation operating profit and capital expenditure;  - revenues broken down into the broad product groups that the ASD provides and further split between internal and external sales;  - separately identified payments to other parts of BT for products and services that form inputs to ASD products (e.g. electronics); and  - a commentary that explains any changes in the basis within which the above figures are presented.]	See discussion in section 5.4.1.1 of this response.	P
39	5.28	With effect from the start of BTs financial year 2006/2007, the regulatory financial statements of BT will also separately present the results of ASD.	With effect from the start of BTs financial year 2006/2007, the regulatory financial statements of BT will also separately present the results of ASD [in a form agreed with Ofcom].	See discussion in section 5.4.1.1 of this response.	Р

40	. 5.29	With effect from the start of BTs financial year 2006/2007:	With effect from the start of BTs financial year 2006/2007:	See discussion in section 5.4.1.1 of this response.	Р
		5.29.1 BT shall begin to report ASD's financial performance in BT Group plc's annual and quarterly reports in the same format as is used for BTs existing divisions; and  5.29.2 ASD annual financial accounts shall be reconciled with the relevant parts of BTs annual regulatory accounts.	<ul> <li>5.29.1 BT shall begin to report ASD's financial performance in BT Group plc's annual and quarterly reports in the same format as is used for BTs existing divisions [plus additional information to include:         <ul> <li>headline revenue, cost of sales (or gross margin), SG&amp;A, EBITDA, depreciation operating profit and capital expenditure;</li> <li>revenues broken down into the broad product groups that the ASD provides and further split between internal and external sales;</li> <li>separately identified payments to other parts of BT for products and services that form inputs to ASD products (e.g. electronics); and</li> </ul> </li> </ul>	Tesponse.	
			<ul> <li>a commentary that explains any changes in the basis within which the above figures are presented]</li> </ul>		
			; and		
			5.29.2 ASD annual financial accounts shall be reconciled with the relevant parts of BTs annual regulatory accounts [and such reconciliation published].		

41	5.30	The ASD Headquarter Management Team shall move to:  5.30.1 access controlled accommodation which is separately secured from BT businesses downstream of the ASD and shall have completed this move within 6 months of the date that these Undertakings take effect; and  5.30.2 accommodation which is separately located from BT businesses downstream of the ASD and shall have completed this move within 18 months of the date that these Undertakings take effect.	The ASD Headquarter Management Team shall move to:  5.30.1 access controlled accommodation [in London] which is separately secured from BT businesses downstream of the ASD and shall have completed this move within 6 months of the date that these Undertakings take effect; and  5.30.2 accommodation [in London] which is separately located from BT businesses downstream of the ASD and shall have completed this move within 18 months of the date that these Undertakings take effect.	To ensure that obligation cannot be circumvented by locating HQ outside London. By definition (of ASD HQ Management Team) the obligations only relate to staff in London.	D
42	5.36.3	for the avoidance of doubt the nominated individuals and individuals occupying the roles and functional areas referred to in sections 5.36.1 and 5.36.2 shall not abuse their positions to circumvent the intent of these Undertakings:	Move to separate subsection.  for the avoidance of doubt the nominated individuals and individuals occupying the roles and functional areas referred to in sections 5.36.1 and 5.36.2 shall not abuse their positions to circumvent the [letter and/or] intent of these Undertakings;	Anti-avoidance provision should be standalone.  Need to ensure that violation of letter of undertaking cannot be excused on the basis that it didn't reflect BT's intent.	D

40				Ar C C C DT	
43.		n/a	[Except for the nominated individuals, and individuals	Mirror of restriction placed on BT	Р
	sub-		occupying the roles and functional areas (and their relevant	Wholesale. This applies to ASD, whereas	
	section		external advisers, sub-contractors and agents) listed in Part A and Part B of Annex 2:	5.35 excludes ASD.	
			- ASD will not disclose its Customer Confidential Information to BT Upstream or to the downstream divisions as referred to in section 8.1, except, in all cases, with the relevant customer's consent;		
			<ul> <li>people in ASD shall not disclose their respective BTWS or BTS Commercial Information to people in the downstream divisions as described in section 8.1 other than through mechanisms and processes identical or similar to those available to other Communication Providers.]</li> </ul>		
44.	5.38	ASD shall ensure that the way in which new product and service requests are received and evaluated and Commercial Information of ASD is made available is on a non-discriminatory basis in relation to products and services where Equivalence of Inputs applies and on a not unduly discriminatory basis where other SMP Products are involved.	ASD shall ensure that the way in which new product and service requests are received and evaluated and Commercial Information of ASD is made available is on a non-discriminatory basis [between other Communications Providers and other divisions of BT] in relation to products and services where Equivalence of Inputs applies and on a not unduly discriminatory basis [such term to be interpreted consistently with any similarly worded SMP obligation to which BT is subject from time to time, taking account of any then applicable Ofcom guidelines on interpretation] where other SMP Products are involved.	Need to be clear that inter-divisional interaction is being compared with ASD-other CP interactions.  "Not unduly discriminatory" should be interpreted in line with Ofcom guidelines.	P

45.	5.40	Within 12 months of these Undertakings taking effect, BT shall logically partition its Management Information Systems such that these systems are run separately for ASD and the rest of BT such that they do not lead to undue discrimination against other Communications Providers. For the avoidance of doubt this section does not apply to BTs Operational Support Systems.	Within 12 months of these Undertakings taking effect, BT shall logically partition its Management Information Systems such that these systems are run separately for ASD and the rest of BT such that they do not lead to undue discrimination against other Communications Providers. For the avoidance of doubt {this section} [BT's obligation to logically partition its systems] does not apply to BTs Operational Support Systems.	To ensure that the no undue discrimination obligation is not disapplied by last sentence.	D
46.	New Sub- section	n/a	[The ASD shall not sell, or resell, any product or service which is product managed by any other part of BT, except by agreement with Ofcom.]	See discussion in section 5.6 of this response.	
47.	6.3	For the avoidance of doubt both BTWS and BTS may at any time product manage products and services which are not otherwise required to be product managed within either BTWS or BTS as provided for in section 6.1.	For the avoidance of doubt both BTWS and BTS may at any time product manage products and services which are not otherwise required to be product managed within either BTWS or BTS as provided for in section 6.1 [except for products and service which receives 55% or more of product revenue from End-Users (as opposed to Communications Providers other than BT).]	To avoid retail product management in BT Wholesale, which would circumvent Chinese walls.  See discussion in section 5.6 of this response.	P
48.	6.10.3	people in BTWS and BTS shall not disclose their respective BTWS or BTS Commercial Information to people in the downstream divisions as described in section 8.1 other than through mechanisms and processes identical or similar to those available to other Communication Providers.	people in BTWS and BTS shall not disclose their respective BTWS or BTS Commercial Information to people in the downstream divisions as described in section 8.1 other than through mechanisms and processes {identical or similar} [which are identical, or where not identical mot materially different from] to those available to other Communication Providers.	To ensure that "similar" is not an excuse for consistently worse.	Р

	6.12	In circumstances where demands for product or service enhancement from ASD, BTWS or BTS create a situation which requires prioritisation by BT of its capital expenditure, BT will not unduly discriminate in its prioritisation. BT will seek the view of the EAB on the best means of avoiding such undue discrimination.	In circumstances where demands for product or service enhancement from ASD, BTWS or BTS create a situation which requires prioritisation by BT of its capital expenditure, BT will not unduly discriminate [such term to be interpreted consistently with any similarly worded SMP obligation to which BT is subject from time to time, taking account of any then applicable Ofcom guidelines on interpretation] in its prioritisation. BT will seek the view of the EAB on the best means of avoiding such undue discrimination.	"Not unduly discriminatory" should be interpreted in line with Ofcom guidelines.	Р
50.	6.16.1	"Alternative Communications Provider Operational Area" means a Communications Provider Operational Area at another Exchange other than that requested by the Communications Provider so that the Communications Provider has the same ability to provide electronic communications services that make use of Network Access at no greater cost to the Communications Provider than that which it would have paid had it occupied a Communications Provider Operational Area at the Exchange named within its request;	"Alternative Communications Provider Operational Area" means a Communications Provider Operational Area at another Exchange other than that requested by the Communications Provider (so that the Communications Provider has the same ability to provide electronic communications services that make use of Network Access at no greater cost to the Communications Provider than that which it would have paid had it occupied a Communications Provider Operational Area at the Exchange named within its request);	Definition should not contain obligation.  See discussion in section 5.9 of this response.	D
51.	6.16.2	"Equipment" means equipment listed in Annex 4, owned by the Communications Provider (but not its customers or any other third party) used to provide Electronic Communications Services that make use of Network Access and which is connected to the BT network;	"Equipment" means equipment listed in Annex 4, {ewned}[operated] by the Communications Provider (but not its customers or any other third party) used to provide Electronic Communications Services that make use of Network Access and which is connected to the BT network;	Why owned? Why not leased, or equipment subject to retention of title?  See discussion in section 5.9 of this response.	Р
52.	6.16.2	"Exchange" means a BT site containing a main distribution frame with access to the metallic path;	"Exchange" means a BT site containing a {main distribution frame with access to the metallic path}[Local Access Node];	We understand this to be intent.	D

53.	6.17.2	there is:-	there is:-	Bona fide to avoid space being reserved by BT simply to exclude others.	Р
		a) sufficient space available at the relevant Exchange at the date of that	a) sufficient space available at the relevant Exchange at the date of that request (including any [bona fide] future plans	Cost provision moved from definition.	
		request (including any future plans that BT	that BT has for use of the Exchange in connection with its	·	
		has for use of the Exchange in connection with its business);	business);	See discussion in section 5.9 of this response.	
		b) sufficient electrical power available at the relevant Exchange at the date of that request including any future plans that BT has for use of the Exchange in	b) sufficient electrical power available at the relevant Exchange at the date of that request including any future [bona fide] plans that BT has for use of the Exchange in connection with its business); and		
		connection with its business); and	In any event BT may provide an Alternative Communications Provider Operational Area to the Communications Provider if it		
		In any event BT may provide an Alternative Communications Provider Operational Area to the Communications Provider if it is reasonable to do so.	is reasonable to do so. [always provided that such provision does not result in a greater cost to such Communications Provider than the cost it would have incurred had it occupied space at the requested exchange].		

P

55.	6.23	It will be part of the reasonable commercial terms offered by BT under section 6.19 that if any Communications Provider seeks to remain in an Exchange after BT has vacated the Exchange then the Communications Provider will fully indemnify BT against all compensation, damages, actions, costs and claims howsoever arising under the terms of the BT and Telereal property transaction completed on 13th December 2001.	{It will be part of the reasonable commercial terms offered by BT under section 6.19 that if any Communications Provider seeks to remain in an Exchange after BT has vacated the Exchange then the Communications Provider will fully indemnify BT against all compensation, damages, actions, costs and claims howsoever arising under the terms of the BT and Telereal property transaction completed on 13th December 2001.}	These undertaking are offered by BT. Making offered obligation conditional on acceptance by others of unreasonable commercial terms does not help to address the problems identified by Ofcom, and sets expectations that this may be considered part of the wider "regulatory settlement".  See discussion in section 5.9 of this response.	Р
56.	8.1.3	Commercial Information of the upstream division is not disclosed by its sales function to the sales functions of the downstream divisions otherwise than through mechanisms and processes identical or similar to those available to other Communications Providers.	Commercial Information of the upstream division is not disclosed by its sales function to the sales functions of the downstream divisions [unless it is also made available to other Communications Providers] {etherwise than} through mechanisms and processes identical or similar to those available to other Communications Providers.	To ensure equal treatment.	Р
57.	8.2	Communications Providers who are eligible to be account-managed by BT in accordance with eligibility criteria to be published by BT shall be account managed by either BT's upstream division or downstream divisions as referred to in section 8.1 according to their choice and they will experience no disadvantage, in terms of price, service, or quality, or product range by being managed by BT's upstream division.	Communications Providers who are eligible to be account-managed by BT in accordance with eligibility criteria to be published by BT shall be account managed by either BT's upstream division or downstream divisions as referred to in section 8.1 according to their choice and they will experience no disadvantage, in terms of price, service, or quality, or product range by being managed by BT's upstream division [except to the extent that BT's downstream divisions are constrained in their provision by any part of these Undertakings].	To ensure that this provision isn't used to circumvent other parts of undertakings which create Chinese walls.	Р

58.	8.3	BT shall ensure that other Communications Providers, wishing to purchase products and services from BT, are not obliged to deal with the downstream divisions as referred to in section 8.1 in relation to such purchases, where such products or services are inputs to products or services that they shall offer to End-Users in competition with the downstream divisions. In such circumstances BT shall ensure that other Communications Providers shall be able, in dealing with the upstream division as referred to in section 8.1 in relation to the purchase of products or services, to purchase them on exactly the same terms and conditions (including price) as offered by the downstream divisions, save where differences are trivial or where there are material differences between the products and services that the downstream divisions supply and the products and services that the upstream division supplies. For the avoidance of doubt, nothing in this section 8 shall of itself require BT to supply products or services which are not within a market in which BT has been determined by Ofcom as having SMP.	BT shall ensure that other Communications Providers, wishing to purchase products and services from BT, are not obliged to deal with the downstream divisions as referred to in section 8.1 in relation to such purchases, where such products or services are inputs to products or services that they shall offer to End-Users in competition with the downstream divisions. In such circumstances BT shall ensure that other Communications Providers shall be able, in dealing with the upstream division as referred to in section 8.1 in relation to the purchase of products or services, to purchase them on exactly the same terms and conditions (including price) as offered by the downstream divisions, save where differences are trivial or where there are material [technical] differences between the products and services that the downstream divisions supply and the products and services that the upstream division supplies. For the avoidance of doubt, nothing in this section 8 shall of itself require BT to supply products or services which are not within a market in which BT has been determined by Ofcom as having SMP.	Otherwise the clause says that things will be supplied on same basis, unless they are different, which isn't helpful.	P
59.	9.5	BT's mandatory compliance and regulatory training for all its employees shall cover compliance with these Undertakings and the Code of Practice.	BT's [ongoing] mandatory compliance and regulatory training for all its employees shall cover compliance with these Undertakings and the Code of Practice.	To ensure compliance and training is not a "once-only" activity.	D

60.	10.5	BT shall consult Ofcom on any terms of reference for each EAB member and on the terms of appointment of each independent member.	BT shall consult Ofcom on any terms of reference for each EAB member and on the terms of appointment of each independent member. [Independent members shall enter into a fixed term between 3 and 5 years contract for services (not a contract of employment) with BT which shall include an obligation to diligently monitor BT's compliance with these Undertakings, a requirement for them to act in an independent manner (and not in the interests of BT) and a right to make public statements. In so far as is reasonably practicable, the contractual arrangements with independent members shall ensure that the ends dates of their tenure are staggered so as to ensure continuity.]	Suggested additions are needed to demonstrate independence.  See discussion in section 5.8 of this response.	P
61.	10.6	The Chairman of the EAB, following agreement with BT Group plc Chairman and consultation with Ofcom, may remove the independent members of the EAB.	The Chairman of the EAB, following agreement with BT Group plc Chairman and consultation with Ofcom, may remove the independent members of the EAB [for gross misconduct only].	Suggested additions are needed to demonstrate independence.  See discussion in section 5.8 of this response.	Р
62.	10.9	The role of the EAB is a general one of monitoring, reporting and advising BT on BT's compliance with these Undertakings and the Code of Practice, with a specific focus on the provision of products and services on an Equivalence of Inputs basis and the operation of ASD. It is not one of executive policy making for BT or any part thereof.	The role of the EAB is a general one of monitoring, reporting and advising BT on BT's compliance with these Undertakings and the Code of Practice, with a specific focus on the provision of products and services on an Equivalence of Inputs basis and the operation of ASD. It is not one of executive policy making for BT or any part thereof. [The EAB, and each member of the EAB, shall in exercising their functions have regard to these Undertakings and the interests of all Communications Providers (not solely the interests of BT).]	To ensure that the EAB is independent and does not act solely in the interests of BT.  See discussion in section 5.8 of this response.	P
63.	10.12	The EAB shall be responsible for monitoring and reviewing the product roadmaps and volume forecasts, as well as the associated investment decisions, as they relate to ASD and SMP Products.	The EAB shall be responsible for monitoring and reviewing [for compliance with these Undertakings] the product roadmaps and volume forecasts, as well as the associated investment decisions, as they relate to ASD and SMP Products.	To set standard for review.  See discussion in section 5.8 of this response.	Р

64.	10.20	In the event that there is a serious concern shared by some or all of the members of the EAB, the EAB shall have an escalation route via the EAB Chairman, ultimately to the BT Group plc Board. The EAB's annual report shall show summary details of any such escalations to the BT Group plc Board, subject to commercial confidentiality.	In the event that there is a serious concern [of one,] {shared by} some or all of the members of the EAB, the EAB shall have an escalation route via the EAB Chairman, {ultimately} [directly] to the BT Group plc Board. The EAB's annual report shall show summary details of any such escalations to the BT Group plc Board, subject to commercial confidentiality.	As they are independent, even a single member should be able to raise concerns. To ensure clear escalation route.  See discussion in section 5.8 of this response.	P
65.	10.26.2	The EAB shall have no remit in respect of: conduct of claims or litigation; and	The EAB shall have no remit in respect of: conduct of claims or litigation[except in relation to potential or actual breaches of these Undertakings, where they have the role set out in these Undertakings]; and	Otherwise EAB role would end if any prospect of breach (as this may result in litigation to enforce undertakings)  See discussion in section 5.8 of this response.	Р
66.	10.27.7	a summary of any documents (excluding any internal audit reports, legal advice or legally privileged documents) prepared for the EAO for the purposes of preparing the report that substantiate significant conclusions of the report. Such documents shall be supplied to Ofcom if so requested; and	a summary of any documents (excluding any {internal audit reports}, legal advice or legally privileged documents) prepared for the EAO for the purposes of preparing the report that substantiate significant conclusions of the report. Such documents shall be supplied to Ofcom if so requested; and	Internal audit reports are highly relevant to the work of EAB. Why are they excluded?  See discussion in section 5.8 of this response.	Р
67.	10.30	The EAB annual report shall be audited by independent external auditors.	The EAB annual report shall be audited by independent external auditors [as to whether they represent a true and fair view of the matters contained within them (including, without limitation, whether BT has complied with these Undertakings).]	Need to provide a standard for the audit.  See discussion in section 5.8 of this response.	Р
68.	10.35	The EAB will aim to reach decisions on a unanimous basis. Where it is unable to do so decisions will be made on a majority basis with the Chairman of the EAB having a casting vote and any dissent in relation to such a decision by an EAB member shall be noted in the minutes.	{The EAB will aim to reach decisions on a unanimous basis. Where it is unable to do so}Decisions will be made on a majority basis with the Chairman of the EAB having a casting vote and any dissent in relation to such a decision by an EAB member shall be noted in the minutes.	Doesn't this put pressure on independent members to conform to majority view?  See discussion in section 5.8 of this response.	Р

69.	10.36	The EAB shall be quorate with 3 members present, one of which must be the Chairman of the EAB or his nominee. The BT senior manager shall also be entitled to nominate a replacement for him or her if he or she is unable to attend a meeting of the EAB.	The EAB shall be quorate with 3 members present [including by telephone, video-conference or web-conference, or such other method as may be agreed by the EAB from time to time], one of which must be the Chairman of the EAB or his nominee. The BT senior manager shall also be entitled to nominate a replacement for him or her if he or she is unable to attend a meeting of the EAB. [All independent members shall be given sufficient notice of meetings.]	There should be requirements to give sufficient notice of meetings to independent non-execs, to avoid meetings being called at short notice with only a "friendly" independent member able to attend.  See discussion in section 5.8 of this response.	P
70.	11.1	BT shall supply other Communications Providers with Network Access using its NGN in Network Access markets in which, from time to time, BT is determined by Ofcom to have SMP. Such provision of Network Access shall not be conditional on the provision of another form of Network Access or another product or service, unless agreed by Ofcom.	BT shall supply other Communications Providers with Network Access using its NGN in Network Access markets in which, from time to time, BT is determined by Ofcom to have SMP. Such provision of Network Access shall not be conditional on the provision of another form of Network Access or another product or service [or any element of the Network Access not required by other Communications Providers], unless agreed by Ofcom.	To ensure unbundled products are covered.	Р

71.	11.3	Whilst constructing its NGN BT shall not make any network design decisions on network architecture the effect of which would be to prevent the provision of Network Access as described in section 11.1 to other Communications Providers, without first consulting with other Communications Providers. If such consultations suggest that demand may exist for a specific form of Network Access, BT shall enter into commercial negotiations with those Communications Providers interested in such Network Access and shall continue such negotiations for a period of up to three months, during which period BT will not implement any such design decisions to its NGN which would prejudice the outcome of these negotiations.	Whilst constructing its NGN BT shall not make any network design decisions on network architecture [or specifications] the effect of which would be to prevent [hinder, delay or degrade] the provision of Network Access as described in section 11.1 to other Communications Providers, without first consulting [taking account of its obligations under 11.1] with other Communications Providers. If such consultations suggest that demand may exist for a specific form of Network Access, BT shall enter into commercial negotiations with those Communications Providers interested in such Network Access and shall continue such negotiations for a period of up to three months, during which period BT will not [make]{implement} any such design decisions to its NGN which would prejudice the outcome of these negotiations. [BT shall publicise each consultation and its outcome].	Wording added to clarify what is included.  There needs to be a requirement to publicise each consultation as it changes the rights of third parties (see 11.4.1).  See discussion in section 5.7 of this response.	P
72.	11.5.1	section 11.4 applied and BT has complied with that section 11.4	section 11.{4}[3] applied and BT has complied with that section 11. {4}[3]	Typo? If not, meaning of clause obscure.	D?
73.	11.8.2 b)	the SMP which Ofcom has previously determined BT to have is of an enduring nature.	[Ofcom has indicated that it expects the SMP to be of a continuing nature] {the SMP which Ofcom has previously determined BT to have is of an enduring nature}	Ofcom does not have power to make the determination envisaged.	D
74.	11.9	Sections 11.6 and 11.7 shall not apply where it would not be reasonably practicable to provide Network Access on an Equivalence of Inputs basis.	Sections 11.6 and 11.7 shall not apply where it would not be reasonably practicable to provide Network Access on an Equivalence of Inputs basis. [In this sub-section "not reasonably practicable" shall only mean circumstances where provision is either technically impossible or that the costs would fail an industry cost-benefit analysis].	Definition is in line with Ofcom statement as to their interpretation of this clause. Without specificity, this subsection could be interpreted very widely and devalue the rest of 11.  See discussion in section 5.7 of this response.	Р

75		Where BT launches a new product or service for End-Users which makes use of its Network Access provided by means of BT's NGN, it shall ensure that such Network Access is made available to other Communications Providers sufficiently in advance of the launch of such new product or service so that such other Communications Providers are able to launch competing products or services to End-Users at the same time as BT. For the avoidance of doubt, except where BT undertakes to provide products or services on an Equivalence of Inputs basis, the ASD or the upstream division referred to in section 8.1 can deliver Network Access using BT's NGN to the downstream businesses referred to in that section as they see fit, provided that those downstream businesses experience the same charging regime and functionality as experienced by other Communications Providers.	[Before]{Where} BT launches a new product or service for End-Users which makes use of its Network Access provided by means of BT's NGN, it shall ensure that such Network Access is made available to other Communications Providers sufficiently in advance of the launch of such new product or service so that such other Communications Providers are able to launch [equivalent] competing products or services to End-Users at the same time as BT. For the avoidance of doubt, except where BT undertakes to provide products or services on an Equivalence of Inputs basis, the ASD or the upstream division referred to in section 8.1 can deliver Network Access using BT's NGN to the downstream businesses referred to in that section as they see fit, provided that those downstream businesses experience the same charging regime and functionality as experienced by other Communications Providers.	Time, not place qualifier required.  Needs to equivalent, rather than competing, but inferior products.	P
76	. 11.11.2	the SMP which Ofcom has previously determined BT to have is of an enduring nature.	[Ofcom has indicated that it expects the SMP to be of a continuing nature] {the SMP which Ofcom has previously determined BT to have is of an enduring nature}	Ofcom does not have power to make the determination envisaged.	D

77. 11.17 Such operational dispute adjudicator scheme will enable any Communications Provider, including BT, within two months of an operational issue arising in the context of BT's NGN implementation plan, including transition, relating to that Communications Provider to refer operational disputes to this adjudicator for a time-limited binding decision. The nature of the time-limited decision shall be such that only the directly affected parties may file a dispute and all disputes must be resolved within 4 weeks. Following the resolution of a dispute, if further disputes are submitted addressing the same or similar points, BT can elect to bypass the operational dispute adjudicator scheme and refer directly to Ofcom.	Such operational dispute adjudicator scheme will enable any Communications Provider, including BT, within two months of an operational issue arising in the context of BT's NGN implementation plan, including transition, relating to that Communications Provider to refer operational disputes to this adjudicator for a {time-limited} binding decision [decided within a specified time limit]. The nature of the time-limited decision shall be such that only the directly affected parties may file a dispute and all disputes must be resolved within 4 weeks. Following the resolution of a dispute, if further disputes are submitted addressing the same or similar points, BT can elect to bypass the operational dispute adjudicator scheme and refer directly to Ofcom.	The time for making the decision is time-limited, not its binding effect.	D
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78. 11.18	The principles BT will use in making	The principles BT will use in making compensation	
78. 11.18	The principles BT will use in making compensation to a Communications Provider taking Network Access from BT as part of BT's implementation of NGN for network costs necessarily borne by such Communications Provider taking Network Access as a result of notified planned changes to access and interconnection arrangements will take into account:  a) the extent to which these changes are unilaterally decided by BT without industry agreement;  b) the distribution of benefits that accrue from these changes;  c) the asset life of any legacy interconnect equipment employed at the time of the change;  d) the extent to which new investment of assets which cannot be re-employed is reasonably and justifiably made by a Communications Provider after it has been	The principles BT will use in making compensation to a Communications Provider taking Network Access from BT as part of BT's implementation of NGN for network [and non-network] costs necessarily borne by such Communications Provider taking Network Access as a result of notified planned changes to access and interconnection arrangements will take into account:  [a) cost causation as the primary principle;]  [b]) the extent to which these changes are unilaterally decided by BT without industry agreement;  [c]) the distribution of benefits that accrue from these changes;  [d]) the asset life of any legacy interconnect equipment employed at the time of the change;  [e]) the extent to which new investment of assets which cannot be re-employed is reasonably and justifiably made by a	Oftel (based on MMC's recommendations in its report into number portability) has historically used 6 principles when looking at cost allocation:  - causation costs: should be recovered from those whose actions cause the costs to be incurred where there are externalities;  - distribution of benefits costs: should be recovered from the beneficiaries especially where there are externalities;  - effective competition: the mechanism for cost recovery should not undermine or weaken the pressures for effective competition;  - cost minimisation: the mechanism for cost recovery should ensure that there are strong incentives to minimise costs;  - reciprocity: where services are provided reciprocally, charges should also be reciprocal; and  - practicability: the mechanism for cost recovery needs to be practicable and relatively easy to implement.
	e) the additional cost necessarily and directly incurred as a result of having to bring forward investment in new interconnect equipment.	Communications Provider after it has been made aware of forthcoming changes; and  [f]) the additional cost necessarily and directly incurred as a result of having to bring forward investment in new interconnect equipment.	It is not clear why BT should use different principles, and in fact the suggested principles may be more favourable to BT than would be the case otherwise. As a minimum cost causation needs to be primary consideration. Why is industry agreement relevant - cost causation looks at who causes costs to be incurred. It seems perverse for other CPs to pick up more costs as a result of co-operating. If change is
			someway off, but CP needs more capacity to deal with current customer demand why should it be forced to either not meet customer demand or not be able to recover investment.  See discussion in section 5.7 of this response.

79.	11.20	This section 11 contains all BT's specific obligations by virtue of these Undertakings in relation to the development and deployment of its NGN. Subject to the provisions of this section 11, nothing in these Undertakings shall impede the flow of information reasonably required to enable BT to design, build and operate its NGN or the decision-making process relating thereto.	This section 11 contains all BT's specific obligations by virtue of these Undertakings in relation to the development and deployment of its NGN [except those set out elsewhere in these undertakings]. Subject to the provisions of this section 11, nothing in these Undertakings shall impede the flow of information reasonably required to enable BT to design, build and operate its NGN or the decision-making process relating thereto [always provided that such information shall be used solely and exclusively for such purpose and not to circumvent the letter or intent of these undertakings.]	There are various NGN references elsewhere. Unless this first sentence is qualified these should be removed as having no effect (which substantially weakens the undertakings). Information used to build NGN should be used only for that purpose.  See discussion in section 5.7 of this response.	Р
80.	13.1	Where a request for information is received by BT under section 12 the [negligent,] reckless or deliberate provision to Ofcom of false or misleading information shall be deemed to be a breach of these Undertakings.	intent of these undertakings.].  Where a request for information is received by BT under section 12 the reckless or deliberate provision to Ofcom of false or misleading information shall be deemed to be a breach of these Undertakings.	Surely negligence should be covered?	D
81.	17.1	BT and Ofcom may, from time to time, vary and amend these Undertakings by mutual agreement.	BT and Ofcom may, from time to time, vary and amend these Undertakings by mutual agreement, [subject to the requirements of the Enterprise Act 2002 and publication of any such variation and amendment].	It is important that the version of the undertakings in force from time to time is published so third parties may enforce their rights.	D
82.	Annex 1 5 and 6	The RFS date for Shared Metallic Path Facility will be 30 June 2006. The IBMC date in relation to asymmetric IPStream will be 31 December 2006.	The RFS date for Shared Metallic Path Facility [and for Associated Services] will be 30 June 2006. The IBMC date in relation to asymmetric IPStream will be 31 December 2006.	To ensure associated services covered, by undertakings.	Р
		The RFS date for Metallic Path Facility will be 30 June 2006. The IBMC date in relation to symmetric IPStream will be 31 December 2006.	The RFS date for Metallic Path Facility [and for Associated Services] will be 30 June 2006. The IBMC date in relation to symmetric IPStream [and Wholesale Line Rental] will be 31 December 2006.	See discussion in section 5.2 of this response.	

3. Annex 2, Part	Any member of the board of directors of BT Group plc, and British Telecommunications plc, or the Company Secretary of either	Any member of the board of directors of BT Group plc, and British	Exceptions too wide.
A Part	Company.	Telecommunications plc, or the Company Secretary of	·
' '	Company.	either Company.	
	Any member of a committee of the Board of BT Group plc	ours. company.	See discussion in section
	including the BT Group	Any member of a committee of the Board of BT Group plc	5.3 of this response.
	Operating Committee	including the BT Group	
		Operating Committee	
	Group General Counsel		
	Local and Dagulatons	Group General Counsel	
	Legal and Regulatory	Legal and Regulatory	
	Group Strategy	Legal and Regulatory	
	Croup Grategy	{Group Strategy}	
	Group Risk & Insurance	(	
		Group Risk & Insurance	
	Head of Ethics/Business Practices		
	Over Building	Head of Ethics/Business Practices	
	Group Portfolio	{Group Portfolio}	
	Group Commercial Policy Forum	( <del>Group Fortiono</del> )	
	Stoup Commorcial Folloy Forum	{Group Commercial Policy Forum}	
	Procurement		
		Procurement	
	The following areas in Group Finance:	T. (	
	Crayo Financial Control	The following areas in Group Finance:	
	Group Financial Control	Group Financial Control	
	Group Treasury	Group i mandar control	
	Cloup Housely	Group Treasury	
	Group Tax		
1		Group Tax	
	Group Reporting, Planning and Analysis, and Controller	Oncore Deposition Plansing and April 2	
1	BT Group	Group Reporting, Planning and Analysis, and Controller BT Group	
	Group Corporate Finance	Contiolier of Group	
	Group Corporate i mande	Group Corporate Finance	
	Commercial and Regulatory Finance		
		(Commercial and Regulatory Finance)	
	And in all cases their equivalents in BT Northern Ireland.		
	And in all cases their relevant external advisers, subcontractors	And in all cases their equivalents in BT Northern Ireland.	
	and agents.	And in all cases their relevant external advisers,	
		subcontractors and agents.	

84.	Annex 2, Part B	Any member of the EAB and the EAO, including the EAB secretary External Auditors	Any member of the EAB and the EAO, including the EAB secretary External Auditors	Exceptions too wide.	Р
		External Quality Assurance	External Quality Assurance	See discussion in section 5.3 of this response.	
		Finance	{Finance}		
		Internal Audit	Internal Audit		
		Compliance	Compliance		
		Human Resources	Human Resources		
		Group Information	{Group Information}		
		BT Property	BT Property		
		Group Technology (including development)	{Group Technology (including development)}		
		Any Assistant Company Secretary & Board Secretariat	Any Assistant Company Secretary & Board Secretariat		
		Press, communications, media and investor relations	Press, communications, media and investor relations		
		Billing Centre of Excellence	Billing Centre of Excellence		
		Security	Security		
		And in all cases their equivalents in BT Northern Ireland.	And in all cases their equivalents in BT Northern Ireland.		
		And in all cases their relevant external advisers, subcontractors and agents.	And in all cases their relevant external advisers, subcontractors and agents.		

