



Requests from BT for specified
exemptions and agreements
to its Undertakings under the
Enterprise Act 2002
Part 2

Statement

Publication date:

21 Dec 2006

Contents

Section		Page
1	Summary	1
2	Introduction	3
3	Responses to the consultation and Ofcom's further reasoning with respect to the exemptions requests	7
Annex		Page
1	BT's exemption, variation and agreements requests	28
2	Letter from BT	61
3	Exemptions, agreements and variations wording (including Variation Number: 7)	63

Section 1

Summary

- 1.1 On 22 September 2005 BT Group plc ("BT") offered, and Ofcom accepted, a set of undertakings ("the Undertakings") pursuant to section 154 of the Enterprise Act 2002 in lieu of a reference of certain markets to the Competition Commission. At the time the Undertakings were formulated it was realised that in the interest of reaching a conclusion in a timely manner, to ensure that the benefits could be felt by consumers as quickly as possible, it would be inappropriate to consider all BT's products in the context of to which products Equivalence of Inputs (EOI) should apply. Therefore, a process was included into the Undertakings to allow Ofcom and BT to consider the EOI requirement for certain products at a later stage. In addition, the Undertakings provide that under certain circumstances BT may apply for exemptions from certain provisions.
- 1.2 In January 2006, BT provided Ofcom with a proposed list of products (which had not been specifically identified in the original Undertakings) to which EOI should apply and a number of requests for exemptions and requests for agreement from Ofcom. BT needs to seek such agreement since, for instance, Openreach pursuant to the Undertakings cannot supply products on a non-EOI basis unless it has the agreement of Ofcom.
- 1.3 Since receiving the requests from BT, Ofcom and BT have been discussing the substance of the requests and modifying the requests in line with those discussions. Ofcom has taken the view that it would only consult with other stakeholders, either formally or informally, once it was satisfied that the substance of the requests is something to which Ofcom would be minded to agree.
- 1.4 Ofcom published a statement on 15 June 2006 in respect of the first batch of exemptions *Requests from BT for specified exemptions and agreements to its Undertakings under the Enterprise Act 2002 – Part 1* ("Exemptions Part 1") and included in this a list of the 15 outstanding requests. In recognition of the complex issues surrounding some of these requests, and the view that receiving comments on them from the wider industry would help inform Ofcom's decision making process, on 18 October 2006 Ofcom published a consultation *Requests from BT for specified exemptions and agreements to its Undertakings under the Enterprise Act 2002 – Part 2* in respect of 13 of these outstanding requests.
- 1.5 This statement concludes that consultation and includes a decision by Ofcom to agree to the nine requests which do not cover fibre-based products and includes the text of the agreement between Ofcom and BT formalising this decision. In respect of the four fibre-related exemptions (i.e. Redcare CCTV, Media & Broadcast services, managed radio communications services and Wavestream) Ofcom has decided that the complexity of the issues highlighted by respondents around these requests – and the need for the results from Openreach's current ethernet portfolio review¹ to feed into the analysis – means that Ofcom needs more time to resolve these issues. Ofcom has therefore decided through a variation of the Undertakings to extend the existing temporary exemption in respect of these requests up to 31 March 2007².

¹ http://www.openreach.co.uk/orpg/downloads/pdf/Briefing_WESBES014.pdf

² <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/variation6.pdf>

- 1.6 Two of the requests identified in Exemptions Part 1 as outstanding (i.e. initial wideband planning and inter-exchange capacity planning) are not covered by this statement and remain under discussion between Ofcom and BT.
- 1.7 Also, it is possible that Ofcom may receive further requests from BT for specified exemptions and agreements in respect of products or services not currently identified, e.g. through the deployment of its Next Generation Network, "21CN". Ofcom will decide whether to consult on these on a case-by-case basis.

Section 2

Introduction

Background

- 2.1 On 22 September 2005 BT Group plc ("BT") offered, and Ofcom accepted, a set of undertakings ("the Undertakings") pursuant to section 154 of the Enterprise Act 2002 ("the Enterprise Act"). The Undertakings addressed issues that had been raised by Ofcom as it considered whether to refer certain markets to the Competition Commission in relation to the provision of fixed telecommunications. The Undertakings were accepted by Ofcom in lieu of making such a reference at that time. Ofcom's reasons for accepting the Undertakings, together with the Undertakings themselves, are set out in full in the document entitled *Final statements on the Strategic Review of Telecommunications, and undertakings in lieu of a reference under the Enterprise Act 2002*³.
- 2.2 At the time the Undertakings were formulated it was realised that in the interest of reaching a conclusion in a timely manner, to ensure that the benefits of the Undertakings could be felt by consumers as quickly as possible, it would be inappropriate to consider all BT's products in the context of to which products Equivalence of Inputs (EOI) should apply. Therefore, a process was included into the Undertakings to allow Ofcom and BT to consider the EOI requirement for certain products at a later stage. In addition, during the course of BT's implementation of the Undertakings a number of processes or services have been identified by BT for which it has requested exemptions from certain sections of the Undertakings.
- 2.3 The process of considering to which products EOI should apply, and the additional exemption requests, has been underway since BT submitted its list of products (which had not been specifically identified in the original Undertakings) in January 2006, for consideration by Ofcom, in the form of a number of requests for exemptions and requests for agreement from Ofcom. BT needs to seek such agreement since, for instance, Openreach pursuant to the Undertakings cannot supply certain products on a non-EOI basis unless it has the agreement of Ofcom.
- 2.4 Since receiving the requests from BT, Ofcom and BT have been discussing the substance of the requests and modifying the requests in line with those discussions. Ofcom has taken the view that it would only consult with other stakeholders, either formally or informally, once it was satisfied that the substance of the requests is something to which Ofcom would be minded to agree. Ofcom recognises that this has restricted to some extent the flow of information to other stakeholders. To alleviate this Ofcom has, throughout the process, endeavoured to share as much as possible with other stakeholders (e.g. publishing in its statement dated 15 June 2006 on the first batch of exemptions and agreements ("Exemptions Part 1")⁴ a list of the outstanding requests) and has also encouraged BT to engage with other stakeholders to help inform its requests. It is Ofcom's view that the process it has followed has been the most expedient way to reach resolution on BT's requests.
- 2.5 In Section 4 of Exemptions Part 1 Ofcom listed 15 outstanding requests from BT which were still under consideration. On 18 October 2006 Ofcom published a consultation on 13 of these 15 outstanding requests ("Exemptions Part 2

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

⁴ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/requests/>

Consultation"⁵). Following on from this, and after consideration of responses to the consultation received by Ofcom, Ofcom is publishing in this document its final statement to that consultation.⁶

2.6 There are essentially three categories of request:

- i) the supply of legacy products (such as MegaStream Ethernet and Featureline) on a non-EOI basis; considered under Section 5.46.2 of the Undertakings. Section 5.46.1 lists a number of specific products and services to which EOI is not required to be applied. Generally, products and services supplied by Openreach and not included under Section 5.46.1 of the Undertakings fall under Section 5.46.2 which requires a decision to be made either to exclude such products from the EOI requirement, withdraw them from sale or supply, or apply EOI to them;
- ii) the supply of certain engineering services (such as engineering services for BT Global Services in the Scottish islands and Scilly Isles) currently supplied by Openreach to BT's downstream division(s), or vice versa, on a non-EOI basis in support of legacy products; and
- iii) the supply of legacy products (such as Redcare CCTV and Wavestream) on an EOI basis (as per category (i) above) but which require a fibre-based input from Openreach currently not provided on an EOI basis.

2.7 In the Exemptions Part 2 Consultation Ofcom proposed to agree the requests under categories (i) and (ii), and asked whether respondents supported this recommendation. For the four requests under category (iii) Ofcom did not make any specific recommendation, but instead asked for views from respondents on the solutions proposed by BT.

2.8 In this statement Ofcom is agreeing to the nine requests from BT which fall under categories (i) and (ii) above (subject to minor modifications in respect of request 5 relating to Openreach engineering services and request 7 relating to private circuits). Ofcom also notes some additional information in respect of request 1 relating to ISDN conversion, request 3 relating to Featureline, request 4 relating to Featurenet, request 5 relating to Openreach engineering services and request 9 relating to LLU associated services provided to it by BT via a letter which is reproduced in Annex 2 of this statement.

2.9 However, given the responses received in respect of the four fibre requests which fall under category (iii) above Ofcom has decided that it requires more time to consider the issues around these requests and has not decided at this time to agree to those requests.

2.10 The products and services to which these exemptions and agreements relate were set out in BT's submissions contained in Annex 5 of the Exemptions Part 2 Consultation and are reproduced in Annex 1 of this statement for reference. The

⁵ <http://www.ofcom.org.uk/consult/condocs/btrequests/>

⁶ As discussed in the Exemptions Part 2 Consultation, two of the requests (Initial wideband planning and Inter-exchange capacity planning) raise important issues of principle as to the boundary between Openreach and BT Wholesale, and these were not addressed to Ofcom's satisfaction in the proposals from BT current at the time of the consultation. At the time of publication of this statement Ofcom is continuing to discuss these requests with BT and expects to consult on them, if appropriate, in the near future.

legal document by which BT and Ofcom agree the various proposed exemptions and agreements is contained in Annex 2 of this statement⁷.

The exemptions process

- 2.11 The possibility of there being products and/or services about which a decision would need to be made with respect to EOI was recognised and anticipated for in the Undertakings. Section 5.46 of the Undertakings not only sets out the general principle of when EOI will apply (5.46.1) but also sets out a list of products to which EOI will not apply (5.46.1(a) – (i)). In addition Section 5.46.2 envisaged that there were products which would exist at the date the Undertakings came into force (22 September 2005) and which AS⁸ (now known as Openreach) would supply, but which Ofcom and BT would have to subsequently agree whether or not EOI should apply, or whether the product should be withdrawn from supply by AS.
- 2.12 Under the current terms of the Undertakings (Section 5.46.2) BT and Ofcom are required to agree the action to be taken in respect of products and services which fall under Section 5.46.2 by 22 December 2006⁹. Also within Section 5.46.2 is an exemption in respect of the application of Section 5.46.1 to any products or services falling under Section 5.46.2. This exemption is for 18 months after the Undertakings come into force and is intended to allow sufficient time for the decisions taken in respect of the identified products or services to be implemented¹⁰.
- 2.13 However, not all the identified products and services are covered by the exemption in Section 5.46.2. For these products and services specific temporary exemptions up to and including 24 April 2006 were granted in letters exchanged between Ofcom and BT on 20 January 2006¹¹. These temporary exemptions were further extended by an exchange of letters between Ofcom and BT on 19 April 2006 to 21 August 2006 inclusive¹², and again by an exchange of letters on 17 August 2006 to 22 December 2006 inclusive¹³. The requests within the scope of this statement that are covered by these letters are:
- the support of BT Global Services products and services by Openreach engineers in specified geographies (Request No. 6);
 - the provision by Openreach of private circuit (including Partial Private Circuits) provision, repair, maintenance and upgrade support services to BT Wholesale (Request No. 7);
 - the application of information sharing restrictions in respect of the 21CN network uplift programme (Request No. 8); and
 - the use by BT Wholesale of non-EOI associated services in respect of Handover Distribution Frames (HDFs) and tie cables for its 20CN Digital Subscriber Line Access Multiplexer (DSLAM) equipment (Request No. 9).

⁷ A proposed agreements wording was published in Annex 6 of Ofcom's Exemptions Part 2 Consultation. This has been revised in light of the changes discussed in this statement.

⁸ Since the Undertakings came into effect BT has created Openreach to fulfil the duties (as defined in the Undertakings) of Access Services.

⁹ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/var3.pdf>

¹⁰ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/var3.pdf>

¹¹ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/BTE1.pdf>

¹² <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/letter20042.pdf>

¹³ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/ofcomresponse.pdf>

- 2.14 Ofcom and BT have also agreed a variation to the Undertakings. This variation is set out with the agreed exemptions in Annex 3 and allows Ofcom and BT to agree exceptions of the requirement that pursuant to section 5.12 of the Undertakings Openreach ('AS') shall control and operate the assets contained within the Physical Layer of BT's Access and Backhaul Network. This variation has been made to allow Ofcom and BT to agree paragraph 4(b) of the agreements wording (see Annex 3) in relation to the Featurenet request.
- 2.15 Section 155 of the Enterprise Act 2002 requires that Ofcom consults where it proposes to amend the Undertakings in a material respect. However, Ofcom does not consider that the exemptions, agreements and variation contained herein would alter the Undertakings in a material respect as they concern the operation of mechanisms envisaged when the Undertakings were offered by BT and accepted by Ofcom. Whilst Ofcom is not obliged to consult on non-material changes to the Undertakings, it stated in Exemptions Part 1 that it would decide whether or not to consult on any such changes in the future on a case-by-case basis and indicated that it intended to consult on the outstanding requests. The subjects of these outstanding requests were, in Ofcom's opinion, sufficiently complex that there was value in consulting with stakeholders to obtain views and comments that would help Ofcom in reaching its decision as to whether to agree, or not, to each request from BT.
- 2.16 The Enterprise Act requires that Ofcom should "have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition". Ofcom's competition concerns were set out in its *Strategic Review of Telecommunications Phase 2 Consultation Document*. In considering the case for varying the Undertakings, Ofcom must consider whether this solution is materially and negatively affected by the variation in question.
- 2.17 Ofcom does not consider the proposed variation to be material and it therefore follows that the variation can not in any way materially affect the comprehensive solution that the Undertakings represent. Furthermore Ofcom considers that the variation will not have a negative impact on the comprehensive solution. In reaching this view Ofcom has considered the following factors where appropriate:
- whether there would be, or would likely be, harm to consumers if the exemption and/or agreement was granted or not granted due to, for instance, a reduction in effective competition or disruption to the services customers receive;
 - whether there would be demand from Communications Providers (other than BT) for an EOI product to which the exemption relates; and
 - the length of time for which the exemption and/or agreement will be granted and whether the amount of resource that would be needed to accelerate development of an EOI product is warranted balanced against other resource requirements (i.e. proportionality).

Section 3

Responses to the consultation and Ofcom's further reasoning with respect to the exemptions requests

Introduction

3.1 In this section Ofcom sets out its position in respect of each of the requests from BT for certain exemptions and agreements to its Undertakings under the Enterprise Act 2002, and the reasons why it has adopted the position it has. Ofcom, through the Exemptions Part 2 Consultation, received a number of comments from interested stakeholders with respect to the proposals contained in its consultation. Non-confidential responses are published on the Ofcom website¹⁴ and were received from the following respondents (in alphabetical order):

- BSkyB (Questions 1 and 5-19 only);
- BT (all questions);
- Cable & Wireless (all questions);
- Digital 3 & 4 (Questions 12 and 13 only);
- Metropolitan Police Service (Questions 10 and 11 only);
- Mr N Clews (Questions 1 and 12 only);
- Synetrix (Questions 16 to 19 only);
- THUS (Questions 1-9 and 16-19 only); and
- Viatel (Questions 16 to 19 only).

3.2 In addition two confidential responses were received.

3.3 The full text of BT's requests was published in Annex 5 of the Exemptions Part 2 Consultation and is reproduced in Annex 1 of this statement, for reference, in respect of those requests covered by this statement. The exemptions and agreements wording signed by BT and Ofcom is set out in Annex 3 of this statement. The reasoning Ofcom puts forward in this section in respect of BT's requests is based on the information available to Ofcom at the time of publication of the Exemptions Part 2 Consultation, responses received to the consultation from interested stakeholders and subsequent discussions with BT to address the key points raised by the consultation.

3.4 The Enterprise Act requires that Ofcom should "have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition". Ofcom's competition concerns were set out in its *Strategic Review*

¹⁴ <http://www.ofcom.org.uk/consult/condocs/btrequests/responses/>

of *Telecommunications Phase 2 Consultation Document*¹⁵. In considering the case for varying the Undertakings, Ofcom must consider whether this solution is materially and negatively affected by the variation in question. As stated in paragraph 2.17, Ofcom does not consider each of the proposed variations to be material and it therefore follows that each variation can not in any way materially affect the comprehensive solution that the Undertakings represent. Furthermore Ofcom considers that each variation will not have a material negative impact on the comprehensive solution. In reaching this view and in considering the exemption requests Ofcom has considered the following factors where appropriate:

- whether there would be, or would likely be, harm to consumers if the exemption and/or agreement was granted or not granted due to, for instance, a reduction in effective competition or disruption to the services customers receive;
- whether there would be demand from Communications Providers (other than BT) for an EOI product to which the exemption relates; and
- the length of time for which the exemption and/or agreement will be granted and whether the amount of resource that would be needed to accelerate development of an EOI product is warranted balanced against other resource requirements (i.e. proportionality).

3.5 Note that within this section 'Openreach' is used in place of Access Services (as is used in the Undertakings) as BT has – since the acceptance of the Undertakings – branded its Access Services division, referred to in the Undertakings, as Openreach.

3.6 Below we have outlined general comments on these exemptions and then we discuss the comments on each specific request and our final conclusions.

General comments to the consultation

3.7 A number of respondents raised general concerns with respect to the exemptions process. These comments broadly fell into three categories: duration of the process; transparency; and, materiality.

3.8 BSkyB and one other respondent felt that the exemptions process overall is taking too long. BSkyB commented that it was difficult to argue against some of the timelines proposed for the EOI products as they are now imminent and it therefore questioned the value of consulting on them. Further, BSkyB believed that if rapid resolution to an exemption request from BT could not be achieved then Ofcom should consider not agreeing to BT's request. Cable & Wireless believed that a number of the proposed dates were too lenient.

3.9 One respondent felt that the process has not been sufficiently transparent and that the effects of agreeing any of the exemptions have not been quantified by Ofcom. It felt that in the absence of such quantification it is difficult for Ofcom to determine the most effective way of dealing with the issue and that the bilateral nature of the exemptions process precludes other stakeholders from providing input to the process.

3.10 Cable & Wireless were concerned with the breadth of products affected and believed that Ofcom's decision to consult was slightly contradictory to its assertion that the

¹⁵ http://www.ofcom.org.uk/consult/condocs/telecoms_p2/

exemptions are not material. One other respondent also felt that the exemptions, if agreed by Ofcom, would constitute a material change to the Undertakings.

- 3.11 Cable & Wireless also raised a general point about a number of exemptions relating to the movement of engineering staff across divisional boundaries and was concerned that this might have a detrimental effect on the service provided to CPs.

Ofcom's response

- 3.12 Ofcom is also concerned about the duration of the process and the uncertainty this creates for stakeholders. As such Ofcom has sought to agree with BT the details of each request as quickly as possible and to provide stakeholders with as much detail as possible throughout the process, for example indicating the outstanding requests in its Exemptions Part 1 Statement. Ofcom has also sought to ensure that the dates offered by BT are the earliest possible dates and in some respects the fact that some of the dates are in the near future is because Ofcom has encouraged BT to commit to these early dates. As such, Ofcom views the proximity of the dates as a positive outcome of the process. Ofcom reserves the right not to agree to a request but, as stated in paragraph 3.4 above, considers each request within the context of a number of criteria. Also, we balance the potential outcome from the refusal of a request with the potential outcome from reaching an agreement with BT on the scope of any exemption. In the majority of cases this has favoured an appropriate agreement rather than a refusal of the request.
- 3.13 As stated above, throughout the process Ofcom has sought to provide stakeholders with as much information as possible, and has encouraged BT to engage with other stakeholders on the substance of the requests. However, the nature of the process means that it is BT who decides to request agreement from Ofcom to any exemption which it believes it needs. Since receiving the requests from BT, Ofcom and BT have been discussing the substance of the requests and modifying the requests in line with those discussions. Ofcom has taken the view that it would only consult with other stakeholders, either formally or informally, once it was satisfied that the substance of the requests is something to which Ofcom would be potentially minded to agree. Ofcom recognises that other stakeholders may well wish to comment on the more complex issues and therefore decided that in the case of the current batch of requests it would seek such comment as part of the process of deciding whether or not to agree to them.
- 3.14 It was not possible during the process of developing the Undertakings to consider each product within BT's portfolio and it was anticipated that a large number of unidentified products might be affected. As such Ofcom does not believe the breadth of products covered by the requests is surprising. As stated in paragraph 2.17 Ofcom does not consider that the exemptions and agreements contained herein would alter the Undertakings in a material respect as they concern the operation of mechanisms envisaged when the Undertakings were offered by BT and accepted by Ofcom. Ofcom is not, therefore, obliged to consult on them. However, in the case of the complex issues embodied in this batch of requests Ofcom felt that it would be helpful to seek comment from other stakeholders. The result of this consultation has refined some of the requests but not to the extent where any request materially changes the Undertakings. Ofcom does not believe that its desire to consult on the requests indicates that it believes the requests, if agreed, would materially change the Undertakings. Rather it indicates a desire to understand stakeholders' views before deciding whether or not to agree.

- 3.15 With respect to Cable & Wireless' point on the movement of engineering staff across divisional boundaries, this point is addressed in the relevant exemptions below.

Legacy products considered under Sections 5.46.1 and 5.46.2

- 3.16 These requests cover legacy products and services which currently consume inputs from Openreach on a non-EOI basis.

Request No. 1: ISDN and Highway conversion process

Overview

- 3.17 Currently an automated process is used when a customer on either ISDN or Highway requests to migrate to broadband supplied by BT (i.e. IPstream or Datastream). However, if the customer wishes to migrate to broadband supplied by a LLU operator then a different, inferior, cease-and-provide process is used. The process is therefore not EOI compliant.
- 3.18 In its request BT's proposal was that as of 1 April 2007 an EOI process should be used. An Installed Base Migration Complete (IBMC) date is not relevant as this is a conversion process which will be used only when a line is converted upon customer request (i.e. not a migration of the installed base). Ofcom proposed to agree to the exemption request as drafted as it believed there is demand from other Communications Providers (CPs) for such a process and the Ready For Service (RFS) date is the earliest that could reasonably be expected given the time it takes to develop such a process.
- 3.19 Ofcom asked respondents the question:

Question 1: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of the ISDN and Highway conversion process? If you do not please explain why.*

Responses to the consultation

- 3.20 BSkyB expressed disappointment that this issue had not yet been resolved.
- 3.21 Mr N Clews was concerned that this request indicated an intent to withdraw ISDN and noted that broadband was not a suitable alternative in his application.
- 3.22 Cable & Wireless felt that BT's request did not accurately reflect industry interest in such a conversion process, noting that it had been requesting one for some 18 months. It felt that the process is a prerequisite for granting the exemption and that it should be for conversion of ISDN access to either of Shared Metallic Path Facility (SMPF) or Metallic Path Facility (MPF).
- 3.23 BT and THUS agreed with the proposal.

Ofcom's response

- 3.24 Ofcom has discussed in paragraph 3.12 above its concerns with respect to the duration of the exemptions process. In response to the point raised by Mr N Clews Ofcom notes that the request from BT concerns conversions at the customer's request and specifically does not include an IBMC date. BT states in its request that Residential ISDN2 and Highway services were withdrawn from new supply in

September 2005 but does not discuss the termination of existing services. Agreement to this request is independent of any decision BT might take in respect of whether or not to terminate its ISDN/Highway products and will not require BT to terminate these products.

- 3.25 Ofcom notes Cable & Wireless' comment with respect to industry interest in a conversion process. However, BT has confirmed to Ofcom that industry requests have been in respect of a conversion process to MPF, as opposed to SMPF. The scope of the request from BT covers conversion from ISDN/Highway to SMPF only; as stated in Section 1 of the request:

“This request concerns the conversion process to enable an end-user to go from ISDN or Highway to PSTN/ WLR and BT IPstream/BT Datastream.”

- 3.26 As such, whilst Ofcom recognises Cable & Wireless' desire for a conversion process to MPF, it does not believe that such a process is within the scope of the request from BT and that such requests should be pursued through the standard product development routes. Should BT decide to implement a process for conversion of an ISDN/Highway customer to a product which is based on MPF then Ofcom expects that this process will be made available by BT on an EOI basis.
- 3.27 Ofcom has decided to agree to this request from BT as it believes there is demand from other CPs for such a process and the RFS date is the earliest that could reasonably be expected given the time it takes to develop such a process. The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 2: MegaStream Ethernet

Overview

- 3.28 There are currently two versions of MegaStream Ethernet: one which is supplied on an EOI basis (using equipment supplied by ADVA¹⁶) and a longer range version for which there is no EOI product available (using BT's ASDH2 technology). Within the current installed base of MegaStream Ethernet the ADVA circuits outnumber the ASDH2 circuits by approximately 8 to 1, of these less than 3% of ASDH2 deployment is in situations where there is a need for a longer reach product. BT stopped new supply of MegaStream Ethernet based on ASDH2 from 30 September 2006.
- 3.29 In its request BT's proposal was not to develop an EOI version of the ASDH2 product as this will be replaced by an EOI product based on 21CN. BT proposed an RFS date of 1 October 2006 and IBMC date of 1 July 2010 for the installed base and orders pending on 30 September 2006 in respect of these products. Migration of each circuit would take place within 6 months of the relevant exchanges having been converted to 21CN, subject to customer agreement. After the RFS date all new supply would use EOI products.
- 3.30 Ofcom proposed to agree to the exemption request as drafted since in Ofcom's opinion the installed base is small relative to the installed base that uses the EOI product. Furthermore, the proportion of circuits supplied using ASDH2 is expected to continue to decrease given that new supply will use the EOI product. Future long

¹⁶ <http://www.advaoptical.com/>

range ethernet products will be supplied on an EOI basis. Ofcom therefore believed the competitive impact of this exemption to be minimal. Ofcom further believed that the customer disruption that would be caused by a migration to an interim EOI product prior to a further migration to the 21CN EOI product would not be proportionate relative to the small potential impact on competition and preferred to see Openreach's resources concentrated on the earliest possible introduction of the 21CN EOI product.

3.31 Ofcom asked respondents the question:

Question 2: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of MegaStream Ethernet? If you do not please explain why.*

Responses to the consultation

3.32 Cable & Wireless was concerned that the implication of BT's request is that the EOI product replacing the ASDH2 product would only be available on BT's 21CN and therefore it would only be possible to compete with it in areas where 21CN has been rolled-out. It felt that it was necessary to know how the existing ASDH2 circuits would be replaced by 21CN circuits over time to fully understand the impact. Cable & Wireless also requests to know exactly which WES variants BT will use as inputs into the successor product.

3.33 THUS did not believe Ofcom should agree to this request and was concerned with BT's proposal noting that the availability to BT of the ASDH2 variant is important in offering complete network solutions to end customers. THUS noted that BT has not, as yet, discussed a longer range variant to replace ASDH2 at the relevant customer forum. It wished to see BT withdraw the ASDH2 variant from new supply pending the development of an EOI replacement but allowing existing customers to be supported until migration is complete.

3.34 BT agreed with the proposal.

Ofcom's response

3.35 Ofcom acknowledges that BT's proposal is linked to the roll-out of its 21CN but notes that the duration of the exemption has an absolute end date of 30 June 2010. Ofcom also believes that the withdrawal of the ASDH2 from new supply as of 30 September 2006 effectively limits the impact to those circuits in service as of that date which are being used to support circuits which could not be supported on the current EOI WES product, due to the longer distance requirement. BT has supplied data to Ofcom which indicates that as of the RFS date of 30 September 2006 a total of only eight (8) circuits use ASDH2 as a result of the longer reach requirement. From the RFS date all new supply uses the EOI products. Ofcom does not believe therefore that this tiny installed base is materially detrimental to competition. Finally, Ofcom does not believe that the exemption request is the right document to provide technical product details and this should be communicated to industry through the usual Openreach product development channels.

3.36 Ofcom has decided to agree to this request from BT since in Ofcom's opinion the installed base – eight circuits – is small relative to the installed base that uses the EOI product. Furthermore, the proportion of circuits supplied using ASDH2 is expected to continue to decrease given that all new supply as of the RFS date (i.e. 30 September 2006) uses the EOI product. Future long range ethernet products will be supplied on an EOI basis. Ofcom therefore believes the competitive impact of this

exemption to be minimal. Ofcom further believes that the customer disruption that would be caused by a migration to an interim EOI product prior to a further migration to the 21CN EOI product would not be proportionate relative to the small potential impact on competition and prefers to see Openreach's resources concentrated on the earliest possible introduction of the 21CN EOI product.

- 3.37 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 3: Featureline

- 3.38 In Exemptions Part 1, Featureline and Featurenet were combined. However, in the Exemptions Part 2 Consultation BT and Ofcom agreed to split them as they each address different issues.
- 3.39 Featureline is used to provide PBX-like services to small sites and is hosted on a BT PSTN switch. In its request BT proposed a RFS date of 1 April 2008¹⁷ and an IBMC date of 1 July 2010¹⁸. Featureline will consume the WLR3 product. The reason cited by BT for the deviation in RFS and IBMC dates compared to other retail products that consume WLR is the need to undertake systems development specific to Featureline and to ensure that all the relevant systems pieces are in place prior to the migration. This involves systems beyond those within Openreach supporting the WLR3 product.
- 3.40 Ofcom proposed to agree to the exemption request as drafted as it believed that as Internet Protocol (IP) based services continue to be deployed over the WLR timeframe the competitive significance of Featureline will decline. Ofcom did not believe there is significant interest from other CPs in early availability of Featureline EOI products. Ofcom further believed that aligning Featureline with the Annex 1 dates for WLR would result in a significant adverse impact on the deployment of other WLR based products by diverting resources away from those WLR features important for competition into those related to Featureline with relatively less positive competitive impact.
- 3.41 Ofcom asked respondents the question:

Question 3: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of Featureline? If you do not please explain why.*

Responses to the consultation

- 3.42 Cable & Wireless agreed that Featureline inputs should not be offered externally ahead of consumption of WLR3, however, it wished to see BT commit to developing effective migration processes for migrating Featureline customers to alternative services provided by other CPs.
- 3.43 BT and THUS agreed with the proposal.

¹⁷ In Annex 1 of the Undertakings WLR RFS dates of 30 June 2007 for analogue, 30 September 2007 for ISDN2 and 31 December 2007 for ISDN30 are specified.

¹⁸ In Annex 1 of the Undertakings the phasing of migration is specified as follows: 30% of analogue WLR lines to be migrated by 30 June 2008, 70% by 30 June 2009 and 100% by 30 June 2010; IBMC for ISDN2 as 31 March 2009 and IBMC for ISDN30 as 31 December 2009.

Ofcom's response

- 3.44 Ofcom recognises the lack of effective migration processes as a potential barrier to competition and believes that a commitment from BT to a review of this area would be a welcome addition to its request. Ofcom therefore welcomes the commitment given by BT in its letter to Ofcom (the text of which is reproduced in Annex 2) to work with other CPs on such a review.
- 3.45 Ofcom has decided to agree to this request from BT as it believes that as IP based services continue to be deployed over the WLR timeframe the competitive significance of Featureline will decline. Ofcom does not believe there is significant interest from other CPs in early availability of Featureline EOI products. Ofcom further believes that aligning Featureline with the Annex 1 dates for WLR would result in a significant adverse impact on the deployment of other WLR based products by diverting resources away from those WLR features important for competition into those related to Featureline with relatively less positive competitive impact.
- 3.46 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 4: Featurenet

- 3.47 In Exemptions Part 1, Featurenet and Featureline were combined. However, in the Exemptions Part 2 Consultation BT and Ofcom agreed to split them as they each address different issues. Featurenet is similar to Featureline in that it is used to provide PBX-like services hosted on a BT PSTN switch, but is a more complex product aimed at multi-site installations and typically comprises several thousand lines spread over multiple sites. This complexity gives rise to particular problems with respect to migration to competing products.
- 3.48 BT's request covered both the manner in which lines are tested and the physical delivery of those lines by Openreach. In its request BT proposed that Openreach would develop a bulk lines EOI product with a RFS date of 1 July 2008 and an IBMC date of 1 July 2010 by which time BT expected Featurenet to have been replaced by a 21CN variant consuming EOI products from Openreach. BT also included in its request a commitment to work with other CPs on identifying any changes which can be made to ease migration between suppliers. This review was to begin in autumn 2006 and BT would implement achievable improvements earlier than the EOI dates wherever possible.
- 3.49 In the Exemptions Part 2 Consultation Ofcom stated its belief that the major barrier to competition in this area is the lack of effective migration processes and welcomed BT's commitment to a review of the problems faced by CPs in migrating customers from Featurenet to their own products. It was Ofcom's view that the migrations review must involve the range of interested parties from within the industry and must look at all the issues which currently present significant obstacles to migration, e.g. project management of multi-site migration and multi-site dial plans, to ensure the deployment by BT of effective migration processes.
- 3.50 Ofcom proposed to agree to the exemption request as drafted as whilst it believed the development of a bulk lines EOI product would provide an EOI product which other CPs could use to develop competitive products it was not aware of significant demand from CPs for such a product. Therefore, Ofcom stated that it would prefer to see Openreach resources concentrated in other areas where there are currently

significant competition concerns and believed the RFS date for the bulk line facility was reasonable. Ofcom further believed that the IBMC date was reasonable to avoid undue customer disruption given the eventual migration to EOI products when available on 21CN.

3.51 Ofcom asked respondents the question:

Question 4: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of Featurenet? If you do not please explain why.*

Responses to the consultation

3.52 Cable & Wireless agreed with Ofcom's proposal but felt that agreement to BT's request should be conditional on BT's commitment to review the migration process. It also felt that it was slightly misleading to offer the review with "the underlying expectation" that delivery of improvements may have to wait until delivery of EOI.

3.53 BT and THUS agreed with the proposal.

Ofcom's response

3.54 Ofcom believes that BT's request as drafted provides a commitment to a review of the migrations process, but welcomes BT's reiteration of that commitment in its letter to Ofcom (the text of which is reproduced in Annex 2). Ofcom further believes that it is not unreasonable of BT to deliver identified improvements which are contingent on the new EOI products from Openreach in line with the RFS dates for those products. An earlier delivery would necessitate an earlier RFS date. BT does state that where it is able to deliver improvements not contingent upon EOI products earlier it will. Ofcom does not believe it unreasonable for BT to reserve its position on such delivery until it has had an opportunity to identify what the delivery of such improvements entails.

3.55 Ofcom has decided to agree to this request from BT as whilst it believes the development of a bulk lines EOI product would provide an EOI product which other CPs could use to develop competitive products it is not aware of significant demand from CPs for such a product. Therefore, Ofcom prefers to see Openreach resources concentrated in other areas where there are currently significant competition concerns and believes the RFS date for the bulk line facility is reasonable. Ofcom further believes that the IBMC date is reasonable to avoid undue customer disruption given the eventual migration to EOI products when available on 21CN.

3.56 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 5: Openreach engineering services

3.57 Currently engineering services are supplied by Openreach to BT's downstream divisions in support of contracts for the management of privately owned network facilities. Openreach is considering offering these services on an EOI basis but in the interim BT requested an exemption related to existing contracts until they expire or are terminated. BT also requested an exemption until 1 January 2008 in respect of services supplied downstream but also supplied externally to allow the downstream services to be migrated on to an EOI basis.

3.58 Ofcom proposed to agree to the exemption request as drafted as it believed that BT should be allowed to honour existing contracts in order to minimise disruption to existing customers, but that any new contracts (from the date the agreement takes effect) should be based on services supplied on an EOI basis in accordance with BT's Undertakings.

3.59 Ofcom asked respondents the question:

Question 5: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of Openreach engineering services? If you do not please explain why.*

Responses to the consultation

3.60 BSkyB was concerned that the 31 December 2007 date quoted in BT's request should be the date by which these services are made available to all and not just existing CP customers.

3.61 Cable & Wireless was concerned that the support of these engineering services is not detrimental to the service level offered to other CPs. It also wished to see the list of services that will be provided to Ofcom.

3.62 THUS was concerned that the contracts referred to in the request may have the option of extension of the contract without expiration or termination, thereby allowing the contracts to continue to be serviced on a non-EOI basis beyond their anticipated end dates. It wished to see a backstop date such as 31 December 2007 included in the agreements wording.

3.63 BT agreed with the proposal.

Ofcom's response

3.64 It is Ofcom's view that the request from BT makes it clear that the 31 December 2007 date is in respect of services currently supplied to BTGS and BT Retail on a non-EOI basis, equivalents of which are currently supplied to other CPs on an EOI basis. The 31 December 2007 date is the date by which these services will be consumed by BTGS and BT Retail on an EOI basis and that these services are already available on an EOI basis. As such Ofcom believes that the request already provides for BSkyB's concern.

3.65 Ofcom is aware that the service performance of Openreach is a key concern to its CP customers and BT has provided Ofcom with data on the amount of Openreach resource consumed by this activity. The number of Openreach engineers involved in supporting this activity represents a very small (a low single digit) percentage of the relevant Openreach engineering work force (i.e. the work force employed to undertake these kinds of activities). It is Ofcom's view that this resource requirement is sufficiently small that it is unlikely to place an undue additional burden on Openreach and to result in a material decline in service performance. Ofcom further recognises that publication of the list of services will increase transparency and encourages BT to make this list available to its CP customers, upon request, at the same time it makes it available to Ofcom.

3.66 Ofcom is also concerned about the potential for contracts to be extended in perpetuity without ever triggering the need for them to be moved to EOI products, as raised by THUS. However, Ofcom believes that a single backstop date for all

contracts would not be appropriate and, as stated in the Exemptions Part 2 Consultation, that BT should be allowed to honour existing contracts. Ofcom and BT have, therefore, revised the agreements wording that was published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request to make it clear that no contract will be extended on a non-EOI basis beyond the anticipated expiry dates provided in confidence to Ofcom as part of the original request. This is reiterated in BT's letter to Ofcom (the text of which is reproduced in Annex 2).

- 3.67 Ofcom has decided to agree to this request from BT as it believes that BT should be allowed to honour existing contracts in order to minimise disruption to existing customers, but that any new contracts should be based on services supplied on an EOI basis in accordance with BT's Undertakings. The agreements wording in Annex 3 has been revised over that published in Annex 6 of the Exemptions Part 2 Consultation to exclude the possibility that a contract can continue to be fulfilled on a non-EOI basis, beyond the expiry date indicated by BT to Ofcom, by virtue of an extension as opposed to expiry or termination.

Services supplied by Openreach to BT's downstream division(s), or vice versa, on a non-EOI basis

- 3.68 These requests broadly cover issues related to the location of a number of groups and functions within BT whose activity spans both Openreach and BT's downstream business activities.
- 3.69 Section 5.12 of the Undertakings states that Openreach shall control and operate the Physical Layer assets of BT's Access and Backhaul Networks. Section 5.13 states that Openreach shall not control and operate the Transmission Layer assets of BT's Access and Backhaul Networks. In practice Transmission Layer assets are controlled and operated by BT Wholesale. Section 5.39 states, subject to certain specified exceptions, that no employee of Openreach shall disclose Customer Confidential Information to Upstream or Downstream divisions of BT. Section 6.10 states, subject to certain specified exceptions, that no employee of BT Wholesale shall disclose Customer Confidential Information to Openreach or Downstream divisions of BT.
- 3.70 Three of the following requests (6 to 8) relate to teams whose activities span this boundary and/or who are party to Customer Confidential Information belonging to the other division. Where Ofcom decides that the most efficient solution, with respect to its criteria, is to agree to an exemption in respect of this either temporarily or permanently it has as a general principle adopted the view that if an individual is required to operate on assets belonging to both Openreach and a downstream division, or is required to access Confidential Information belonging to a division other than the one for whom they work, then it is better that the function is located in the upstream division rather than the downstream one. This ensures that individuals do not operate on products provided to, or have access to Customer Confidential Information of, their competitors.

Request No. 6: Engineering services in support of BT Global Services in particular geographical areas

- 3.71 In certain remote locations in the UK (i.e. the Scottish Islands and the Scilly Isles which together contain approximately 0.1% of the UK population) BT field staff have historically, for reasons of operational efficiency, generally operated across divisional boundaries. BT requested an exemption up to and including 31 March 2008 in respect of Openreach engineers supporting assets belonging to BT Global

Services¹⁹. After this date BT Global Services would take over responsibility for supporting its own assets with its own field engineers.

3.72 Ofcom has already granted, in Exemptions Part 1, an exemption in respect of Openreach engineers operating on BT Retail payphones in the Scottish Highlands, Scottish Islands and the Scilly Isles up to and including five years from the date of the statement. However, Ofcom believed there to be greater competition in the markets in which BT Global Services operates and believed that BT Global Services should assume responsibility for engineering services in relation to its own products and services at the earliest possible date. Given the time required for BT Global Services to build this capability in these remote locations Ofcom believed the proposed date to be the earliest practical date and, therefore, proposed to agree to this exemption request as drafted.

3.73 Ofcom asked respondents the question:

Question 6: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of engineering services in support of BT Global Services in particular geographical areas? If you do not please explain why.*

Responses to the consultation

3.74 BSKyB questioned whether 31 March 2008 really is the earliest that this issue can be resolved. It also considered that Openreach engineering resource should be made available on an EOI basis in these areas.

3.75 Cable & Wireless was concerned that the support of these engineering services is not detrimental to the service level offered to other CPs.

3.76 THUS felt that agreement with this request is undesirable believing that engineering assistance from Openreach confers a competitive advantage on BTGS in "tenders where speed of rollout is a selection criterion". If Ofcom does agree to the request then it felt that there should be no possibility of extension beyond 31 March 2008.

3.77 BT agreed with the proposal.

Ofcom's response

3.78 Ofcom acknowledges the concern of both BSKyB and THUS over the duration of the exemption, however, Ofcom believes that this is not unreasonable given the difficulties of creating a field engineering resource in these remote areas without causing a significant impact to the service provided to end customers. Ofcom fully expects BTGS to have completed its migration away from reliance on Openreach field engineering in these areas by 31 March 2008 and does not expect there to be a request from BT to extend this exemption.

3.79 Upon expiry of this agreement, if Openreach continues to make available these engineering resources to any other part of BT then in accordance with section 5.46.1 of the Undertakings it must do so on an EOI basis unless otherwise agreed with Ofcom.

¹⁹ There is an existing temporary exemption as part of the exchange of letters between Ofcom and BT in respect of Openreach engineers supporting BT Global Services in the Scottish Highlands up to and including 22 December 2006.

- 3.80 Ofcom is aware that the service performance of Openreach is a key concern to its CP customers and BT has provided Ofcom with data on the amount of Openreach resource consumed by this activity. The number of Openreach engineers involved in supporting this activity represents a very small (a low single digit) percentage of the relevant Openreach engineering work force (i.e. the work force employed to undertake these kinds of activities). It is Ofcom's view that this resource requirement is sufficiently small that it is unlikely to place an undue additional burden on Openreach and result in a material decline in service performance.
- 3.81 Ofcom has decided to agree to this request from BT as given the time required for BT Global Services to build this capability in these remote locations Ofcom believes the proposed date to be the earliest practical date.
- 3.82 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 7: Private Circuits

- 3.83 A Private Circuit, including a Partial Private Circuit (PPC), is not required to be supplied on an EOI basis and is supplied by BT Wholesale. Whenever a Private Circuit is delivered or serviced at a customer site the work of an Openreach engineer will typically cover both Openreach assets and the NTE, which is an asset of BT Wholesale.
- 3.84 BT requested an exemption for a permanent period in respect of Private Circuits²⁰ to allow Openreach engineers to provision, repair, maintain and upgrade Private Circuit equipment belonging to BT Wholesale.
- 3.85 Ofcom believed that there are essentially three ways in which the provisioning, repair, maintenance and upgrade of Private Circuit equipment belonging to BT Wholesale could be accomplished:
- use two separate teams – one in Openreach working on Openreach assets and one in BT Wholesale working on BT Wholesale assets;
 - use a single team located in BT Wholesale; or
 - use a single team located in Openreach.
- 3.86 Within the narrow scope of what these teams do, Ofcom believed that the first of these would lead to operational inefficiency, and increased cost and disruption for customers. It was Ofcom's view, therefore, that a single team should be used. If the team were located in BT Wholesale then this would contravene the principle highlighted above in 3.70 and Ofcom's preferred option was therefore for a single team, located in Openreach.
- 3.87 Ofcom proposed to agree to the exemption request as drafted as it believed that this is in the interest of consumers and has no material impact on competition given that the same services will be supplied as inputs into both retail Private Circuits and wholesale Partial Private Circuits. Ofcom believed that the issues underlying this

²⁰ The term "Private Circuit" is not defined in the Undertakings but a definition, based on that for a PPC in the Undertakings, is included in the proposed exemptions and agreements wording in Annex 6.

request are unique to the situation where an upstream product is supplied on a non-EOI basis.

3.88 Ofcom asked respondents the question:

Question 7: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of Private Circuits? If you do not please explain why.*

Responses to the consultation

3.89 BSKyB did not agree that Ofcom should agree to this request from BT, stating:

“Retail private circuits remain an area where competition is not fully established. This was confirmed in Ofcom’s review of the impact of the Telecoms Review, where Ofcom stated: *‘for fibre based products (typically leased lines used for business applications)... progress [towards effective and sustainable competition] has been relatively slow.’*²¹ As a result, we consider that it is not appropriate to allow exemptions in the area of leased lines.”

3.90 It felt that agreement with this exemption would allow BT Wholesale to pool engineering resource with Openreach which it considered a benefit not available to other CPs. BSKyB further considered that an additional 150-200 engineers “does not seem particularly excessive”.

3.91 Cable & Wireless was concerned that as drafted the exemption “could potentially include any product to which PPC is an input” and felt that the request and the agreements wording needed to be more carefully worded. It also wished to know whether there was a deliberate omission of CWSS²² from the request. Cable & Wireless were also concerned that the permanent nature of this exemption “presents the opportunity for BT to foreclose the way in which TILLAPs / TILLBPs could be developed as component inputs to PPCs”.

3.92 THUS agreed with the proposal in respect of the 20CN product but expected that any 21CN PPC or emulated PPC-equivalent product would be launched on an EOI basis with suitable migration paths from the BT Wholesale PPC product.

3.93 BT agreed with the proposal.

Ofcom’s response

3.94 Ofcom does not believe that the slow progress towards effective and sustainable competition in fibre-based products is of itself a reason not to agree to this request. As it stated in the Exemptions Part 2 Consultation the reason Ofcom believes it appropriate to agree to this request is that, given PPCs are not EOI, it is in the interests of both CPs and consumers by providing a more efficient process for the provision, repair, maintenance and upgrade of Private Circuits including PPCs. Ofcom does not believe that agreement with this request will allow BT Wholesale to pool engineering resource with Openreach outside of the scope of the provision, repair, maintenance and upgrade of Private Circuits including PPCs and – since the

²¹ Paragraph 1.22, *Evaluating the impact of the Telecoms Review, An interim report one year on*, Ofcom, 18 October 2006. [See: <http://www.ofcom.org.uk/telecoms/btundertakings/impact1006/>]

²² Copper Wideband Serving Section – a method of delivery of Private Circuits or PPCs over copper local loops.

benefits of this process are also available to CPs through the wholesale PPC products – does not, therefore, believe it construes an advantage on BT Wholesale not available to other CPs. As highlighted in the Exemptions Part 2 Consultation it is Ofcom's view that agreement with the request will allow the use of a more efficient process in the interest of consumers whereas requiring further engineering resource to be used to support the alternatives would both increase costs – to both CPs and consumers – and lead to the requirement for coordination between the visits of two engineers to complete the required work.

- 3.95 In respect of TILLAPs and TILLBPs Ofcom notes the comments of Cable & Wireless and THUS but also notes Section 5.6 of the Undertakings which states:

“When AS provides a TILLAP or a TILLBP, those products shall be made available to other Communication Providers in a manner that provides them with the opportunity to replicate commercially, from the point of view of their use of the TILLAP and/or TILLBP, relevant Partial Private Circuits.”

- 3.96 Ofcom therefore believes that when the TILLAP and TILLBP products are made available they will not be at a commercial disadvantage to PPCs and Ofcom does not believe that the substance of this agreement will vary the operation of Section 5.6.
- 3.97 With respect to 21CN, Ofcom believes in relation to EOI that the Undertakings do not draw a distinction between PPCs provided over BT's 20CN infrastructure and its proposed 21CN infrastructure.
- 3.98 Ofcom cannot comment on the inclusion or otherwise of products in BT's requests as the exemptions process requires BT to identify the exemptions it considers that it needs. However, Ofcom acknowledges that the text of the proposed agreements wording in Annex 6 of the Exemptions Part 2 Consultation was not sufficiently clear with respect to the scope of this agreement – in that the definition of Private Circuit did not explicitly include PPC – and BT and Ofcom have agreed a clearer wording which is reflected in the text in Annex 3 of this statement.
- 3.99 Ofcom has decided to agree to BT's request as it believes that this is in the interest of consumers and has no material impact on competition given that the same services will be supplied as inputs into both retail Private Circuits and wholesale PPCs. Ofcom believes that the issues underlying this request are unique to the situation where an upstream product is supplied on a non-EOI basis.

Request No. 8: 21CN network uplift programme

- 3.100 During BT's 21CN migration there is a large amount of non-standard work required in each exchange to ready it for 21CN. This includes work on both Openreach and BT Wholesale assets and includes a number of activities related to maintenance and preparation of the main distribution frame. Further details can be found in BT's request (see Annex 1). The nature of the work means that there will be some services supplied by Openreach to BT Wholesale which will only be used during the 21CN migration programme and which Openreach does not intend to offer to other CPs on an EOI basis.
- 3.101 BT requested an exemption covering the provision by Openreach to BT Wholesale of engineering services on a non-EOI basis under the 21CN uplift programme, and access by Openreach to BT Wholesale systems, and vice versa, in support of the

21CN uplift programme. The exemption expires six months after the last exchange is migrated to 21CN which will, in any case, be no later than 31 December 2011.

3.102 Ofcom proposed to agree to the exemption request as drafted as it believed this is a once-only programme of necessary engineering within each exchange. Ofcom did not, therefore, believe it is reasonable to require Openreach to provide these bespoke engineering services on an EOI basis. Ofcom further believed that due to their custom nature it may not be possible to use the same processes should another CP wish to undertake something similar and that, therefore, there would be little value in making these services available on an EOI basis. Ofcom did believe, however, that should another CP request something similar then Openreach should be willing to consider the development of suitable processes as has been done for BT Wholesale in respect of 21CN. Ofcom did not believe there will be any negative impact on competition from this exemption as it does not, Ofcom believed, confer any competitive advantage on BT relative to its competitors and believed that it is important to ensure a seamless migration to 21CN to minimise disruption to services provided to customers.

3.103 Ofcom asked respondents the question:

Question 8: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of the 21CN network uplift programme? If you do not please explain why.*

Responses to the consultation

3.104 BSKyB did not agree that Ofcom should agree to this request and considered that it should be possible to identify some common elements of the engineering services used in the 21CN uplift programme that would be of use to other CPs, for example in the case of consolidation. BSKyB felt that without such a product BT would have a material advantage over other CPs.

3.105 Cable & Wireless was concerned that resourcing the 21CN programme resulted in fewer resources being available to provide service to other CPs. In particular it felt that service has deteriorated since the establishment of Openreach and wanted to see all available resource being committed to improving service.

3.106 BT and THUS agreed with the proposal.

Ofcom's response

3.107 BT has given within its request a commitment to considering whether some of the services provided by Openreach to BT Wholesale in support of the 21CN uplift programme can be productised and offered externally on an EOI basis. Ofcom believes that BT should also give consideration to any requests from CPs for similar services, as Ofcom stated in the Exemptions Part 2 Consultation and in paragraph 3.102 above. Ofcom believes that this commitment addresses the points raised by BSKyB.

3.108 Ofcom is aware that the service performance of Openreach is a key concern to its customers and BT has provided Ofcom with data on the amount of Openreach resource consumed by this activity. The number of Openreach engineers involved in supporting this activity represents a very small – low single digit – percentage of the Openreach engineering work force. It is Ofcom's view that this resource requirement is sufficiently small that it is unlikely to place an undue additional burden on

Openreach and result in a material decline in service performance. Ofcom also believes that the 21CN uplift programme is an essential part of the 21CN programme and that 21CN is beneficial to both consumers and other CPs.

- 3.109 Ofcom has decided to agree to this request from BT as it believes this is a once-only programme of necessary engineering within each exchange. Ofcom does not, therefore, believe it is reasonable to require Openreach to provide these bespoke engineering services on an EOI basis. Ofcom further believes that due to their custom nature it may not be possible to use the same processes should another CP wish to undertake something similar and that, therefore, there would be little value in making these services available on an EOI basis. Ofcom does believe, however, that should another CP request something similar then Openreach should be willing to consider the development of suitable processes as has been done for BT Wholesale in respect of 21CN. Openreach has given a commitment in its request to do so (see section 4 of request no. 8 in Annex 1). Ofcom does not believe there will be any negative impact on competition from this exemption as it does not, Ofcom believes, confer any competitive advantage on BT relative to its competitors and believes that it is important to ensure a seamless migration to 21CN to minimise disruption to the voice service provided to customers.
- 3.110 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Request No. 9: LLU Associated Services in relation to BT's 20CN DSLAMs

- 3.111 This request combines two of the requests listed in Section 4 of Exemptions Part 1: HDFs in the 20CN and LLU associated services.
- 3.112 Currently BT Wholesale employs non-EOI processes and products in support of its 20CN DSLAM²³ installations in BT exchanges. Specifically, BT Wholesale does not use a HDF between its own DSLAM and the Openreach Main Distribution Frame (MDF), does not use the same tie cables to connect its DSLAM to the MDF and uses alternative configurations with respect to its broadband test equipment. With the advent of 21CN BT Wholesale will consume EOI products from Openreach.
- 3.113 In its exemption request BT proposed to use EOI tie cables and a HDF on certain new DSLAM installations from 1 July 2007. BT estimates that in excess of 95% of new DSLAM installations after 1 July 2007 will qualify as installations to be installed with an HDF. Already installed equipment as of that date, together with any extensions to existing equipment, would continue to be operated and maintained on a non-EOI basis until it is replaced by 21CN. BT further proposed that service layer testing on some of its 20CN DSLAM installations (those in which a Test Access Matrix (TAM) is not used and require the use of hand-held test equipment) would be conducted on a non-EOI basis by Openreach until the earlier of: it is replaced by 21CN; it is redesigned to avoid the need to touch the MDF; or, it is provided on an EOI basis should there be reasonable demand from other CPs.
- 3.114 Ofcom proposed to agree to the exemption request as drafted as it believed requiring BT Wholesale to install HDFs, tie cables and TAMs (if appropriate) for those DSLAMs already installed as of the EOI date would be disproportionate since it would involve considerable expense which would cause considerable customer

²³ A DSLAM (Digital Subscriber Line Access Multiplexer) is used to support DSL (i.e. Broadband) services.

disruption and would unnecessarily raise prices to consumers given that it would only be for an interim period prior to 21CN deployment. The use of HDFs and tie cables on an EOI basis from 1 July 2007 whilst not negating the cost and quality advantage BT Wholesale enjoys on its existing installations would ensure that it is capped to those existing installations and that for new installations BT Wholesale will deploy DSLAMs using the same products and processes in respect of tie cables and HDFs as are used by other CPs, thereby minimising adverse competitive impact prior to the full adoption of EOI with 21CN. In respect of service layer testing Ofcom believed that as BT Wholesale will move to EOI products with the deployment of 21CN the development of an EOI service layer testing process would be disproportionate in the absence of reasonable demand from other CPs.

3.115 Ofcom asked respondents the question:

Question 9: *Do you agree that Ofcom should agree to this request from BT for an exemption in respect of LLU Associated Services in relation to BT's 20CN DSLAMs? If you do not please explain why.*

Responses to the consultation

- 3.116 Cable & Wireless were concerned that BT Wholesale will continue to have an advantage in respect of those installations where it will not have a HDF after the proposed 30 June 2007 date. Another respondent echoed these concerns stating that compensation should be paid to LLUOs in respect of the cost advantage BT Wholesale enjoys in respect of HDFs. It also questioned the time BT has stated it will take to develop the EOI process.
- 3.117 Cable & Wireless went on to express concern over the fact that BT Wholesale does not consume the same co-mingling product as LLUOs and it believed that this provides BT Wholesale with a commercial advantage. Cable & Wireless wished to see compensation provided to the LLUOs in respect of this suspected commercial advantage. It was also concerned that BT Wholesale is able to use its space for whatever purpose it chooses whilst other CPs must purchase NetLocate in order to deploy other equipment. It therefore wished to see CPs able to use existing co-mingling space for non-LLU activities.
- 3.118 Cable & Wireless was also concerned that the request had a broad coverage and wished to see the agreement agreed within the scope of the text of Annex 6.
- 3.119 BT, THUS and B SkyB agreed with the proposal, however, B SkyB wished the EOI date to be the date by which BT removes all HDFs rather than the date by which BT Wholesale starts using them.

Ofcom's response

- 3.120 Whilst Ofcom acknowledges that the lack of a HDF confers a commercial and quality advantage, as Ofcom did in its Exemptions Part 2 Consultation, Ofcom continues to believe that retrospective fitting of HDFs would be disproportionate. Ofcom further believes that it would be inappropriate to request BT to provide compensation to LLUOs which use a HDF as this is the existing commercial framework. As such, discussion of compensation within the context of this request is, in Ofcom's opinion, out of scope.
- 3.121 The Undertakings do not require BT Wholesale to purchase the co-mingling product in support of its own DSLAM installations as BT Wholesale self-provides a

substantial number of the co-mingling product features. Ofcom notes that section 5.46.1(b) of the Undertakings specifically excludes from EOI any Associated Services (as defined in the Undertakings) to the extent they are supplied by Openreach. The exemption request from BT is in respect of those products which BT Wholesale does not self-provide and which it instead receives from Openreach, currently, on a non-EOI basis. As such, Ofcom regards the broader points raised by Cable & Wireless in respect of co-mingling and NetLocate as out of scope with respect to this request.

- 3.122 However, Ofcom does agree that the commercial and quality advantage should be minimised as far as possible and requested BT to determine if it would be possible to commit to an earlier date and, if not, to fully explain why this is not possible. BT has provided a detailed view of the timeline associated with the adoption of the EOI products in its letter to Ofcom (the text of which is reproduced in Annex 2). In Ofcom's opinion this information supports BT's view that the proposed date is the earliest practical date for adoption of the EOI products.
- 3.123 Ofcom notes Cable & Wireless' concerns over the request wording but wishes to point out that the agreements wording in Annex 3 of this document forms the legal agreement between Ofcom and BT and not the text of the requests themselves (reproduced for convenience in Annex 1 of this document).
- 3.124 Ofcom has decided to agree to this request from BT as it believes requiring BT Wholesale to install HDFs, tie cables and TAMs (if appropriate) for those DSLAMs already installed as of the EOI date would be disproportionate since it would involve considerable expense which would cause considerable customer disruption and would unnecessarily raise prices to consumers given that it would only be for an interim period prior to 21CN deployment. The use of HDFs and tie cables on an EOI basis from 1 July 2007 whilst not negating the cost and quality advantage BT Wholesale enjoys on its existing installations would ensure that it is capped to those existing installations and that for new installations BT Wholesale will deploy DSLAMs using the same products and processes in respect of tie cables and HDFs as are used by other CPs, thereby minimising adverse competitive impact prior to the full adoption of EOI with 21CN. In respect of service layer testing Ofcom believes that as BT Wholesale will move to EOI products with the deployment of 21CN the development of an EOI service layer testing process would be disproportionate in the absence of reasonable demand from other CPs.
- 3.125 The text of the proposed agreements wording published in Annex 6 of the Exemptions Part 2 Consultation in respect of this request has been incorporated into the agreements wording reproduced in Annex 3 of this statement.

Downstream products which require a fibre-based input from Openreach and for which BT is proposing an intermediate EOI product

- 3.126 BT requested four separate exemptions related to certain products it currently supplies which are fibre-based. These were in respect of Redcare CCTV, Media & Broadcast services, managed radio communications services and Wavestream. All of these products have one feature in common: they are all essentially analogue services (even though the analogue signal might itself be modulated with a digital one). Because of this they each rely on direct access to fibre and cannot in their current form consume any of the digital services provided by Openreach such as WES. Openreach currently provides fibre as an upstream input into these products and does so on a non-EOI basis.

- 3.127 Ofcom stated in the Exemptions Part 2 Consultation that it recognises that the most obvious upstream input into these services might appear to be 'dark' fibre. However, Ofcom continues to believe that the availability of dark fibre on an EOI basis as a tactical response to the issues outlined here has the potential to undermine investment in infrastructure across a range of wholesale and retail services beyond the ones identified in these requests. This is possible because the scale and ubiquity of Openreach's network is greater than any competitor CP's network and it is highly likely therefore that it in the majority of cases it would be more economic for a CP to lease fibre from Openreach than to use existing or build their own access and core infrastructure. Additionally, those CPs who have not built their own network could rapidly establish one using Openreach fibre undermining the investment of those CPs who have invested significant amounts over a number of years in their own networks. Ofcom further believes that with the availability of dark fibre from Openreach there would be little incentive to purchase any of the other Openreach fibre based connectivity products. For these reasons Ofcom remains of the view that under the current circumstances it is not appropriate for Openreach to provide dark fibre on an EOI basis as an upstream input into these products.
- 3.128 Ofcom therefore sought, with BT, to determine if it is possible to migrate these fibre-based products to products which can consume an intermediate EOI product from Openreach which is downstream of dark fibre. BT believed this is possible and this was reflected in its exemption requests. However, for some of these products the migration to intermediate digital products (such as WES) necessarily requires some reduction in functionality and Ofcom was concerned whether the resulting, more limited, products would continue to address the requirements of customers.
- 3.129 Whilst accepting that the solutions proposed by BT had undergone rigorous analysis, Ofcom decided to maintain a neutral position with respect to these requests in its Exemptions Part 2 Consultation. Ofcom actively sought comment from stakeholders not only on the requests themselves but also on the proposed EOI products to inform its view.
- 3.130 The responses received to the Exemptions Part 2 Consultation indicated two main themes:
- i) that there was some doubt amongst consumers of the retail products that the wholesale products proposed by BT could be used as inputs into retail products that meet their requirements; and
 - ii) that the issues around Wavestream in respect of the relevant EOI products, end-user restrictions, replicability at the retail level using wholesale inputs and impact on competition are complex and require more in-depth analysis.
- 3.131 Given the responses Ofcom received – and the need for the results from Openreach's current ethernet portfolio review²⁴ to feed into the analysis – it has decided that it requires more time to consider the issues identified. Ofcom is of the view that there are modifications which could be made to BT's requests to address the remaining substantive issues which would result in an agreement which Ofcom could agree. Ofcom has therefore decided that it is appropriate to extend, through a variation to the Undertakings, the existing temporary exemption in respect of the four

²⁴ http://www.openreach.co.uk/orpg/downloads/pdf/Briefing_WESBES014.pdf

fibre exemptions up to 31 March 2007 to allow these issues to be explored and resolved with BT²⁵.

- 3.132 Ofcom recognises that a further extension prolongs the period until an EOI compliant solution is found and applied and the uncertainty for stakeholders, but believes that a further extension to allow time to explore these issues and implement solutions is in the interests of both CPs and consumers as the refusal of the requests is the least favourable option due to the potential disruption to consumers of these services. Ofcom intends to publish a statement in respect of these requests as soon as it has agreed mutually satisfactory wording between it and BT; it will not necessarily wait for all four requests to be agreed before doing so as it recognises the need to provide stakeholders with an expedient resolution to these requests.

²⁵ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/variation6.pdf>

Annex 1

BT's exemption, variation and agreements requests

(Note: these are as published in the Exemptions Part 2 Consultation and have not been revised but are included here for reference.)

Request number: 1

Product: ISDN and Highway conversion process

Legal basis: 5.46.2a)

1. Product description and reasons for request

This request concerns the conversion process to enable an end-user to go from ISDN or Highway to PSTN/ WLR and BT IPstream/BT Datastream. If an ISDN/Highway customer wants to move to broadband, their line has to be converted back to PSTN before broadband can be provided. In order to provide a good customer experience BT has developed an automated conversion process that allows the PSTN and ADSL provision field and frame activities to be coordinated to minimise downtime and avoid the (small) risk that the PSTN is provided and the line is subsequently found not to support broadband.

The processes are equivalent for BT and other Communications Providers (CPs) vis-à-vis any given end-product (PSTN or WLR and BT IPstream / BT Datastream ADSL), but the processes are different between these products. In other words, any differences that may exist are not a case of "BT vs external customers" but, rather, of differences according to whether the end-user is switching to a CP buying BT IPstream / BT Datastream or to an LLU Operator. As a result, it is currently easier and quicker for an end-user to move from their current ISDN/Highway service to a BT Wholesale broadband service (whether bought from BT Retail or another CP) than to move to a broadband service offered by a CP who uses an unbundled line.

Specifically, BT IPstream / BT Datastream ADSL currently has a fully automated order handling process to convert end-users from BT Retail's ISDN2/Home or Business Highway products to broadband (SMPF), whereas a cease and subsequent provision process must be followed on LLU. The automated process to convert from ISDN or Highway to broadband was developed to avoid having to do two sets of transition/migration processes (ISDN/Highway to PSTN, PSTN to broadband) and to avoid incurring two sets of costs and two engineer visits.

BT Retail's Residential ISDN2 and Home Highway product were withdrawn from new supply in September 2005. The volume of conversions to broadband is falling rapidly.

BT has decided to develop and put into place a new EOI process for any customer wishing to convert ISDN/Highway lines to any broadband, whether BT IPstream, BT Datastream or an unbundled line with non-BT broadband.

This request seeks an exemption from EOI under section 5.46.2a) of the Undertakings to enable BT to continue to use its existing ISDN/Highway conversion processes for an initial transitional period up to and including 31 March 2007 when a new EOI process (including

relevant systems interfaces) will have been developed and launched for all CPs. The existing process will cease when the new EOI process is launched.

2. Legal basis, scope and duration

- Legal basis: section 5.46.2a)

- Scope: exemption from section 5.46.1

- Duration: exemption up to and including 31 March 2007, the day after which will serve as an RFS date.

3. Identification of the products involved

The BT IPstream products involved are:-

- BT IPstream 500
- BT IPstream S products
- BT IPstream Home products
- BT IPstream Office products
- BT IPstream Max and Max Premium products

The BT Datastream products involved are:

- BT Datastream Office products
- BT Datastream Max and Max Premium products

The specifications of the BT Wholesale broadband products listed above can be found at:

http://www.btwholesale.com/application?pageid=community_hub&nodeId=navigation/node/data/Broadband_Community/navNode_Broadband_Community

More technical interface specifications can be found at:

<http://www.sinet.bt.com/>

Information regarding the ISDN and Highway products can be found at:

<http://www.bt.com/homehighway/>

<http://www.btbroadbandoffice.com/linesandcalls/ISDN2e>

<http://www.btbroadbandoffice.com/linesandcalls/ISDN30>

4. Description of the way in which the product is provided on terms other than EOI

IPstream ADSL currently has a fully automated order handling process to convert end-users from BT Retail's ISDN2/Home or Business Highway products to broadband (SMPF), whereas a different less automated process must be followed on LLU.

Because IPstream ADSL currently has a fully automated order handling process to convert end-users from BT Retail's ISDN2/Home or Business Highway products to broadband (SMPF), it is currently easier and quicker for an end-user to move from their current ISDN/Highway service to a BT Wholesale broadband service (whether bought from BT Retail or another CP) than to move to a broadband service offered by a CP who uses an unbundled line. There has been no demand from LLU Operators to provide, or develop, such a process for LLU. BT has however decided that it will develop and launch a new EOI process (including relevant systems interfaces) for all CPs to facilitate ISDN/Highway to broadband conversion.

5. Description of the solution proposed

As noted above, IPstream ADSL currently has a fully automated order handling process to convert end-users from BT Retail's ISDN2/Home or Business Highway products to broadband (SMPF), whereas a different less automated process must currently be followed on LLU. BT will develop and launch a new EOI process (including relevant systems interfaces) for all CPs wishing to convert ISDN/Highway lines to any broadband, whether BT IPstream, BT Datastream or an unbundled line with non-BT broadband. BT proposes to launch the new EOI process and relevant systems interfaces by 1 April 2007.

6. Justification for the exemption and impact on CPs

There has been no demand from LLU Operators to provide, or develop, such a process for LLU. BT believes that one of the reasons for this is that the conversion would require an Openreach engineer to visit the end-user premises, thereby incurring a customer visit charge which would be additional to the standard SMPF charge.

The requested exemption will have no material impact given its transitional nature and short duration.

Request number: 2

Product: MegaStream Ethernet

Legal basis: 5.46.2a)

1. Product description and reasons for request

This request concerns Openreach inputs into the current retail MegaStream Ethernet service.

Two forms of technology underpin the current retail product: Access SDH Stage 2 (ASDH2) and ADVA.

The former, which can be used for longer (greater than 15km) circuits, is not currently supplied externally and providing it on an Equivalence of Inputs basis would be impracticable and disproportionately costly and would adversely impact end users. ASDH2 was developed in 2003/4 as a forerunner to BT's NGN 21CN deployment.

ADVA-based inputs from Openreach to the retail MegaStream Ethernet service are provided on an Equivalence of Inputs basis.

BT requests an exemption under section 5.46.2a) of the Undertakings to enable Openreach to continue supporting the current ASDH2-based inputs to the retail MegaStream Ethernet services for the installed base, and orders pending at the 30 September 2006 WES RFS date, without the relevant Openreach inputs having to be made available on an external basis. New supply will use the WES EOI product for all new provision orders placed after 30 September 2006.

This exemption is to cover the transitional period until the 21CN successor MegaStream Ethernet service is available (this is being prioritised as part of BT's 21CN development) and the installed base has been commercially migrated to the new product no later than 30 June 2010, the day after which will serve as an IBMC date by which MegaStream Ethernet will consume the Openreach EOI input.

2. Legal basis, scope and duration

- Legal basis: section 5.46.2a)

- Scope: exemption from section 5.46.1

- Duration: exemption up to and including 30 September 2006, the day after which will serve as an RFS date, and thereafter only for the installed base and orders pending on 30 September 2006, up to and including 30 June 2010, the day after which will serve as an IBMC date. If completion of migration to BT's NGN 21CN is not going to be achieved by 30 June 2010, BT and Ofcom may agree a later IBMC date.

3. Identification of the products involved

There are two types of Openreach input into the BT retail MegaStream Ethernet product. These can be defined as:

- Release 1.0 & 2.0 using ADVA technology (as used for SHDS)
- Release 3.0 & 4.0 using ASDH2 technology for Access

The former, ADVA type, will be provided by the Openreach WES product from 30 September 2006. The ASDH2 solution is often applicable to longer range requirements (in excess of 15Km) although there are very few places where such requirements arise. It also allows re-use of the existing fibre delivery to the customer and therefore minimises fibre usage in the access loop.

The specifications of these products can be found at:

http://www.btwholesale.com/application?origin=prod_az_list.jsp&event=bea.portal.framework.internal.refresh&pageid=product&nodeId=navigation/node/data/Products/Data/MegaStreamEthernet/navNode_MegaStreamEthernet

http://www2.bt.com/btPortal/application?origin=mb_subcat_prod.jsp&event=bea.portal.framework.internal.portlet.event&pageid=mb_pns_catalogue&portletid=mb_pns_catalogue&wfevent=link.Product&siteArea=mb.corp&productDetail=products/megastream_ethernet.xml

4. Description of the way in which the product is provided on terms other than EOI

Current delivery of the access component of a MegaStream Ethernet delivered using ASDH2 technology is not EOI and BT believes that it would not be practicable to make it EOI. This arises because the access fibre has to terminate directly onto the ASDH2 terminating port with aggregation taking place within the ASDH2 equipment. As a result, there is no clearly defined termination point for the WES interface. To achieve such an interface would require the separation of the aggregation from the ASDH2 box which would introduce additional complexity and therefore cost into the design. BT considers that this would be disproportionate when it would only be a transitional solution until the product is migrated as part of implementation of BT's NGN 21CN. In addition, early withdrawal of the ASDH2 variant would adversely impact end users who have purchased expensive terminating equipment which would become redundant if they were required to migrate to an ADVA delivered solution.

5. Description of the solution proposed

The functionality required to support MegaStream Ethernet-type services is available to all Communications Providers (CPs) from 30 September 2006 using the Openreach WES products which utilise ADVA technology.

ASDH2 based services for the installed base and orders in hand at the RFS date of the EOI WES product will continue to be supported on such technology until they are migrated onto a successor 21CN EOI solution.

BT is committed to launch a MegaStream Ethernet equivalent service on 21CN currently referred to as Harmonised Ethernet Release 1.0 in March/April 2007. This solution will not provide the full national coverage of ASDH2 as it is a solution connecting EOI WES accesses to Metro switches of which there are 106 planned.

To get the geographical coverage required and give full national coverage there is a need to utilise the rest of the 21CN architecture which includes accesses via MSANs. Migration of the installed base will commence once the serving and terminating exchanges for the service have been fully migrated to 21CN and will take place within 6 months of this subject to customer agreement, and all migration will be completed by no later than 30 June 2010. If completion of migration to BT's NGN 21CN is not going to be achieved by 30 June 2010, BT and Ofcom may agree a later IBMC date.

6. Justification for the exemption and impact on CPs

The exemption is justified on the grounds of practicability given the disproportionality and disruption that would be caused by withdrawal of the ASDH2 supported solution for the installed base of customers.

Given the current availability, and future development, of WES services from the Openreach portfolio which provide the requisite functionality, and early migration to 21C solutions, any adverse impact on CPs is expected to be minimal at most.

Request number: 3

Product: Featureline

Legal basis: 5.46.1g)

1. Product description and reasons for request

BT Retail's Featureline services enable small to medium sized organisations to link together a number of lines serving separate premises such that they behave in a similar fashion to the way a single site PBX operates.

The Featureline products currently utilise BT PSTN exchange line and digital access inputs from Openreach, in accordance with section 5.46.1d), to which BT Wholesale adds functionality. This will need to change as Openreach meets the RFS dates for WLR. BT proposes to deliver Featureline in future by using WLR3 as the Openreach EOI input, to which BT Wholesale will add Featureline functionality (without reconfiguring or modifying the WLR3 line in any way).

For the reasons set out below, BT will not be able to offer Featureline services which take WLR3 as their input from the WLR3 EOI RFS dates. An exemption is therefore requested under section 5.46.1g) to enable Openreach to continue to supply the same inputs into the Featureline product portfolio as are currently provided without these inputs needing to be productised or provided externally, and to do so using the same processes as currently employed.

The exemption also covers the need for BT Wholesale and BT Retail, as part of the existing processes, to have access to Openreach systems until the proposed RFS date and thereafter only for the installed base until the IBMC date.

This exemption is necessary to enable BT to fulfil ongoing requirements with existing Featureline customers.

2. Legal basis, scope and duration

- Legal basis: section 5.46.1(g)

- Scope: exemption from section 5.46.1

- Duration:

- From the WLR RFS dates set out in Annex 1, paragraphs 1, 2 and 3, of the Undertakings up to and including 31 March 2008, the day after which will serve as an RFS date (which is the date by which new Featureline customers shall consume WLR3 as the Openreach input into Featureline).
- From the WLR IBMC dates set out in Annex 1, paragraphs 1, 2 and 3, of the Undertakings and thereafter up to and including 30 June 2010, the day after which will serve as an IBMC date (which is the date by which the installed Featureline base shall consume WLR3 as the Openreach input into Featureline). Between 1 April 2008 and 30 June 2010, the installed base will progressively migrate to the new Featureline product, and the existing Openreach inputs and

processes will therefore continue for the non-migrated installed base only up to and including 30 June 2010.

3. Identification of the products involved

There are three product variants – Featureline, Featureline Compact and Featureline Corporate/Embark.

Featureline and Featureline Compact are single-site centrex solutions that offer similar functionality to a small telephone system. These services can accommodate up to a maximum of 60 extensions on each site. This includes call hunting and free short code dialling of extensions.

The Featureline Corporate / Embark product provides virtual private networks using centrex (Featureline) and digital (2M) access lines to enable customers with both large and very small sites to link together into a corporate telephone network. The customer receives a corporate dial plan to enable them to complete on and off-net calls with functionality that mirrors a PBX.

Further information about BT's Featureline portfolio can be found at:

http://www.productsupport.bt.com/fline/?com.bea.event.type=linkclick&oLName=link.searchresults&oLDesc=KB_904

4. Description of the way in which the product is provided on terms other than EOI

The Openreach inputs into Featureline products are not currently productised and externalised.

5. Description of solution proposed

BT is committed to the introduction of Featureline products that use Openreach EOI inputs and which do not require any modification or reconfiguration of the WLR3 line. However, as the designs of the current Featureline products were based on integrated systems and processes these will take time to adapt to use standard EOI inputs.

Delivery of a Featureline product portfolio which uses WLR3 as a standard Openreach EOI input with both analogue and digital options will be possible by 31 March 2008, the day after which will serve as an RFS date. The EOI ISDN30 product (which provides the digital access bearer) will be made available from 31 December 2007.

BT proposes to incorporate the migration of the existing Featureline customer base into the WLR programme as of 1 July 2010, the IBMC date (which is the date by which the installed Featureline base shall consume WLR3 as the Openreach input into Featureline).

The exemption also covers the need for BT Wholesale and BT Retail, as part of the existing processes, to have access to Openreach systems until the proposed RFS date for Featureline consuming WLR3 and thereafter only for the installed base until the Featureline

consuming WLR3 IBMC date. This will be done by having dedicated and ring-fenced teams within BT Wholesale and BT Retail having limited access to Openreach systems by way of specific user access profiles. Appropriate behavioural controls/training, access controls and audit trails will be put into place to support these arrangements. Only access to Openreach systems which is strictly necessary to deliver the existing Featureline portfolio until the RFS date, and thereafter for the installed based only until the IBMC date, will continue to be granted, and only for the sole purpose of delivering Featureline.

6. Justification for the exemption and impact on CPs

A time limited exemption is sought to allow sufficient time for BT to develop an alternative Featureline product which uses standard Openreach EOI inputs. The current Featureline solution was designed and based on integrated systems and processes that will take time to adapt to use EOI inputs. The key dependency is on new systems capabilities in BT Wholesale which will allow the equivalent use of WLR3 as an input to the creation of Featureline. The exemption covers the period up to availability of the systems and a short interval beyond to align the equivalent delivery of Featureline with that of Featurenet Embark, a product which is often bought with Featureline.

The exemption is necessary to enable BT to fulfil ongoing requirements with existing Featureline customers.

The markets in which Featureline operates are competitive and there are other centrex and PBX products that other Communications Providers (CPs) have access to as an alternative means of providing Featureline-like capabilities. The exemption request gives BT time to develop and implement systems supporting the equivalent use of WLR3 as an input. It does not delay or compromise the provision of any Openreach service to other CPs.

The transfer processes are being enhanced such that migration of a customer off Featureline to WLR will be a straightforward transfer.

Request number: 4

Product: Featurenet centrex copper delivery

Legal basis: 5.46.2 a), 18.1 and 5.12

1. Product description and reasons for request

This request concerns Openreach inputs into BT Wholesale to support the Featurenet product portfolio sold by downstream parts of BT, and the processes through which they are delivered and maintained. These Openreach inputs are not currently productised or externalised.

Featurenet is a centrex and VPN voice solution providing voice networks spanning multiple sites and offering functionality that would normally be associated with a PBX. Featurenet End-User customers are large and medium corporates and governmental organisations.

21CN infrastructure will underpin Featurenet services in the future.

BT Wholesale's input into Featurenet consists of platform activities plus a network provided by a mix of Partial Private Circuits (PPCs) and copper pairs from Openreach.

The copper pairs supplied by Openreach to BT Wholesale to support Featurenet are not currently productised or provided externally. The two main differences are that: -

- There are non-standard terminations at both ends.
- Featurenet testing sits on the BT Wholesale platform.

BT requests an exemption from section 5.46.1 under section 5.46.2a) and a variation through section 18.1 of section 5.12 and then agreement under the amended section 5.12 to enable Openreach to continue to supply the same inputs into BT Wholesale to support the Featurenet product portfolio without these inputs needing to be productised or provided externally, and to do so using the same processes as currently employed, including where this involves BT Wholesale carrying out activities that could be considered to fall within section 5.12.

2. Legal basis, scope and duration

- Legal basis: sections 5.46.2a), 18.1 and 5.12

- Scope: exemption from section 5.46.1 and variation and agreement under section 5.12

- Duration: exemption and variation up to and including 30 June 2008, the day after which will serve as an RFS date, and thereafter only for the installed base up to and including 30 June 2010, the day after which will serve as an IBMC date. If completion of migration to BT's NGN 21CN is not going to be achieved by 30 June 2010, BT and Ofcom may agree a later IBMC date.

3. Identification of the products involved

Openreach inputs into BT Wholesale to support the Featurenet product portfolio are copper pairs that are not currently productised or provided externally.

The downstream Featurenet products supported by BT Wholesale on the basis of these Openreach inputs are:

Featurenet 5000 - SRU/RSC delivered

Featurenet 5000 - B-B Mux delivered

Featurenet 5000 - ac15 delivered

Featurenet 5000i

Further details of the full Featurenet portfolio are to be found at:

http://www.serviceview.bt.com/list/current/docs/Featurenet.boo/1338.htm?com.bea.event.type=linkclick&oLName=link.searchresults&oLDesc=KB_748

4. Description of the way in which the product is provided on terms other than EOI

The Openreach inputs into BT Wholesale to support the Featurenet portfolio are not currently productised and externalised. In particular, there are a number of ways in which the current delivery and maintenance processes for these inputs are not externalised.

The key aspects which are not currently EOI are:

- 1. Featurenet testing.** Testing of Featurenet lines is performed from the DMS100 Featurenet switches. This test capability is an integrated one that tests both the copper and the services that run over it. This function is currently performed by BT Wholesale and BT Global Services, directing Openreach resources. The closest Openreach product for input for the majority of Featurenet access links would be MPF, which has its own line test capability. Deploying this additional, unnecessary, test capability would be costly and would require planned outages on all lines. However Openreach and BT Wholesale will examine the opportunity for moving the copper testing element into Openreach.
- 2. Introduction of NTE5.** A large percentage of the Featurenet lines are “multi lines per site” and terminated on an End-User’s own frame. To utilise the standard Openreach MPF product would require an NTE5 being introduced into each line resulting in some End-Users having to find space for hundreds of small white boxes as well as accepting interruption to their service.
- 3. Bulk Provision of End-User lines.** Openreach does not support the order and provision of more than four lines per order on the MPF product. Featurenet customers will typically have a requirement to provide 10s of lines to their sites.

In addition, under the existing delivery and maintenance processes, BT Wholesale carries out activities that may be considered to fall within section 5.12. Such activities include but are not limited to jumpering activities and fault reporting processes.

5. Description of the solution proposed

BT requests an exemption from section 5.46.1 under section 5.46.2a) and a variation through section 18.1 of section 5.12 and then subsequent agreement under the section as varied to enable Openreach to continue to supply the same inputs into BT Wholesale to support the Featurenet products without the inputs needing to be productised or provided externally, and to do so using the same processes as currently employed.

The request will enable:

- a) Openreach to continue to provide on current processes the existing inputs into BT Wholesale to support the Featurenet business up to and including 30 June 2008, the day after when BT will make available for new supply, on an equivalent basis, an Openreach bulk lines service which will form the input into BT Wholesale for the construction of Featurenet services.
- b) Openreach to maintain the installed customer base on the existing Featurenet products using existing processes until Featurenet customers migrate to a 21CN Featurenet successor by 30 June 2010 at the latest, the day after which will serve as an IBMC date.

For the purposes of this request new supply means supply to customers under a contract entered into after 30 June 2008, or the supply after that date of Featurenet service to existing customers on new sites. BT will endeavour to ensure the product developed by Openreach also supports the provision of new capacity to existing customers at existing sites, but that cannot at this stage be guaranteed.

6. Justification and impact on CPs

The request is necessary to enable BT to fulfil ongoing contractual requirements to existing Featurenet customers and to support new business during the development of and migration to interim 20CN and 21CN solutions using EOI inputs from Openreach.

There is a large number of competing business voice services offered by both BT and other suppliers to End-Users. Communications Providers (CPs) and Service Providers offering alternative solutions include C&W, NTL, COLT, Siemens, IBM Network Solutions Vanco, Affiniti and Vodafone. The exemption and variation are not expected to have a material adverse impact on this industry.

Concern has been expressed by some competing business voice service providers that the process of migrating a customer from a BT Featurenet solution to one provided by a competing provider is cumbersome and slow. As part of the development of the Openreach bulk lines service, BT will work with CPs to identify and resolve issues concerning migration from Featurenet. That process of review will begin in Autumn 2006, with a view to informing Openreach product development. To the extent that achievable improvements are identified which are not contingent upon the new Openreach EOI inputs, BT will, where reasonably practicable, deliver those earlier.

Request number: 5

Product: Openreach engineering services

Legal basis: 5.46.2a)

1. Product description and reasons for request

Openreach currently supplies engineering services to BT Wholesale and BT Global Services to enable them to effect delivery of a limited list of specifically identified existing network management services contracts as agreed with Ofcom (“the identified existing contracts”). These contracts are to provide and maintain privately owned networks on private land and beyond the Network Termination Point (NTP).

BT Wholesale and BT Global Services have a limited number of existing contracts which depend on Openreach field engineering resources to service them – the identified existing contracts. Customers expect current contractual commitments to continue to be met, and thus these engineering resources need to continue to be supplied. It is therefore critical that continuity of supply is maintained between Openreach and BT Wholesale/BT Global Services so that the required Openreach engineering support continues to be supplied for the duration of the identified existing contracts. These Openreach services are charged to BT Wholesale and BT Global Services.

Openreach has yet to determine whether it wishes to make all of these engineering services externally available, or, if it were to do so, on what basis. As a result, an exemption from the requirement to offer these services on an EOI basis is needed to ensure continuity of supply of Openreach engineering services to BT Wholesale and BT Global Services in support of the identified existing contracts.

To the extent that these activities are not already exempted by virtue of section 5.46.1h) of the Undertakings, BT is seeking an exemption to enable Openreach to continue providing these engineering services to BT Wholesale and BT Global Services in support of the identified existing contracts, on the current basis and processes, without having to provide them externally, until the relevant contracts end or are terminated, or until these services are launched by Openreach on an EOI basis, whichever occurs first.

To the extent that some of these services may correspond to engineering services which are already offered to other Communications Providers (CPs), BT is seeking a transitional exemption to enable BT Wholesale and BT Global Services to migrate the specific existing engineering services provided to them by Openreach in support of the identified existing contracts to the terms and conditions on which these Openreach engineering services are available to all CPs, to the extent that these activities are not already exempted by virtue of section 5.46.1h) of the Undertakings. This migration will be completed by 31 December 2007, and until then these engineering services will continue to be provided by Openreach on the current basis and processes. After 31 December 2007, these engineering services will only be provided on an EOI basis.

2. Legal basis, scope and duration

- Legal basis: section 5.46.2a)

- Scope: exemption from section 5.46.1

- Duration:

- For engineering services which are not currently provided to other CPs, until the earlier of:
 - each of the identified existing BT Wholesale and BT Global Services contracts ends or is terminated; or
 - should such specific engineering services be launched by Openreach on an EOI basis, the EOI launch date will be the RFS date after which any new order by another part of BT will be for these EOI engineering services. The IBMC date by which BT Wholesale and BT Global services must migrate to the EOI product or EOI terms and conditions (as appropriate) will be 12 months after the RFS date.
- For specific engineering services which are currently provided to other CPs, until 31 December 2007, the day after which shall serve as an IBMC date by which BT Wholesale and BT Global Services must migrate to the same terms and conditions available to all CPs.

in both cases to the extent that these activities are not already exempted by virtue of section 5.46.1h) of the Undertakings.

3. Identification of the products involved

These services include typical field engineering services such as provision of cable and duct and maintenance thereof, surveys, wayleaves or plant protection. They do not include the provision of private circuits or partial private circuits.

By 31 March 2007, BT will prepare a detailed list of the specific engineering services, distinguishing between those to be migrated and those which are not provided to other CPs, and will communicate this list to Ofcom.

4. Description of the way in which the product is provided on terms other than EOI

For certain engineering services, Openreach has yet to determine whether it wishes to make these engineering services externally available, or, if it were to do so, on what basis.

For other engineering services, they may be provided on different terms, conditions and/or processes than are available to other CPs.

5. Justification for the exemption and impact on CPs

These engineering services can continue to be provided by Openreach to BT Wholesale and BT Global Services (without Openreach having to provide comparable services externally) in relation to identified existing contracts without this having a material adverse effect on competition. This exemption is necessary to enable BT Wholesale and BT Global Services

to fulfil ongoing requirements of existing customers under the limited list of specifically identified contracts.

BT bids for network management services contracts in a competitive environment. Competing bidders either have their own engineering force or have access to the same services from engineering contractors who are readily available in the marketplace.

With respect to engineering services, competing bidders (whether CPs, systems integrators, etc) always have the alternative to outsource the work or to internalise it, depending on which suits them best.

This exemption specifically does not apply to any pending or future bids, for which BT Wholesale and BT Global Services will rely on the same engineering services as are (or may in the future be) made available by Openreach to all CPs on an EOI basis.

Request number: 6

Product: Engineering services in support of BT Global Services in particular geographical areas

Legal basis: 5.46.1g)

1. Product description and reasons for request

The detailed operational planning involved in the implementation of BT's Undertakings has identified specific issues with regard to particular geographical areas.

Given that a temporary exemption for the Scottish Highlands has been agreed up to and including 22 December 2006, BT no longer requires a further exemption for the Scottish Highlands.

With respect specifically to the Scottish Islands and Scilly Isles, BT requests an exemption to enable the Openreach field engineers to provide engineering services to BT Global Services, without these services being provided externally.

2. Legal basis, scope and duration

- Legal basis: section 5.46.1g)

- Scope: exemption from section 5.46.1

- Duration: for the Scottish Islands and Scilly Isles – exemption up to and including 31 March 2008.

3. Identification of the products involved

This request is to enable Openreach field engineers to provide engineering services to BT Global Services in limited and specific geographical locations, specifically the Scottish Islands and Scilly Isles.

4. Description of the way in which the product is provided on terms other than EOI

Multi-skilled Openreach field engineers in particular geographical areas will provide engineering services to BT Global Services, without these services being available externally.

5. Description of the solution proposed

The request is to allow Openreach field engineers to provide engineering services to BT Global Services in limited and specific geographical locations.

The solution proposed is the following:

- In the Scottish Islands and the Scilly Isles, Openreach field engineers will continue to provide engineering services to BT Global Services up to and including 31 March 2008. This is the most efficient solution given the remote location and relative size of these islands, and enables the Openreach teams responsible for these locations to have a size sufficient to provide necessary flex to be able to operate notwithstanding leave, absences, etc. Should Openreach wish to terminate this arrangement, it would give BT Global Services three months' notice to enable them to make alternative arrangements.
- BT Global Services will be charged for these services.

6. Justification for the exemption and impact on CPs

It would not be proportionate to require BT to provide these services on an EOI basis in the circumstances described. Given the short duration and remote locations involved, the exemption is not expected to have a material adverse effect on any relevant market.

Request number: 7

Product: Private Circuits

Legal basis: 5.46.1g)

1. Product description and reasons for request

The detailed operational planning involved in the implementation of BT's Undertakings has identified specific issues with regard to private circuits.

Currently BT has some 1,100 people engaged in repairing, maintaining and delivering all forms of private circuits, including Partial Private Circuits (PPCs). This is a skilled resource, where the individuals are equally able to operate on the Network Termination Equipment (NTE), copper or fibre bearer, and tackle issues on an end-to-end basis.

In examining in detail how the range of private circuits could best be supported following the signing of the Undertakings, the option of dividing the currently integrated private circuits workforce between Openreach and BT Wholesale and between bearers and electronics was examined. The conclusion that BT reached was that such a division of the integrated private circuits workforce would give rise to operational inefficiencies, primarily due to increased hand-offs, and a requirement for an additional 150 -200 engineers who would need additional training to support private circuits. Such a division would in the end increase costs for all those who require private circuit and PPC capabilities from BT, as well as having a potentially adverse impact on the quality of service offered, thereby increasing the likelihood of customer dissatisfaction issues.

BT has therefore given careful consideration to other options.

The solution identified is to keep the private circuit (including PPCs) provision, repair, maintenance and upgrade activity as an integrated unit, and to locate it within Openreach. There would be an agreed set of Service Level Agreements for the services provided to BT Wholesale to secure its responsibilities in relation to PPCs and leased lines for Communications Providers (CPs). BT Wholesale will be charged for these services.

Location of this integrated private circuits workforce in Openreach is preferred to location within BT Wholesale, since this means that the incentives and culture of Openreach apply, and there is no "non-Openreach" intervention in the access and backhaul networks which are Openreach's responsibility. Overall this is seen as the solution which provides the best customer service as well as being the most efficient.

BT requests an exemption from Equivalence of Inputs under section 5.46.1g) to ensure that Openreach is allowed to provide private circuit (including PPCs) provision, repair, maintenance and upgrade services to BT Wholesale without having to also provide them on an external basis. TILLAPs/TILLBPs will be provided on an external basis but are not subject to EOI in accordance with section 5.46.1a) of the Undertakings.

The Undertakings do not contain any restriction on BTW Commercial Information being shared with Openreach. With respect to any possible sharing of BTW Customer Confidential Information with the integrated Openreach private circuit unit, this is authorised under section 6.10.1 (ii) which provides that BTW Customer Confidential Information can be disclosed to Openreach people to the minimum extent necessary to operationally enable BT Wholesale to deliver BT Wholesale products to customers, which is what will happen in this case.

2. Legal basis, scope and duration

- Legal basis: section 5.46.1g)
- Scope: exemption from section 5.46.1
- Duration: exemption for a permanent period

3. Identification of the products involved

The products involved are provision, repair, maintenance and upgrade services provided to BT Wholesale in relation to its retail and wholesale private circuits portfolios (including PPCs).

The specifications of these products can be found at:

PPC info can be found on btw.com at:

http://www.btwholesale.com/application?origin=prod_az_list.jsp&event=bea.portal.framework.internal.refresh&pageid=product&nodeId=navigation/node/data/Products/Data/Partial_Private_Circuits_PPCs/navNode_Partial_Private_Circuits_PPCs

All BT product tech i/f specs can be found on the SINET site:

<http://www.sinet.bt.com/>

PC retail leased line product information is available from www.bt.com at:

http://www2.bt.com/btPortal/application?origin=mb_product_atoz.jsp&event=bea.portal.framework.internal.portlet.event&pageid=mb_pns_catalogue&portletid=mb_pns_catalogue&wfevent=link.Product&com.bea.event.type=contentclick&oSiteArea=mb.corp&oPjsp=mb_product_atoz.jsp&oPt=mb_pns_catalogue&oDocumentId=products/private_circuit.xml&oOjsp=mb_product_atoz.jsp&oPg=mb_pns_catalogue&oDocumentType=Product&siteArea=mb.corp&PorS=products&productDetail=products/private_circuit.xml&contentType=Product

4. Description of the way in which the product is provided on terms other than EOI

Openreach does not intend to make such services available externally to other CPs.

The requested exemption is intended to provide the products identified in paragraph 3 without Openreach having to also provide them on an external basis.

TILLAP/TILLBPs will be provided on an external basis but are not subject to EOI in accordance with section 5.46.1a) of the Undertakings.

5. Description of the solution proposed

The provision and maintenance of private circuits (including PPCs) involves a series of complex tasks undertaken by highly skilled engineers. It is crucial therefore that BT is able to deploy engineers in a manner that allows them to fully utilise their skills, minimise the number of hand-offs between BT units and which will offer the best possible service to all CPs and thus to their end customers.

Openreach field engineering activities will be carried out in support of upgrade, provisioning and assurance processes across:

- NTE
- Cable chamber
- Optical Fibre Rack
- DWSS (Digital Wideband Serving System)/ LTE (Line Termination Equipment)
- Digital Distribution Frame
- Core MUX (Multiplexer) line card
- Related internal tie cables

On receiving a Fault Report, Openreach will obtain the circuit information and carry out diagnostic tests in line with the original primary diagnostic tests. From these tests, actions will be taken which may include: changing the LTE or NTE cards, changing or repairing the bearer, changing the configuration, and/or checking and repairing permanent wiring. On intermittent faults, an 'In Service Monitor' may be fitted for further diagnostics. Where required, individual circuit paths will be tested to confirm with the customer the BT service to their kit.

Any changes to equipment or records will be recorded. Additionally, fault updates and clearance notes are recorded on Work Manager software which is automatically downloaded to CAMSS. All customer contact details are provided on the Fault Report from Work Manager. Access to a customer's site will be arranged and confirmed by BT Wholesale.

The Core MUX line card represents the natural boundary between Openreach operations and BT Wholesale operations because it is the logical dividing line between single circuit provision and repair on the one hand, and multiple circuit aggregated capacity provision on the other hand. Moving the boundary closer to the customer increases the frequency of multiple engineering visits and time consuming hand-offs between BT Wholesale and Openreach on customer private circuit provision and repair. Conversely, moving the boundary further into the core network means that Openreach would become directly involved in the construction and routine maintenance of BT Wholesale's transmission and switch network.

At the other extreme, installing and maintaining the NTE as well as the NTU make a single customer visit possible. Customer premises equipment beyond this point is clearly an activity that can be undertaken by any, and many, other service providers.

6. Justification for the exemption and impact on CPs

Openreach engineers will therefore perform all customer visits for Openreach and BT Wholesale owned private circuits.

This arrangement offers the following significant advantages:

- Single visits to customers can be maintained where they already occur and more will be possible in the future as multi-skilling is extended;

- Exchange (LTE out) to customer private circuits provision and assurance will be provided by a single BT Line of Business simplifying controls and interface management and thereby enabling reduced lead-times and improved quality;
- The number of 'hand-offs' is kept to the minimum which optimises the speed of both the provision and repair processes and reduces the likelihood of delays and faults;
- It makes the best and most effective use of high value engineering skills, experience, tools and testers;
- It is the most straightforward option for measurement purposes, enabling effective management control;
- It offers the greatest level of operational flexibility thereby enabling improved service delivery.

Over and above the provision of the bearer, Openreach will provide and fit the LTE card, the NTE card and (where required) casing and the connecting link to the BT core network. The NTE will be connected to the customer's DC power supply. Openreach will also provide any necessary ISDN2 service for alarm connections at the NTE and carry out alarm checks with the alarm centre. When specified, commissioning tests will be completed including end-to-end tests.

All site records will be updated. Also all COSMOSS and Routing records will be updated where required. There is an automatic download to the CAMSS system, used for a subsequent fault reports, from the COSMOSS system.

BT believes that overall, this is both the most efficient model and the one that offers the best customer service, to the benefit of all CPs.

Request number: 8

Product: 21CN network uplift programme

Legal basis: 5.46.1c)

1. Product description and reasons for request

The overall 21CN Network Uplift programme has been designed to review and, where appropriate, prepare the physical network (Main Distribution Frame (MDF) and core), associated records and exchange buildings to make them ready for implementation of BT's NGN 21CN in order to mitigate the risk and impact to customer service during and as a result of the cutover to BT's NGN 21CN. The 21CN Network Uplift programme is led by BT Wholesale, and is scheduled to run for the duration of the implementation of BT's NGN 21CN through to 2011. Once BT's NGN 21CN is up and running, the 21CN Network Uplift programme will be dissolved and people will be reassigned.

The MDF is an Openreach asset which is impacted by the 21CN Network Uplift programme. It is critical to ensure strong alignment of site and systems activities at the infrastructure level (irrespective of asset ownership) in the 21CN Network Uplift programme to guarantee smooth and efficient migration of services to BT's NGN 21CN from a customer service point of view and to provide a base for long-term service stability.

From 1 September 2006 Openreach has progressively been taking over those activities required under the 21CN Network Uplift programme which relate to the MDF, and is accordingly providing the necessary engineering services to BT Wholesale in relation to the MDF in preparation for the launch of BT's NGN 21CN, as part of BT's 21CN Network Uplift programme.

The Openreach 21CN engineering team is responsible for leading on all activities involving physical work on and connection to the MDF including in particular initial network uplift, grooming and transfer engineering (see section 3 below). BT Wholesale will be charged for these services. Up until September 2006, this work had been carried out by a dedicated team of 21CN engineers within BT Wholesale pursuant to the temporary exemption agreed between Ofcom and BT. As of 1 September 2006, Openreach has progressively been taking over responsibility for the engineering work relating to the MDF and is thereafter acting as a supplier to the 21CN programme. Transfer of the relevant people from BT Wholesale into Openreach occurred between 1 September 2006 and 1 October 2006.

BT Wholesale will retain ownership on behalf of BT Group of the end-to-end delivery of BT's NGN 21CN.

Section 11.20 of the Undertakings stipulates that "nothing in these Undertakings shall impede the flow of information reasonably required to enable BT to design, build, and implement its NGN or the decision making process relating thereto."

BT requests the following:

1. Provision by Openreach of engineering services to BT Wholesale on a non-EOI basis

BT requests an exemption under section 5.46.1c) to enable Openreach to provide engineering services under the 21CN Network Uplift programme to BT Wholesale on a non-EOI basis (see section 3 below for more detail on the engineering services involved).

2. Access by Openreach people to BT Wholesale systems and access by BT Wholesale people to Openreach systems

To the extent that implementation of the 21CN Network Uplift programme includes access to Openreach or BT Wholesale systems, including after systems separation milestones, such access shall be authorised for ring-fenced teams solely for the purpose of implementing the 21CN Network Uplift programme. BT is proceeding on the basis that Variation #5 to the Undertakings will ultimately be agreed, and in accordance with that Variation, such systems access shall be considered as "permitted" access consistent with the Undertakings.

The need for any exemption will cease on an exchange-by-exchange basis during the period of implementation of BT's NGN 21CN (due to finish in 2011), plus 6 months to allow for the consolidation period across all exchanges at the end of the implementation period of BT's NGN 21CN. As a result, BT proposes a "sunset provision" whereby this exemption will automatically cease (unless agreed otherwise with Ofcom) 6 months after 21CN implementation and cutover at the last exchange, which is to occur no later than 31 December 2011.

2. Legal basis, scope and duration

- Legal basis: sections 5.46.1c) and 2.1 (as amended by Variation #5 to the Undertakings)
- Scope: exemption from section 5.46.1 and agreement that systems access is "permitted" under section 5.44, 5.45 and 8.5
- Duration: until 6 months after implementation of BT's NGN 21CN and cutover at the last exchange, which shall occur no later than 31 December 2011, unless otherwise agreed with Ofcom.

3. Identification of the products involved

Openreach will provide certain engineering services to BT Wholesale in relation to the MDF and in preparation for the launch of BT's NGN 21CN. Up until September 2006, this work had been carried out by a dedicated team of 21CN engineers within BT Wholesale pursuant to the temporary exemption agreed by Ofcom and BT. As of 1 September 2006, Openreach has progressively been taking over responsibility for the engineering work relating to the MDF and is thereafter acting as a supplier to the 21CN programme (see below with respect to Pathfinder). Transfer of the relevant people from BT Wholesale into Openreach occurred during September 2006 (transfer to be completed by 1 October 2006). The Openreach 21CN engineering team will then be responsible for carrying out initial network uplift, grooming and transfer engineering work.

The initial uplift and grooming activities are carried out in each of BT's approx. 6000 exchanges on a rolling basis within a fixed period depending on the number of exchange lines (ranging from 1 week to a maximum of 18 weeks). This activity is followed by a period of consolidation during which follow-up checks are carried out over a 6 month period to ensure that the MDF is being maintained to the necessary quality.

Specific activities in the 21CN Network Uplift programme

The 21CN Network Uplift programme includes three stages:

1st stage (initial network uplift – removal of obsolete components and records)

- Advanced clean-up and preparation
- Accessing and updating MDF records and data cleansing
- Removal of obsolete and/or surplus network components

This stage involves a series of one-off highly-complex site activities associated with the audit, review, cleanse, uplift of MDF and core network elements and their associated records. Where activities relate to the MDF they will be carried out by Openreach and where activities relate to core network elements they will continue to be carried out by BT Wholesale. This leads to an exchange-by-exchange “lockdown” in terms of work performed on each of these assets to maintain the benefit of the initial uplift and cleansing.

2nd stage of 21CN preparation (grooming)

- Grooming / compression of the MDF as required
- Providing connectivity to EvoTAM and MSAN equipment
- Isolating network components that will not be supported by 21CN once 21CN goes live

This stage involves rearrangement of all the individual connections on the MDF so that spare blocks are eliminated (compression) and reorganised (grooming). In particular, network components relating to legacy circuits or services which will not be supported by 21CN are rearranged and isolated onto distinct blocks on the MDF.

The EvoTAM and MSAN equipment will subsequently be physically connected to non-legacy circuits so that the actual cutover can be initiated via software using a remote terminal connected into the EvoTAM . All of these activities will either be carried out by Openreach or, with respect to the connection of the EvoTAM and MSAN equipment, by third party vendors under the joint control of Openreach and BT Wholesale.

The EvoTAM is a new piece of equipment being introduced as part of BT's implementation of BT's NGN 21CN which provides two facilities as follows:

- It includes a test access matrix which provides the mechanism for testing copper loops;
- It includes a switch capability which can be used by transfer engineering to automate the migration of circuits onto the new network.

3rd stage of 21CN preparation (transfer engineering or migration to 21CN)

- Pre-cutover testing to ensure the physical jumpering work has been correctly aligned to the right 21CN network port
- Software cutover to 21CN and implementation of fallback activities as required on an exchange-by-exchange basis

Transfer engineering means the various activities necessary to transfer or migrate customers from the existing 20CN network onto BT's NGN 21CN.

First, Openreach will carry out all of the frame jumpering in relation to the disconnection of 20CN and activation of 21CN services. BT Wholesale will not carry out any frame jumpering activities.

Second, BT Wholesale will undertake pre-cutover testing to ensure this physical work is correctly aligned to the right 21CN network port. This pre-cutover testing will require access to Openreach systems (see also section 1).

Customer circuits will then be electronically cutover, on an exchange-by-exchange basis, on the night of transfer using a terminal connected to the EvoTAM. If the cutover fails in any given exchange, fallback activities will reverse the situation to its pre-cutover status. During the Pathfinder trial (in the Cardiff area up to and including 30 June 2007), the electronic cutover of circuits will be carried out by having BT Wholesale connect a local terminal to the EvoTAM in the relevant exchange. That connection of a local terminal to the EvoTAM by BT Wholesale will be carried out under agreed processes with Openreach. BT Wholesale is developing Operational Support Systems (OSS) that will facilitate the electronic cutover of circuits from 20CN onto 21CN on a larger scale. These OSS are still under development so their exact mechanics are not yet determined. However as soon as the OSS are up and running (which is expected to be by no later than 30 June 2007), the electronic cutover of circuits will be carried out by BT Wholesale using the OSS. To the extent that any local terminal still needs to be connected directly to the EvoTAM in the relevant exchange, Openreach will carry out that connection and that connection service will be charged to BT Wholesale.

The exchange data contained within the exchange software will be remotely and electronically transferred by BT Wholesale. This involves taking the data from the 20CN equipment, converting it into a suitable format and then inputting it into the 21CN equipment. This transfer of relevant data will require access to Openreach systems (see also section 1).

4. Description of the way in which the product is provided on terms other than EOI

Openreach's intention is to consider whether and to what extent it is possible to productise and offer externally on an EOI basis some or all of the engineering services which will be provided to BT Wholesale as part of the 21CN Network Uplift programme. BT Wholesale will be charged for the services provided by Openreach.

5. Justification for the exemption and impact on CPs

The 21CN Network Uplift programme delivers benefits to Communications Providers (CPs), their end user customers and the wider telecommunications industry.

The key benefits relate to:

- Mitigation of risk to service continuity as a result of data cleanse and lockdown prior to implementation of BT's NGN 21CN;
- Improved MDF reliability; and
- Provision and maintenance of a safe, secure working environment for equipment, employees, contractors and CPs.

These benefits provide a sound, reliable base for the deployment of 21CN equipment and the subsequent cutover to 21CN.

The split of activities between Openreach and BT Wholesale reflects Openreach's ownership of the MDF and BT Wholesale's ownership of the core network and its leadership role in delivering BT's NGN 21CN, as well as the necessary interactions between Openreach and BT Wholesale under the 21CN Network Uplift programme to (i) ensure that disruptions to CPs and their end customers are minimised, including impact on day-to-day customer service; (ii) minimise programme costs and (iii) mitigate the risks to BT and its customers associated with cutover to 21CN.

Request number: 9

Product: LLU Associated Services in relation to BT's 20CN DSLAMs

Legal basis: 5.46.1b)

1. Product description and reasons for request

Section 5.46.1 of the Undertakings provides that Openreach will not supply any product to any other part of BT unless it also offers that product to other Communications Providers (CPs) on an Equivalence of Inputs basis. The section lists a number of areas where this requirement does not apply. This includes at 5.46.1b) "such Associated Services as may be agreed with Ofcom."

Section 2.1 on Definitions and Interpretation describes Associated Services as products and services ancillary to the provision of Metallic Path Facility (MPF) and Shared Metallic Path Facility (SMPF) and lists some of these including at a) co-mingling. Sections 5.4 e) and f) confirm that these are products and services to be provided by Openreach.

The Co-Mingling Product provided to CPs by BT includes a Handover Distribution Frame (HDF) within the Multi-User Area. One side of the HDF is connected to the CP's DSLAM; the other side is connected by LLU internal tie cables to the Main Distribution Frame (MDF) associated with their unbundled lines (MPF and SMPF). In the case of BT Wholesale, BT Wholesale's own tie cables run directly from BT Wholesale's DSLAMs to the MDF without an HDF. Depending on the exact configuration in any given exchange, BT Wholesale's Test Access Matrix (TAM) is connected either directly to the MDF (Frame Test Access Matrix - FTAMs) or between the MDF and the BT Wholesale DSLAM (ETAMs), whereas TAMs of LLU Operators (LLUOs) will be connected to the DSLAM-side of the HDF.

This means that several aspects of how BT Wholesale connects its DSLAMs to the MDF, does the service layer testing on its lines, and consumes LLU Associated Services, are different from other CPs. BT recognises the need to move to a solution which is delivered on an EOI basis for all CPs, including BT Wholesale, so that BT consumes LLU (including certain LLU Associated Services) on an EOI basis, and which also takes into account the LLU designs under BT's NGN 21CN network architecture.

BT accordingly requests an agreement under section 5.46.1b) that section 5.46.1 shall not apply.

This request does not include the approach under BT's NGN 21CN.

2. Legal basis, scope and duration

- Legal basis: section 5.46.1b)

- Scope: exemption from section 5.46.1

- Duration:

(a) HDF/LLU internal tie cables:

- (i) Up to and including 30 June 2007, during which time existing processes will continue to be used (no provision or installation by BT Wholesale of HDFs or

LLU internal tie cables between the MDF and HDF) while new processes and a new HDF/LLU internal tie cable product are being developed by Openreach.

- (ii) For any orders placed after 30 June 2007 and up until the switchover to 21CN (which will occur on an exchange-by-exchange basis) and at the latest by 31 December 2011, BT Wholesale will continue to use existing processes (no provision or installation by BT Wholesale of HDFs or LLU internal tie cables between the MDF and HDF) only for extensions to existing BT Wholesale DSLAMs installed in existing line suites that may require additional cabling between the BT Wholesale DSLAM and the MDF (or ETAM or FTAM, as the case may be).

However, for any orders placed after 30 June 2007 and up until the switchover to 21CN (which will occur on an exchange-by-exchange basis) and at the latest by 31 December 2011, BT Wholesale will use the new processes and purchase the new HDF and LLU internal tie cable products offered by Openreach for any new DSLAM installation (as defined below).

After 21CN switchover, BT Wholesale will use the industry-agreed EOI 21CN solution for LLU.

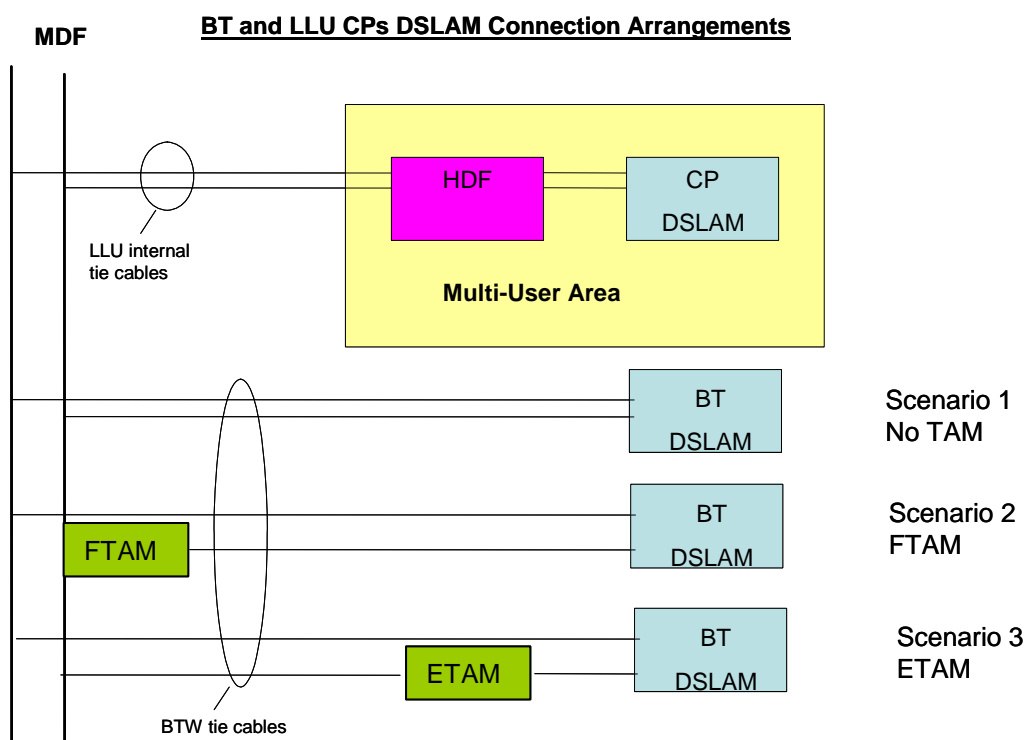
(b) Service layer testing: On legacy BT Wholesale DSLAM installations on which no TAM (FTAM or ETAM) has been installed, service layer testing will be outsourced by BT Wholesale to Openreach, and Openreach engineers will conduct service layer tests on BT Wholesale's behalf using BT Wholesale-owned hand-held testers which interface specifically with BT Wholesale DSLAMs. This service layer testing service will not be externalised and will be provided by Openreach only to BT Wholesale until the earlier of:

- (i) switchover to BT's NGN 21CN (which will occur on an exchange-by-exchange basis) and at the latest by 31 December 2011; or
- (ii) redesign by BT Wholesale of its equipment and/or processes so as to do away with the need for service layer testing involving touching the MDF; or
- (iii) if reasonable demand from other CPs exists, launch by Openreach of an appropriate EOI Openreach "engineering assistance product" to support 20CN DSLAM installations and providing service layer testing.

3. Identification of the products involved

This request concerns LLU Associated Services.

The following diagram shows the current situation:



LLUO Connection Arrangements

The HDF is integral to the design of the Co-Mingling Product which was designed in agreement with LLUOs and provides a clear demarcation between their and BT's networks. This approach also provides CPs with the ability to connect to the wide range of DSLAMs available in the marketplace with the varying termination options they offer. Additionally it provides the CPs with the flexibility to jumper their DSLAMs to the LLU internal tie pairs in any way that they wish. CPs connect their TAMs to their DSLAMS and to the DSLAM-side of the HDF.

The LLU Co-Mingling Product is designed to terminate on an HDF, and the CP therefore cables from its DSLAM to the DSLAM-side of the HDF.

Having an HDF allows BT to complete the co-mingling installation and then hand over a finished site before the CP installs their DSLAM.

The current Co-Mingling Product therefore has clear benefits for CPs in a 20CN world and was designed in agreement with LLUOs.

BT Wholesale Connection Arrangements

BT Wholesale's DSLAMs are currently connected to the MDF without the use of an HDF using tie pairs, in one of the following arrangements, depending on whether a TAM is used and if so where it is placed:

- where no TAM is employed, the DSLAMs are connected directly onto the MDF using BT Wholesale-owned tie cables which are typically pre-cabled into the BT Wholesale DSLAM (scenario 1);
- where a BT Wholesale-owned ETAM or FTAM is used to provide a test access point, BT Wholesale tie cables connect between the DSLAM, TAM and MDF (scenarios 2 and 3) and are again typically pre-cabled into the DSLAM.

4. Description of the way in which the product is provided on terms other than EOI

The current process means that there are several differences between how BT Wholesale and other LLUOs consume LLU Associated Services.

How the order is placed

On completion of the co-mingling installation, CPs are able to purchase unbundled loops (MPF or SMPF) using standard processes and systems. The physical provision and all associated operational processes are identical in all ways, and the same systems are available for use by BT Wholesale and CPs to input MPF and SMPF provision and repair orders.

The order will however differ in the following way depending on whether BT Wholesale or a CP is placing the order. With respect to the tie pair reference, CPs will quote the HDF tie pair number while BT Wholesale will enter a DSLAM Port reference. There is no difference in either provisioning or repair timescales, or associated operational processes for MPF and SMPF, between CPs and BT resulting from this use, or not, of the HDF – e.g. the number of jumpering activities required for a new MPF/SMPF is the same. The necessary frames and field jobs will be provided identically and to the same lead times and processes. A similar approach applies to the repair systems as to provision.

Whether there are HDFs and LLU internal tie cables

LLUOs order HDFs as part of the Co-Mingling Product.

BT Wholesale does not purchase the Co-Mingling Product. It is responsible for the provision of certain infrastructure-related LLU Associated Services (e.g. Space, Power, Cooling), and it self-provides these directly. Further, the tie cables which connect the BT Wholesale DSLAM have historically not been considered as LLU internal tie cables, which is different from the status of the internal tie cables which connect the MDF to the HDF (which is the point of demarcation for LLUOs). BT Wholesale has always self-provided the tie cables which connect its DSLAMS and TAMs to the MDF.

A new product will therefore need to be developed by Openreach which enables BT Wholesale to purchase HDFs and LLU internal tie cables on their own (rather than as part of the existing Co-Mingling Product), and BT Wholesale will need to modify its DSLAMs/processes to enable them to be connected to the HDF and to LLU internal tie cables.

How the connection is made

LLUOs connect their DSLAMs and TAMs to the HDF, and the HDF is connected to the MDF by LLU internal tie cables.

The absence of the HDF impacts how BT Wholesale connects its TAM.

- If BT Wholesale connects an FTAM for broadband, it connects the FTAM directly to the MDF, whereas an LLUO would connect its TAM between the HDF and their equipment (but not directly onto the MDF). The tie cable running from the BT Wholesale DSLAM to the FTAM will normally be pre-cabled on the DSLAM.

- If BT Wholesale connects an ETAM (between the DSLAM and the MDF), the BT Wholesale tie cables are connected to the ETAM and then on to the MDF, or if no TAM is installed, the BT Wholesale tie cable is connected directly to the MDF.

Where there is no BT Wholesale TAM, BT Wholesale has historically needed to have access to the MDF with specific hand-held tester devices to carry out service layer testing.

Price

Because the Co-Mingling Product purchased by CPs include both HDF and LLU internal tie cables, the price charged to CPs will reflect the additional components.

It should be noted that CPs' tie cables connecting their DSLAMS and TAMs to the HDF (which CPs self-provide) are typically very short as their equipment is located next to the HDF. Conversely, the BT Wholesale tie cables which connect their DSLAMS and TAMs to the MDF are very long – and thus more expensive - than LLU internal tie cables consumed by other CPs. This is because BT Wholesale tie cables are effectively as long as the LLU internal tie cables consumed by CPs plus the CP-provided tie cables on the DSLAM-side of the HDF connecting CP equipment to the HDF.

Service layer testing

Service layer testing for legacy BT Wholesale DSLAM installations on which no TAM (FTAM or ETAM) has been installed will be outsourced by BT Wholesale to Openreach. Openreach engineers will conduct service layer tests on BT Wholesale's behalf using BT Wholesale-owned hand-held testers which interface specifically with BT Wholesale DSLAMs. This service layer testing service will be provided by Openreach to BT Wholesale only and will not be externalised.

5. Description of the solution proposed

The current Co-Mingling Product offered by Openreach to LLUOs includes the HDF, connectivity (LLU internal tie cables or other connectivity options such as Cablelink), and co-mingling space and infrastructure-related services provided by BT Wholesale (such as Power and Cooling). The current Co-Mingling Product sold to other CPs is not therefore an appropriate input to be purchased by BT Wholesale between now and the implementation of BT's NGN 21CN.

BT recognises that the HDF offers a clear and industry-recognised point of demarcation for the current LLU product, and that the use of an HDF is a transitory approach, which will in due course be overtaken by 21CN architectures.

This request therefore seeks the following:

1. HDF/LLU internal tie cables:

- a. No retrofitting of HDFs or LLU internal tie cables for existing BT Wholesale DSLAMs is required.
- b. During an initial transitional period up to and including 30 June 2007, BT Wholesale DSLAMs will continue to be provisioned and installed without HDFs and LLU internal tie cables between the MDF and HDF using existing processes.

- c. For any orders placed after 30 June 2007 and up until the switchover to 21CN (which will occur on an exchange-by-exchange basis) and at the latest by 31 December 2011, BT Wholesale will continue to use existing processes (no provision or installation by BT Wholesale of HDFs or LLU internal tie cables between the MDF and HDF) *only* for extensions to existing BT Wholesale DSLAMs installed in existing line suites that may require additional cabling between the BT Wholesale DSLAM and the MDF (or ETAM or FTAM, as the case may be).

The BT Wholesale DSLAMs described under points 1(a), (b) and (c) are referred to in this request as the "legacy BT Wholesale DSLAMs".

- d. For orders placed after 30 June 2007 and until the switchover to 21CN (which will occur on an exchange-by-exchange basis) and at the latest by 31 December 2011, BT Wholesale will use the new Openreach processes and will purchase the new HDF and LLU internal tie cable products offered by Openreach for any new BT Wholesale DSLAM installation. Although this new product and process will be offered on an EOI basis, other CPs will be likely to continue to consume the existing Co-Mingling Product which contains the other LLU Associated Services (e.g. Space, Power) which are necessary for other CPs but which BT Wholesale self-provides.
- e. The definition of BT Wholesale's "new DSLAM installations" with respect to this request includes all new or reused BT Wholesale DSLAMS that require new cabling and new rack framework, where such DSLAMS are to be installed:
 - i. at an MDF site that has not previously had a BT Wholesale broadband installation; or
 - ii. at an existing BT Wholesale broadband-enabled MDF site in a new area, in a new footprint or in a new line suite within that exchange.

The requirement to purchase the new Openreach HDF and LLU internal tie cable product shall apply to all orders relating to new DSLAM installations (as defined above) placed after 30 June 2007.

2. **Service layer testing:** On legacy BT Wholesale DSLAM installation on which no TAM (FTAM or ETAM) has been installed, service layer testing will be outsourced by BT Wholesale to Openreach, and Openreach engineers will conduct service layer tests on BT Wholesale's behalf using BT Wholesale-owned hand held testers which interface specifically with BT Wholesale DSLAMs. This service layer testing service will not be externalised and will be provided by Openreach only to BT Wholesale until the earlier of:
- a. switchover to 21CN (which will occur on an exchange-by-exchange) basis and at the latest by 31 December 2011; or
 - b. redesign by BT Wholesale of its equipment and/or processes so as to do away with the need for service layer testing involving touching the MDF; or
 - c. if reasonable demand from other CPs exists, launch of an appropriate EOI Openreach engineering assistance product to support 20CN DSLAM installations and providing service layer testing.

BT Wholesale will be charged for this service layer testing engineering service.

BT will proceed as follows during this time period:

- (i) During the period up to and including 30 June 2007, Openreach will develop a new process and product so that BT Wholesale is able to purchase HDFs and LLU internal tie cables from Openreach. The HDFs and LLU internal tie cables supplied by Openreach to BT Wholesale will be the same as those provided to other CPs, and will be provided on the same terms and conditions.
- (ii) To the extent that there is reasonable demand from other CPs for an Openreach "engineering assistance product" which would be available to all CPs on an EOI basis to provide Openreach engineering assistance to CPs, including carrying out service layer testing where no TAM is installed, Openreach will carry out a feasibility study within 3 months of CP demand for such a product.

6. Justification and impact on CPs

Any retrofitting of HDFs on existing BT Wholesale DSLAMs would be disproportionate in a number of respects as well as an unnecessary and undesirable diversion of resources away from other work which benefits CPs and end-users. Further, retrofitting would be disproportionate in light of the proposed 21CN solution which does not include a mandatory HDF.

The request to enable BT Wholesale to continue installing DSLAMs for a transitional period up to and including 30 June 2007 while Openreach develops new processes and a new product is reasonable and proportionate. This is because of its short duration and the significant process and systems development work needed to launch a new HDF/LLU internal tie cable product and process which BT Wholesale can use.

The differences in the actual ordering process are *de minimis* (entering different tie pair references instead of DSLAM Port references).

The request to enable BT Wholesale to continue to have limited access to the MDF under prescribed circumstances is reasonable and proportionate, and in particular will ensure there is no disruption of others' telecommunications services.

Annex 2

Letter from BT

A2.1 The text of the letter to Ofcom from BT providing additional information in relation to a number of its requests is reproduced below. The original letter has also been published on Ofcom's website.²⁶

14 December 2006

Sean Williams
Ofcom
Riverside House
2a Southwark Bridge Road
London
SE1 9HA

Dear Sean,

REQUESTS FROM BT FOR SPECIFIED EXEMPTIONS AND AGREEMENTS TO ITS UNDERTAKINGS UNDER THE ENTERPRISE ACT 2002- Part 2

Further to the published responses to Ofcom's consultation on these requests BT hopes the following comments, which are to be published, may be of assistance to both Ofcom and Industry.

Request 1: ISDN Conversion

This exemption request deals specifically with conversion to SMPF and not to MPF for which an equivalent process already exists. Discussions between Openreach and Communications Providers (CPs) on improvements to the conversion process to MPF, including automation perspectives, are already ongoing but the process and the discussions are not part of this request.

Request 3: Featureline

BT has noted the comments made with respect to possible migration issues and will work with CPs to identify and resolve issues concerning migration from BT Featureline solutions. That process of review will begin in early 2007 with a view to informing Openreach product development. To the extent that achievable improvements are identified which are not contingent upon the new Openreach EOI inputs, BT will, where reasonably practicable, aim to deliver those earlier.

²⁶ <http://www.ofcom.org.uk/telecoms/btundertakings/exemptionsandvariations/bt211206.pdf>

Request 4: Featurenet

For the avoidance of doubt we reiterate the commitment made in the exemption request that we will work with CPs to identify and resolve issues concerning migration from BT Featurenet solutions to those provided by other CPs. To the extent that achievable improvements are identified which are not contingent upon the new Openreach EOI inputs, BT will, where reasonably practicable, aim to deliver those earlier.

Request 5: Openreach Engineering Services

As the text makes clear this request is in relation to specific identified existing contracts only. Where an existing contract is extended under the terms of that contract, any Openreach engineering services provided under that contract that have been launched by Openreach on an EOI basis will be provided on the same terms, conditions and processes as are available to all other CPs subject to the provisions of that contract.

Request 9: LLU Associated Services in relation to BT's 20CN DSLAMs

BT has again revisited the dates in the exemption request to see whether further improvements can be made. Openreach intends to launch the new product to be consumed by BT Wholesale before the end of March 2007, in readiness for the April-June 2007 build period. This will enable BT Wholesale to consume LLU internal tie cables and HDFs. The Openreach product will also, as per industry consultation, enable CPs to choose from a range of demarcation points, including HDF, bare-ended coil or connectorised plug.

Subsequent LLU order and build process requires a period of 45-60 working days and further BT Wholesale connectivity commissioning and network integration with BT Wholesale's DSLAMs which will typically take a further 10-15 working days. Accordingly BT does not believe it is possible to bring forward the 30 June 2007 date currently in the request. We will however keep the position under review in case any earlier date can be achieved.

One of the industry responses also raised issues with regard to Netlocate. Netlocate is not EOI within the Undertakings and not part of the exemption request being consulted upon. The approach advocated in the response was also raised in the industry discussions with respect to Section 7 of the Undertakings but was not adopted in the industry agreements reached. Although not within the scope of this exemption we will of course be more than happy to discuss customers' concerns.

I hope the above comments are useful.

Yours sincerely,

Clive Ansell

Annex 3

Exemptions, agreements and variations wording (including Variation Number: 7²⁷)

WHEREAS:

- (a) BT has offered and Ofcom have accepted Undertakings pursuant to the Enterprise Act 2002, which took effect on 22 September 2005 (the "Undertakings");
- (b) BT has requested Ofcom to agree that certain sections of the Undertakings shall not apply to certain products (or will be modified), and to agree the application of section 5.46.2 to certain products;
- (c) On or before 21 January 2006, BT lodged draft applications with Ofcom in relation to section 5.46.2. In addition, temporary exemptions and agreements up to and including 22 December 2006 have been granted for a number of products in letters exchanged between Ofcom and BT²⁸;
- (d) Ofcom published a Statement on 15 June 2006 setting out certain exemptions and agreements to the Undertakings, which were agreed between Ofcom and BT;
- (e) This Agreement between Ofcom and BT sets out some further exemptions, agreements and variations (as set out in BT's requests annexed to Ofcom's Statement dated 21 December 2006); and
- (f) Access Services as referred to in the Undertakings has been established as Openreach since 21 January 2006.

NOW THEREFORE:

Ofcom and BT hereby agree:

1. Pursuant to section 5.46.2(a) BT and Ofcom hereby agree that section 5.46.1 shall not apply to any AS inputs (including, in particular, processes), concerning the conversion process from ISDN or Highway to the following BT products, up to and including 31 March 2007, the day after which will serve as an RFS date:²⁹

- (a) BT IPstream 500
- (b) BT IPstream S products
- (c) BT IPstream Home products
- (d) BT IPstream Office products
- (e) BT IPstream Max and Max Premium products
- (f) BT Datastream Office products
- (g) BT Datastream Max and Max Premium products

2. Pursuant to section 5.46.2(a) BT and Ofcom hereby agree that section 5.46.1 shall not apply to any AS ASDH2-based inputs into MegaStream Ethernet up to and including 30 September 2006, the day after which will serve as an RFS date for AS's inputs into such product, and thereafter section 5.46.1 shall not apply in respect of the installed base and orders pending on 30 September 2006 up to and including 30 June 2010, the day after which will serve as an IBMC date for AS's inputs into such product. If completion of migration

²⁷ See paragraph 10.

²⁸ Letters exchanged between Ofcom and BT on 20 January 2006, 19 April 2006 and 17 August 2006.

²⁹ See BT's request number 1 in Annex 1 of this document.

to BT's NGN 21CN is not going to be achieved by 30 June 2010, BT and Ofcom may agree a later IBMC date.³⁰

3. Pursuant to section 5.46.1(g) BT and Ofcom hereby agree that section 5.46.1 shall not apply to any AS inputs into Featureline products for the following periods:

(a) from the RFS dates set out in Annex 1, paragraphs 1, 2 and 3, of the Undertakings up to and including 31 March 2008, the day after which will serve as an RFS date (which is the date by which new Featureline customers shall consume WLR on an EOI basis as the AS input into Featureline); and

(b) from the IBMC dates set out in Annex 1, paragraphs 1, 2 and 3, of the Undertakings and thereafter up to and including 30 June 2010, the day after which will serve as an IBMC date (which is the date by which the installed Featureline base shall consume WLR on an EOI basis as the AS input into Featureline).³¹

4(a). BT and Ofcom hereby agree that pursuant to section 5.46.2(a) section 5.46.1 shall not apply with regard to any AS inputs (including in particular processes) into BT Wholesale to support the Featurenet product portfolio, up to and including 30 June 2008, the day after which will serve as an RFS date for AS's inputs into such products, and thereafter only in respect of the installed base up to and including 30 June 2010, the day after which will serve as an IBMC date for AS's inputs into such products. If completion of migration to BT's NGN 21CN is not going to be achieved by 30 June 2010, BT and Ofcom may agree a later IBMC date.³²

(b) BT and Ofcom hereby agree in accordance with section 5.12 as varied pursuant to paragraph 10 below that BT Wholesale may continue to carry out the same activities and processes as currently employed, including where this involves BT Wholesale carrying out activities that could be considered to fall within section 5.12 up to and including 30 June 2010 or such later date as BT and Ofcom may agree.

5. Pursuant to section 5.46.2(a) BT and Ofcom hereby agree that section 5.46.1 shall not apply to engineering services provided by AS to BT Wholesale and to the Downstream Division currently known as "BT Global Services" as follows:

(a) In relation to engineering services which are not provided by AS to other Communications Providers as at the date this Agreement takes effect, until the earlier of:

- the expiry or termination of each of the existing BT Wholesale and BT Global Services contracts as identified and agreed by BT and Ofcom at the date this Agreement takes effect; or
- the date such engineering services are launched by AS on an EOI basis (should AS decide to launch these services), which will serve as an RFS date, and for 12 months thereafter, the day after which will serve as an IBMC date.

(b) In relation to engineering services which are provided by AS to other Communications Providers at the date this Agreement takes effect, up to and including 31 December 2007, the day after which will serve as an IBMC date.

³⁰ See BT's request number 2 in Annex 1 of this document.

³¹ See BT's request number 3 in Annex 1 of this document.

³² See BT's request number 4 in Annex 1 of this document.

By 31 March 2007, BT will provide to Ofcom a detailed list of specific engineering services falling under sub-paragraphs (a) and (b) above, respectively.³³

For the avoidance of doubt, where an existing BT Wholesale or BT Global Services contract referred to in sub-paragraph (a) is extended under the terms of that contract, any AS engineering services provided under that contract that have been launched by AS on an EOI basis will be provided on the same terms, conditions and processes as are available to all other CPs subject to the provisions of that contract. Where any AS engineering services provided under that contract have not been launched by AS on an EOI basis, the provisions of paragraph 5(a) would continue to apply.

6. Pursuant to section 5.46.1(g) BT and Ofcom hereby agree that section 5.46.1 shall not apply to engineering services provided by AS field engineers to the Downstream Division currently known as "BT Global Services" in the Scottish Islands and the Scilly Isles up to and including 31 March 2008.³⁴

7. Pursuant to section 5.46.1(g) BT and Ofcom hereby agree that section 5.46.1 shall not apply to the services provided by AS to BT Wholesale in relation to the provision, repair, maintenance and upgrade of Private Circuits (including Partial Private Circuits).³⁵

In this Agreement "Private Circuit" means a circuit providing dedicated transmission capacity between an End-User's premise and another End-User's premise, or in the case of a "Partial Private Circuit" between an End-User's premise and a point of handover to a Communications Provider, using an interface as defined at G.703 or G.957 or X.21, all as published by ITU-T.

8(a). BT and Ofcom hereby agree that pursuant to section 5.46.1(c) section 5.46.1 shall not apply with regard to the provision by AS to BT Wholesale of engineering services under the 21CN Network Uplift programme, on an exchange-by-exchange basis until six months after implementation of BT's NGN 21CN and cutover at the last exchange, and at the latest by 31 December 2011, unless otherwise agreed with Ofcom.

(b) BT and Ofcom hereby agree that pursuant to section 2.1 (as amended by Variation #5 to the Undertakings) that access is "permitted" by AS people to BT Wholesale systems and by BT Wholesale people to AS systems, until six months after implementation of BT's NGN 21CN and cutover at the last exchange, and at the latest by 31 December 2011, unless otherwise agreed with Ofcom. Such access shall be for ring-fenced teams and solely for the purpose of implementing the 21CN Network Uplift programme.

9(a). Pursuant to section 5.46.1(b) BT and Ofcom hereby agree that section 5.46.1 shall not apply to any AS inputs into:

(i) the HDF and LLU internal tie cables (provisioning and process):

- for all existing BT Wholesale DSLAM installations and any DSLAM provisioned or installed up to and including 30 June 2007, on a permanent basis;
- for extensions to existing BT Wholesale DSLAMs installed in existing line suites that may require additional cabling between the BT Wholesale DSLAM and the MDF (or ETAM or FTAM, as the case may be), where the

³³ See BT's request number 5 in Annex 1 of this document.

³⁴ See BT's request number 6 in Annex 1 of this document.

³⁵ See BT's request number 7 in Annex 1 of this document.

orders are placed after 30 June 2007, up until the switchover to BT's NGN 21CN on an exchange-by-exchange basis and at the latest by 31 December 2011.

(ii) Service layer testing: until the earlier of:

- switchover to BT's NGN 21CN on an exchange-by-exchange basis and at the latest by 31 December 2011; or
- redesign by BT Wholesale of its equipment and/or processes so as to do away with the need for service layer testing involving touching the MDF; or
- if reasonable demand from other Communications Providers exists, launch by AS of an appropriate EOI AS "engineering assistance product" to support 20CN DSLAM installations and providing service layer testing.

(b) BT Wholesale will use the new HDF and LLU internal tie cable product offered by AS for DSLAMs other than those described at (a)(i) above, up to and including switchover to BT's NGN 21CN. Thereafter, BT Wholesale will use the industry-agreed EOI 21CN solution for LLU.³⁶

10. Pursuant to section 18.1 BT and Ofcom hereby agree that section 5.12 be amended by inserting "Except as otherwise agreed with Ofcom," at the beginning of this section.

Definitions and interpretation

Words or expressions in this Agreement have the same meaning as in the Undertakings.

References in this Agreement to section numbers are references to section numbers in the Undertakings.

In this Agreement "BT people" includes BT's employees, agents and sub-contractors as appropriate depending on the context.

For the avoidance of doubt, where it is herein agreed that the requirements of section 5.46.1 do not apply:

(a) information that would otherwise fall within the definition of Commercial Information, shall only do so if it relates to SMP Products; or, in the case of sections 6.10.3, 6.13 and 6.14, to products and services described in section 6.1.2.

(b) the requirement to provide the particular product or service by means of EOI systems and processes will also not apply and existing processes and systems may continue to be used. Such usage of existing processes and systems may continue beyond the dates that trigger systems separation obligations under sections 5.44, 5.45 and 8.5 of the Undertakings. However, this does not affect BT's obligations under sections 5.44, 5.45 and 8.5 of the Undertakings.

(c) the people providing the exempted services whilst working for AS, will not be deemed to work for the Upstream Division(s) or any of the Downstream Divisions, and hence section 5.35 will not apply. Similarly, section 5.35 does not apply where section 5.12 is varied as set out above in paragraph 4 of this Agreement.

³⁶ See BT's request number 9 in Annex 1 of this document.

Notices

Notices to be given under this Agreement shall be in writing.

Effect

Unless otherwise stated the agreements, exemptions and variations set out in this Agreement shall take effect immediately upon signature hereof on behalf of both parties.

Signed for and on behalf of British Telecommunications plc

Signature _____

Name _____

Position _____

Date _____

Signed for and on behalf of Ofcom

Signature _____

Name _____

Position _____

Date _____