

## Cover sheet for response to an Ofcom consultation

### BASIC DETAILS

Consultation title: **BCMR and LLCC consultations**

To (Ofcom contact): Martina Papadopoulou and Monika Kochanowska-Tym

Name of respondent: ✂

Representing (self or organisation/s): **Level 3 Communications (UK) Ltd**

Address (if not received by email):

### CONFIDENTIALITY

Please tick below what part of your response you consider is confidential, giving your reasons why

Nothing

☒

Name/contact details/job title

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Whole response

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Organisation

☐

Part of the response

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If there is no separate annex, which parts?

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Yes

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☐

Name

Signed (if hard copy)

Ofcom  
Riverside House  
2A Southwark Bridge Road  
London SE1 9HA

Sent via email

**Redacted version**

Dear Sir/Madam,

**Re: BCMR and LLCC consultations – Joint response from Level 3 Communications Limited and Global Crossing (UK) Telecommunications Limited**

Level 3 Communications Ltd and Global Crossing (UK) Telecommunications Limited acknowledge this opportunity to raise issues that may help inform the regulatory review of this highly significant market. As of October 2011, Level 3's US parent company Level 3, LLC acquired control of the Global Crossing group of companies, including Global Crossing (UK) Telecommunications Limited. Accordingly, the responses below reflect the combined company, which for ease of reference, we shall refer to jointly as "Level 3".

As a member of UKCTA, we have contributed to and support the UKCTA submission on this matter. If any points made below should conflict with the UKCTA position, then this submission should be taken to reflect our corporate position.

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There follows our response to the issues arising from and the various specific questions raised in both the BCMR and LLC consultations.

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## INTRODUCTION

The Business Connectivity market is a complex one and of considerable importance not only to Level 3's business but also the wholesale and high end enterprise customers that we serve. While the previous review of this market (BCMR1) in 2008 went some way towards addressing the competitive challenges we face, there remain numerous issues that we believe can and should be tackled at this stage.

In this current review, Ofcom rightly concludes that ex ante remedies remain essential if maximum consumer benefit is to be achieved, however Ofcom has made some bold proposals in terms of areas where deregulation may be possible and we welcome the opportunity to set out our thoughts on these points.

When considering a range of factors including product choice, price, conditions of supply etc, at both the wholesale and retail levels, it is Level 3's view that the UK market for business connectivity services is currently one of the most, if not the most effective in Europe. This is in no small measure due to a historically strong regulatory approach, particularly during the last 8 years.

The challenge for network investors is to ensure that maximum economic value can be derived from their investment and BCMR will give important signals to the community in this regard. In the following comments, while we support a number of the proposals that Ofcom has brought forward in order to achieve their stated objectives, we also raise some concerns and strongly urge Ofcom not to risk harming the excellent results that have been achieved to date by taking too hasty an approach to deregulation.

Since BCMR1, we have witnessed only limited levels of capital investment in access network assets by alternative operators. Concurrently (i) end users' capacity demands have been steadily rising in recent years and this trend is set to continue well into the future and (ii) the anticipated swing away from PPC towards Ethernet solutions is far from universal and we anticipate that by the end of the next review period in September 2015, there will remain a significant residual end user demand for services provided via PPC capacity, particularly at 2Mb/s where there exists a large legacy base of TDM customer premises equipment.

Several developments have affected us during the last 4 years which were not (or were only partly) anticipated in 2008. Significant amongst these have been ✂

It seems to us that these developments, together ✂ have hindered market competitiveness.

To the extent that this submission is silent on any matter, then we ask that our previous submissions (notably our response to Ofcom's call for inputs in June 2011) be taken into account.

## **GENERAL**

### **Cost Orientation**

Since BCMR1, there have been multiple disputes in relation to BT's supply of business connectivity services. Those disputes relating to pricing and BT's failure to comply with its cost orientation obligations have required considerable resource to resolve, not only via the Ofcom dispute process, but also through the courts. Although this has been a costly and resource intensive process for all parties, the end result has been the removal of regulatory uncertainty regarding cost orientation requirements and, we believe, a successful model on which to develop a highly successful future market which will increasingly make use of new and more cost-efficient technologies.

We recognize Ofcom's objective to apply only a minimum set of remedies that are needed in order to achieve its objectives. However, ~~✗~~ and it will take time to convince us that the problems have all been identified and resolved. It has taken a considerable time to reach the stage where all parties, including BT, now understand the full implications of the current cost orientation obligations. The mechanism for BT to demonstrate compliance is now clearly established and its removal would not, in our view, significantly reduce BT's operating costs. We firmly believe that any deregulatory measure to remove cost orientation obligation at this stage is premature and cannot understand why Ofcom believes that it would be proportionate to take such a bold step at this time. It would be more appropriate to signal a presumption of removal at the end of the next 3-year term provided no significant new concerns arise either with BT's RFS or its behaviour in delivering against the requirements of the BCMR.

### **Cost Allocation**

In addition to our concerns over the reliability of BT's reported figures, we are uncertain from reading the condoc precisely which 21CN costs Ofcom is proposing to permit BT to recover. We would therefore welcome a more comprehensive explanation than has been given to date.

It appears to us that BT will be permitted to recover EMP costs, which we submit is incorrect. The requirement originally arose because of BT's failure to comply with its obligation in the 2005 Undertakings to achieve a full separation of its legacy back office systems by 2010, the cost of which are within BT's control. Our view is that these costs should be borne by BT and we ask that Ofcom carefully reconsiders whether it is appropriate to permit cost recovery for EMP, and to publish the full reasoning behind its decision.

Openreach products are increasingly being made available via EMP based systems. We are concerned that there is no clear sight of how and where Openreach is recovering its internal costs incurred in developing and establishing a number of complex Business to Business (B2B) interfaces on this platform. This is particularly so since we understand that, at least until the portal it is considered usable by CPs to meet their business needs, it is BT LOBs active in the AI market that in practice are likely to be the dominant beneficiaries. We would therefore expect these LOBs to be making a full or at least significant contribution towards EMP development costs.

In comparison, we are concerned that when a CP approaches Openreach to develop a new solution, particularly in the more mature copper space, the indicative charges quoted for such developments are normally much higher than we have anticipated. Consequently, industry too frequently loses interest and instead pursues more manual tactical solutions in order to circumvent the expensive development cycle.

Ofcom's proposal to adopt the Modern Equivalent Asset (MEA) approach for Ethernet Services but seemingly not for Traditional Interface services is somewhat concerning. As discussed in our CFI, BT declared their efficient 21CN core safe to connect as of 08/04/11, although BT have stated they will only use this as a last resort, Level 3 would ask Ofcom to consider if the MEA approach to TI services would help keep TI trunk pricing down.

We do not feel it appropriate for the costs associated with BT 21<sup>st</sup> CN to be included within the Ethernet basket and find it difficult to understand Ofcom's rationale. In 6.83 of the LLCC consultation Ofcom reference a network upgrade that was necessary to provide the networked Ethernet services, EAD, EBD and BTL services. In our submission, this argument is fundamentally flawed as the 21CN network is not used to deliver either EAD or BTL for external CPs. BT's own Harmonized Ethernet product used by the internal LOBs do make use of this to deliver services as we have discussed elsewhere in a more efficient manner than external CPs are able. Accordingly, we believe that it would be reasonable for Ofcom to make further adjustments to the costs that BT is permitted to recover.

Furthermore as discussed in our BCMR response, only a proportion of the 21CN network is made available for CPs over which to purchase EBD. Also that section of the 21CN network which is made available to external CPs is only partially available. In our response below, we reference 13 chains that remain incomplete.

Additionally again referenced below, BT upgraded its 21CN network to make this '40Gb ready'. We can only assume that this is for internal consumption only thus offering further efficiencies in the delivery of the internal LOBs' Harmonized Ethernet product as the ability to backhaul using 40Gb EBD is not a product available to external CPs. Nor is such a development on the Openreach Roadmap so it would seem inappropriate for BT to be able to recover this element within the AI basket.

We urge Ofcom to rethink its approach to cost allocation in the areas we have highlighted. Finally, we also observe that BT has now published its RFS for 2011/12. We consider it essential that these figures should be analyzed thoroughly for charge control implications before the final Statement is published.

## **Charge Controls**

In addition to our specific comments below, one of the main benefits of these controls is to give both BT and CPs a high degree of certainty over future price trends. In this regard, we very much welcome Ofcom's continuing support for this measure. In most cases, prices have been dropping year-on-year, although we appreciate that because the PPC product is nearing end of life, there are few if any further cost reduction measures available and hence regulated prices have stabilized.

Many of our customers have an enduring reliance on services that we supply over 2Mb/s PPC circuits and it is of concern us that there will be a significant prospective rise in prices for 2Mb/s TI services over the 3-year control period. For our customers, the decision to migrate away from TDM services is a complex one and would prefer to see a tighter control than has been proposed.

## **Price Setting at Wholesale Level**

While we see benefits arising from pricing certainty, we are nevertheless concerned that the proposed basket and particularly sub-basket arrangements will give the SMP provider too much flexibility to influence the market.

Further, the notion of price floors and ceilings between LRIC and SAC has historically provided protection against not only overcharging but also predatory price squeezes. While the proposed basket approach may have been acceptable to us had a cost orientation obligation been retained in parallel, Ofcom's proposal to both remove the cost orientation obligation and associated accounting obligations and permit considerably increased price flexibility is of serious concern.

## **Migrations**

In the forthcoming years, the markets covered by this charge control are expected to go through significant change. We discuss in our BCMR response the difficulties Openreach seemingly have in supporting the requirement to enable migration from a BT Wholesale PPC product to an Openreach product.

It is notable that Openreach has launched a migration product to stimulate movement from WES to EAD however this is limited to upgrade scenarios only and that there is currently no ability to either migrate 'like for like' ie from an existing 100Mb WES product to an 100Mb EAD product or to incorporate an A end shift, remembering that most CPs have been lured into the BT exchanges seeking the lowest cost Local Access variants, CPs are left with a legacy estate of WES circuits that terminate in remote POP sites.

Openreach has notified their intent in briefing ETH029/11 the withdrawal of all modify scenarios (Upgrades, Internal Shift, External Re-site and External Rearrange) from 1 June 2013 and the end of product support from 1 June 2015, thus without the ability to either migrate like for like or incorporate the ability for CPs to perform a shift during migration we are likely to see CPs WES circuits become stranded assets and forced into a less than ideal provide and cease 'migration' arrangement where CPs will be forced to incur new connection fees and be subject to a new 12 month term.

We feel that Ofcom could do more to assist migration of legacy services. One of the apparent barriers to the development of an effective suite of migration products is the fact that two or more distinct BT lines of business are organizationally responsible for different elements. In our view, the problems are not insurmountable and the path forward to achieving solutions will be unblocked if there is a sufficiently specific mandate from Ofcom to achieve a particular outcome within a given timeframe and cost-effectively for CPs.

## **WECLA**

In addition to our comments below regarding WECLA, we are concerned that the wording of the proposed remedy is insufficiently tight to prevent bypass. For example, as worded, it appears to us that OSA could evade the remedy provisions.

Furthermore, the wording of the proposed remedy in relation to circuits between WECLA and non-WECLA destinations appears to raise some questions of interpretation and we invite Ofcom to ensure that the final wording of the relevant SMP condition is absolutely clear and explicit.

## **EAD**

In the BCMR consultation para 2.21 Ofcom states:

*“Until 2008 BT provided Ethernet leased line services by linking optical fibres to create a continuous optical path between the two end-user sites of each Ethernet leased line. This meant that each Ethernet service used a dedicated fibre link. Since then, BT has upgraded its national transmission network with modern Ethernet and WDM equipment. The new design allows BT to aggregate services efficiently, so that several leased lines and other services can share a single optical fibre where their respective routes coincide between BT’s exchanges.”*

We are unclear whether Ofcom believes that this is how Openreach provide EAD today

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## **MEA**

While we fully agree with Ofcom’s support for MEA adjustments, we are not fully convinced by the detailed economic analysis. Intuitively, it seems to us that the potential savings have been underestimated but we have been unable to perform a full analysis ourselves in order to support our concerns. More specifically, we would have expected to see significantly greater savings accrue as a result of single fibre working than has been suggested so we would welcome a further review of the data in the final Statement.

## **VULA**

Ofcom refers to VULA as a service agnostic and uncontended Ethernet connection to the end user that could be used to provide a leased line service (ie dedicated symmetric transmission capacity to carry voice and/or data traffic). We understand that Openreach believes their Generic Ethernet Access (GEA) technology will satisfy VULA demand. We certainly see the potential that VULA will affect both the TI and low rate AI markets within the period of the next 3 years.

We would expect to see considerable growth within the next 3 years as CPs look to move their relatively low cost low bandwidth TI services to replacement technologies ahead of the DPCN closure whilst also look to continue to make year on year cost savings in their AI estate. However, we strongly doubt whether the current GEA offering is a viable product in its current form. In the absence of significant product development, our concern is that GEA will fail to meet business consumer and CP needs, and see little incentive on BT/Openreach to invest in further development of GEA, therefore we invite Ofcom to develop a suitable framework within which the shortcomings of the GEA product can be fully identified and addressed.

## Issues Arising From 2008 SLA/SLG Direction

CPs have recently raised a number of frustrations during the recent Connectivity Services contract review in respect of the current SLA/SLG arrangements and incompatibility with the 2008 SLA SLG Direction. While that Ofcom has not specifically asked any questions in this regard, we observe that BT has declined to engage on SLA/SLG issues points in anticipation of the BCMR. It is therefore our understanding that BT expects the final Statement to make reference to this subject.

In particular, CPs continue to be confused by (i) BT's ability to use Deemed Consent in AI to move out the contractual CDD during the provision process and (ii) the overall quantum of delay that is applied in proportion to standard lead times. Under the current scheme, BT is able to work the process in such a way as to recover any lost time incurred for example due to lack of BT planning resource. This is particularly so in the stage prior to until KCI3 (Keeping Customers Informed milestone 3) that marks the end of the planning process and when CDD is made firm. In a 30 working day delivery cycle this currently occurs until approximately working day 14, ie 50% of the way through the provision cycle, and is not only a significant problem for business customers, but a major source of concern to CPs .

The movement to an EMP (Equivalence Management Platform) based system under the EST (Ethernet Strategic Transformation) project has brought with it the ability to move the CDD back in the event of a successful challenge from the CP. However, BT remains reluctant to introduce a change to the contract wording that reflects this.

As a proposal, Level 3 suggests that Ofcom (or the OTA on Ofcom's behalf) should undertake a full review of the effectiveness of the SLA/SLG Direction with a view to implementing changes should the evidence suggest that they are necessary. In particular, we suggest that attention be paid as to whether or not the current ability of BT to amend CDD without the customers agreement is consistent with the overarching principle of maximising benefit to end users/consumers.

## Applicability of EOI

As Ofcom will be aware from our previous submissions, notably our response to the BCMR call for inputs, we have become concerned at the increase of instances where BT, particularly Openreach, seek to provide services on a 'price on application' basis. What seems to us to be at the root of our concerns is that nowhere in BCMR1 did Ofcom explicitly confirm that EOI should apply at all Ethernet bitrates, independently of SMP findings. It would be of great benefit to us and, we assume, other CPs if Ofcom would set out their views on the applicability of the Undertakings as being independent of SMP remedies.

## Possible Dark Fibre Remedy

We discuss below that despite Ofcom's proposed rejection of the idea, there may still be a case for a passive remedy such as dark fibre in certain circumstances. For example, if BT is unable to deliver a workable and economically efficient high density handover product, be it VLAN or direct/dedicated access, then Ofcom should not foreclose the imposition of a suitable passive remedy.

In our view, the VLAN option would ✂

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## New/Replacement BT Products



One of the weaknesses in the previous BCMR was that little or no attention was paid to this issue and we welcome Ofcom's acknowledgement that the regulatory regime must cater for such developments. However, we question whether Ofcom's approach is sufficiently objective as it appears to support a 'wait and see' stance as to whether any new ex ante remedies are required, based on Ofcom's subjective analysis of the significance of impact that will arise. Ideally, we would prefer to see a more prescriptive approach, but in the alternative, there should be a rebuttable presumption that a new product will require a regulatory remedy, the final decision being opened to consultation.

Justification for the use of a Modern Equivalent Asset approach to new service pricing is based to a degree on the assumption that all WES services will be migrated by year 3. In our view, this is not fully supported by either the market dynamics as we understand them or experience of mass migrations to date.

While this may not have a major economic impact on the pricing decision, we nevertheless believe that it is a sufficiently important point to warrant the publication of additional analysis in the final Statement.

We note that Openreach has launched a migration product to stimulate movement from WES to EAD however this is limited to upgrade scenarios only and that there is currently no ability to either migrate 'like for like' ie from an existing 100Mb WES product to an 100Mb EAD product or to incorporate an A end shift. Mindful that most CPs have been attracted into the BT exchanges in order to achieve the lowest cost Local Access variants, CPs are left with a legacy estate of WES circuits that terminate in remote POP sites. We also note that Openreach has notified their intent in briefing ETH029/11 the withdrawal of all modify scenarios (Upgrades, Internal Shift, External Re-site and External Rearrange) from 1 June 2013 and the end of product support from 1 June 2015, thus without the ability to either migrate like for like or incorporate the ability for CPs to perform a shift during migration we are likely to see CPs' WES circuits become stranded assets and CPs being forced into an inefficient provide and cease 'migration' arrangement where CPs will be forced to incur new connection fees and be subject to new 12-month contractual terms. We feel that the migration precedent set by Oftel in its March 2001 Determination that this process should be 'penalty free' for the CP is an excellent one and strongly urge Ofcom to take a similar approach here in order to avoid disproportionate costs and onerous contract terms being borne by CPs.



## SECTION 1

### BCMR CONSULTATION QUESTIONS

#### Question 1:

**Do you agree with our approach to retail market definition and our proposed retail product market definition?**

Although Ofcom's approach is broadly in line with that taken in BCMR1, and we generally agree with Ofcom's proposal to separately define a new high bandwidth market, we are unclear whether the drivers for consumer behaviour have been fully understood.

In Section 3 of the condoc, Ofcom concludes that broadband and leased lines continue to fall into separate markets. We are surprised by this finding and unconvinced by the supporting analysis because we are noticing that a significant number of customers that would have traditionally consumed low speed AI services are now switching to low cost broadband in order to meet their needs. In the final Statement, we invite Ofcom to provide further analysis as to why the emerging existence a new business connectivity market that encompasses business consumers of broadband services does not yet exist at the retail level and the potential for future change in this regard.

#### Question 2:

**Do you agree with our approach to wholesale product market definition and our proposed wholesale product market definitions? In particular, do you agree with our proposal to define a Multiple Interface Symmetric Broadband Origination (MISBO) market?**

We broadly agree with Ofcom's proposal to separately define a new high bandwidth market, however, we would still support primary market separation between Access & Backhaul. We note in the BCMR condoc, Ofcom comments in para 1.17 that CPs are likely to purchase access & backhaul together. Whilst we feel this is generally true for Traditional Interface (TI) products this is less so for Alternative Interface (AI) or Multiple Interface (MI), here CPs would purchase AI products separately for either the purpose of Access or Backhaul and are less likely to purchase together. CPs would also need to purchase an Access Locate space to use AI circuits together within a BT exchange. As we noted in our response to Ofcom's call for inputs:

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Openreach has signaled the withdrawal of WES/WEES/BES 2.5 & 10G in August 2013 (Ref ✂). This raises significant questions as to the effectiveness of the proposed MI remedy. Assuming Openreach continue with its service withdrawal plans then we would ask Ofcom to consider requiring Openreach to mandate the continued supply of WES/WEES/BES 2.5 & 10G until a viable substitute is made available.

The form of substitute that we have in mind could be Optical Spectrum Access (OSA) with a single interface (including Resilient Option 2 (RO2) scenarios) with chain configurations that would replicate a number of point to point single interface circuits.

In support of the argument for inclusion of OSA, we note that Openreach is proposing the sale of OSA to CPs for backhaul between BT exchanges either where the 21CN WDM network and Ethernet Backhaul Direct (EBD) are not available or where the 21C WDM network exists however Openreach has not made this solution available to EBD. The enclosed excel spreadsheet shows 13 WDM routes where this is the case.

To qualify Ofcom's observation in para regarding CPs' use of leased line services 4.3 – we note that while AI services can be used for this purpose, CPs are not permitted to use PPC services in order to self-supply. This constraint appears to be asymmetrically applied, since we do not believe that mobile operators are constrained in the same way in relation to their use of RBS for this purpose.

We agree that Ofcom have correctly summarized the five main issues that arise from its assessment of the product market definition and our comments follow:

**Issue 1.** We maintain our view that the distinction between AISBO and TISBO markets is essentially an artificial one based on technological and BT organizational differences as opposed to distinct differentiation based on customer and supplier behaviour. For as long as these differences persist, barriers will be created which will frustrate the efficient switching from one technology to the other by CPs and consequently consumers.

Level 3 (Global Crossing) assumed responsibility as the lead CP for SoR8078 (formally 6388 raised by BT Wholesale on 04 Oct 2007) to develop a migration product from a BT Wholesale-supplied PPC circuit to a suitable Openreach product. Unfortunately, there has been little progress to date. Furthermore, we understand that other CPs have reencountered similar problems and have proposed alternative solutions, however none of these has borne fruit to date.

In Feb 2012, Openreach indicated at the Ethernet Product & Commercial Group during a discussion that the OTA has now been involved in seeking to develop an effective migration process. Our understanding is that OTA has identified that a substantial factor in the lack of progress to date has been because the different product sets are managed by separate BT lines of business (LOB). In our view, it is unreasonable that such a factor could not have been overcome, and we therefore urge Ofcom to intervene and mandate the development and launch of an effective and efficient solution within a reasonable period of time.

We note that a number of other CPs also noted that there were still significant barriers to switching from TI to AI products.

While we appreciate the challenges created by BT's organizational structure, where BT Wholesale is the provider of regulated TI (PPC) products and Openreach the provider of regulated AI (Ethernet) products, we do not accept that the two parts of the organization should be unable to work together to develop an effective and inexpensive migration capability.

**Issue 2.** We agree with Ofcom's assessment that that there is only one market for all leased line services supporting very high bandwidths. Level 3 also welcomes the findings of a Multiple Interface Symmetric Broadband Origination (MISBO) market however as described above, we are unclear of the implications

of Openreach's intention to withdraw WES/WEES & BES 2.5 & 10Gb services and see a significant risk that the proposed remedy will be ineffective unless it is more precisely specified.

**Issue 3.** We note that Radio access links are only offered by BT Wholesale as a last resort if existing capacity exists rather than that of the CPs choosing within the TI market and no such option currently exists from Openreach.

As already mentioned, we disagree that access and backhaul network elements are predominately purchased together within an AI market. Currently, Level 3 has ✂

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As Ofcom notes, the potential for CPs to achieve economies of scale in backhaul is limited. Not only do we see the current arrangement a barrier to entry, but we further observe that this approach materially distorts the efficiencies which respective Altnets are able to achieve in comparison to one another, due to the effect of scale.

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In Ofcom's review of competitive backhaul, Ofcom considers the average number of CPs buying the external Cablelink product. We feel that this approach is somewhat weak as it does not assess a CP's ability to purchase backhaul from the relevant BT network node on comparable routes (Intra exchange) available from BT or that competitive backhaul is in fact be available from the CPs present. We also observe that where Ofcom has found that at some exchanges multiple external Cablelink products have been purchased, this is predominately due to the inefficient way in which BT terminates the CPs fibre in the BT exchange. It has been Level 3's experience that ✂.

It is our contention that there are more efficient ways in which cable capacity can be realized and that Ofcom should assume that this inefficiency is removed and the benefits factored into Ofcom's analysis.

**Issue 4.** Ofcom has considered whether or not to identify separate markets for leased lines used to support mobile backhaul, LLU backhaul and CCTV or to include them in either AI or TI wholesale markets. However, Ofcom's conclusion proposes not to include CCTV, Broadcast Access and Street Access in either AISBO or TISBO markets (per para 4.332) based upon analysis of demand and supply side characteristics, but we do not believe that sufficient evidence to support this conclusion has yet been published. It also remains unclear to us whether Ofcom considers that there is a separate market for LLU & Mobile backhaul.

**Issue 5** (bandwidth breaks). As argued above, Level 3 maintains the view that the distinction between AISBO and TISBO markets is essentially a somewhat artificial one based on technological differences. We support the principle that the primary market separation should be at a physical one and not based on bandwidth breaks. However, if bandwidth breaks are to remain, then Level 3 agrees that the proposed breaks remain logical and welcome the inclusion of MISBO. However, we feel that the consequence of this approach will be for BT to supply downstream LOBs backhaul using OSA instead of EBD, which again will undermine the notion of equivalence, unless appropriate safeguards are put in place.

With regard to recovery of 21CN costs within the AI basket, we are concerned that Ofcom's proposed approach will also enable BT to recover potentially stranded asset costs that have been inefficiently incurred, for instance, the deployment of excessively high specification cards cable of offering 40Gb bandwidths which have not been made not available to external CPs. We believe the solution to this issue needs also to cater for the consequences of BT's intended withdrawal WES/WEES & BES 2.5 & 10Gb products from August 2013.

**Question 3:**

**Do you agree with our approach to geographic market definition and our proposed geographic market definitions? In particular do you agree with our proposal to define a larger geographic market in London (the WECLA)?**

We agree that the postcode sector is the most appropriate geographic unit providing an appropriate trade-off between granularity and practicality.

However, while we fully agree with Ofcom's analysis of BT's proposal that market characteristics be defined at a very granular level, we strongly question Ofcom's decision to rely upon the Experian Business Database of businesses with more than 250 employees as a proxy for assessing demand. We would much rather that analysis of actual demand be carried out, if necessary for practical purposes, within a selection of typical geographic areas in order to derive statistically reliable results. As a consequence of the 250 seat approach, we believe the results have been distorted and hence the derived market share conclusions are unreliable.

We find it difficult to understand, from the information published in the condoc, why Ofcom continues to regard 200m as the appropriate flex point. This is despite Ofcom's own findings showing a median of only 22m and an average of 65m dig distances. Level 3 would invite Ofcom to provide a more comprehensive analysis of this point than has so far been made available.

Level 3 is concerned that because BT recovers its dig costs from CP customers via Excess Construction Charges, this could have introduced significant distortions to Ofcom's analysis. ECCs essentially remove investment risk and we do not accept that an assumed economic build distance of 500m for industrial estates and retail parks and 300m for shopping centres and 200m in financial and business districts can be correct, considering the competitive conditions that prevail in the current market.

As a proposal, we believe that a more reasonable maximum distance assumption of 100m would be a more appropriate flex point in urban areas. If the Experian business database (on which we have commented above) were to be applied on the basis of a 100m flex point, we question how Ofcom's findings may change when using a model based on a maximum 100m dig distance.

We also question Ofcom's presumption that competitive pressures and market dynamics are likely to exist where two or more CPs are locally active as, absent an ex ante obligation, this presupposes a willingness by those CPs to supply wholesale service to their competitors at that location.

We note Ofcom's concern (para 7.218) that there is likely to have been a misclassification of CP data in relation to WECLA. A reduction in BT's market share from a volume of 59% to 41% between BCMR1 and BCMR2 seems highly unlikely and, in our view, creates an unreliable data set on which to base market share analysis. In the absence of reliable data, we question whether it is safe for Ofcom to derive the important conclusions that it has reached regarding questions of dominance in this area. Accordingly, we submit that this unreliable information should be discounted when considering BT's market power in the WECLA MISBO market.

**Question 4:**

**Do you agree with our approach to product and geographic market definition for wholesale trunk and do you agree with our proposed market definitions for wholesale trunk?**

In respect of TISBO services, we broadly agree with Ofcom's general approach to product and geographic market definition for wholesale trunk.

The TAN construct within the AI market has in our view failed to deliver the intended benefits and almost gave to implementing routing restrictions that would have, in at least the more dense locations such as London severely impacted the commerciality of Altnet Ethernet products. ✂

We do however question the benefit of the TAN concept within the AI market today, the original expected benefit to CPs of being able to sit in 56 TANs to achieve near 100% coverage of the UK was clear and indeed a desirable outcome for us, similar to that which we enjoy today in TI. Level 3 still believes this would provide benefit to the industry as a whole if indeed BT were required to deliver this under an SMP condition as would solve many of the current issues CPs have today for example in using much limited space and power in BT exchanges.

BT however clearly felt there was no obligation on them to deliver such a product under any SMP condition following the 2008 BCMR and until such time as there is it would appear that there is no benefit in introducing TANs to the AI market for Altnets and so Level 3 would urge caution over any desire to do so.

Furthermore, although it is now four years since the requirement was raised in the 2008 BCMR, CPs still have no view of which BT exchanges would fall into which TANs other than the 56 OHPs originally listed and so it is difficult for CPs to assess the impact of the additional clarification given in the 2012 BCMR that makes it clear that BT is required to provide AI across TAN boundaries.

On a separate matter, ✂

Finally, in para 6.136 Ofcom makes reference to EAD having a technical limitation of 25km radial distance, this is not strictly true, 25km is a distance BT have claimed in the past is a Regulatory one and that the current 40km route distance is one which BT have calculated they can deliver to taking into account an unknown number of splices within the network so will be a conservative view.

**Question 5:**

**Do you agree with our approach to SMP assessment?**

While we agree with Ofcom's approach methodology, we have concerns that there are specific areas that would benefit from further analysis, notably in Ofcom's assessment of (i) MISBO in WECLA and (ii) national cf. regional trunk markets.

**Question 6:**

**Do you agree with our assessment of SMP for the retail low bandwidth TI market in the UK excluding the Hull area?**

Subject to our misgivings in relation to business user consumption of broadband, as noted above, we agree with Ofcom's assessment of SMP for the retail low bandwidth TI market in the UK (excluding Hull).

**Question 7:**

**Do you agree with our assessment of SMP for the wholesale TISBO markets in the UK excluding the Hull area?**

We agree with and support Ofcom's assessment of SMP for the wholesale TISBO markets in the UK (excluding Hull).

**Question 8:**

**Do you agree with our assessment of SMP for the wholesale AISBO markets in the UK excluding the Hull area?**

We agree with and support Ofcom's assessment of SMP for the wholesale AISBO markets in the UK (excluding Hull). We are however somewhat surprised that only 60% of low bandwidth AISBO services sold by Openreach are internal sales. In previous discussions across industry we had assumed this was closer to 90%. Unless there is a reason to explain this difference, such as a change to the counting methodology, then we would suggest that Ofcom should confirm the data. Perhaps Ofcom could be assisted in this matter by the OTA who could sense check the Ofcom data against the figures they have seen when investigating SLA/SLG issues.

**Question 9:**

**Do you agree with our assessment of SMP for the wholesale MISBO markets in the UK excluding the Hull area?**

For reasons already given in relation to WECLA, we are cautious about fully supporting Ofcom's assessment of SMP for the wholesale MISBO markets in the UK (excluding Hull).

**Question 10:**

**Do you agree with our assessment of SMP for the wholesale TI regional trunk market and the wholesale TI national trunk markets?**

In respect of the National cf Regional Trunk market assessment, while we see merits in the C&W proposal (per para 6.113) of using TAN areas as a proxy, we believe that this approach may be somewhat too restrictive, largely due to geographic features. Difficulties would arise where a relatively

short trunk service may cross three TAN boundaries. Two possible counter proposals may be worth considering a Tan-Tan-Tan model (ie three TANs).

**Question 11:**

**Do you agree with our assessment of SMP for the retail low bandwidth TI market and the retail low bandwidth AI market in the Hull area?**

We agree with and support Ofcom's assessment of SMP for the retail low bandwidth TI markets in the Hull area.

**Question 12:**

**Do you agree with our assessment of SMP for the wholesale TISBO and AISBO markets in the Hull area?**

We agree with and support Ofcom's assessment of SMP for the wholesale TISBO and AISBO markets in the Hull area.

**Question 13:**

**Do you agree with our approach to remedies and in particular our consideration of the case for imposing passive remedies?**

For reasons set out in the UKCTA submission, we do not agree that the proposed approach to remedies is sufficiently strong and that it is too early to safely remove the requirement on BT to ensure cost orientation, along with associated accounting obligations. The text of the condoc does not, in our view, clearly set out a cogent case for removal and we strongly encourage Ofcom to give further consideration to this issue.

As Ofcom will already know, ✂

Because of the specialist nature of the RFS, accuracy takes many years to establish and hence we propose that Ofcom delays removal of the cost orientation obligation until at least the next BCMR, by which time ✂

In respect of the consideration of passive remedies, we are unconvinced by the suggestion in para 8.63 that the introduction of passive remedies would result in increased prices to consumers. Given the importance of this issue, we would have expected to see a more detailed rationale in support of the cause and effect aspects of Ofcom's argument. In particular, because BT's WLR/LLU products are likely to be in decline during the coming years, BT will require some alternative method of recovering their common costs associated with these products and because this may have implications for the Business Connectivity market, we would welcome Ofcom's guidance as to whether any of these costs are likely to be shared with Business Connectivity products in future.

We do not agree with Ofcom's preliminary conclusion in para 8.95/6 that it would be inappropriate to apply a passive remedy at this stage. We do acknowledge that the introduction of such a remedy would entail a degree of risk, but it is our view that this risk can be largely constrained if a passive remedy were to be introduced in relation to densely populated geographic areas and the supply of connectivity to large data centres.



**Question 14:**

**Do you agree with the remedies that we propose for BT in the low bandwidth TI retail market in the UK excluding the Hull area?**

We are concerned that the removal of all constraints on 2Mb/s retail supply conditions, including pricing, may be premature. For example the withdrawal of DataStream products will create a need for purchase of replacement alternatives. In particular, we note that many of our customers, including HMG, have a need for a replacement product to be accredited at IL2 for security reasons. The 2Mb/s private circuit is so accredited and is therefore likely to ✂

The absence of supply constraints would therefore ✂

**Question 15:**

**Do you agree with the remedies that we propose for BT in the wholesale TISBO markets in the UK excluding the Hull area and the wholesale TI regional trunk market?**

Our concerns with Ofcom's proposal are set out elsewhere in this response.

**Question 16:**

**Do you agree with the remedies that we propose for BT in the wholesale AISBO markets in the UK excluding the Hull area?**

In para 11.13 of the condoc, we note that Ofcom encourages BT to continue to work with industry to develop ISH interconnection in support of AISBO services at the relevant bitrates. As Ofcom will be aware, this is a long-running issue which predates the 2008 BCMR has been formally raised by Industry through the SoR process. We are very concerned at the lack of progress to date. Openreach has repeatedly raised objections on multiple grounds (lack of available physical space, extension of scope beyond WES Aggregation and EBD, etc) and has effectively prevented progress.

Furthermore, Openreach has begun to justify rejection of SoRs on the basis of a perceived lack of commercial viability which in our view is impossible for industry to police, and we fear that this tactic will continue to be engaged in order to thwart pro-competition developments such as AISBO interconnect. We are therefore convinced that, in the absence of an explicit obligation on BT to deliver this product, a satisfactory outcome will not be achieved. If Ofcom were to designate AISBO interconnection as an essential network interconnection capability, then the way forward could be significantly cleared.

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**Question 17:**

**Do you agree with the remedies that we propose for BT in the wholesale MISBO markets?**

We agree with Ofcom's view not to implement a differential remedy for data centres and would propose that Ofcom perform a targeted S.135 data capture at an appropriate point, once the effective WDM interconnection product that Ofcom suggest is the catalyst for this, has become an established solution within the market.

While single interface remedies will provide some comfort, these will not achieve full equivalence with BT's own downstream businesses which we understand currently use WDM technology. We are

disappointed that Ofcom appears to have given little consideration to the need for imposition of a full set of remedies that will ideally support the notion of input equivalence or, in the alternative, output equivalence.

Our further concerns with Ofcom's proposed approach to MISBO (particularly within WECLA) are set out elsewhere in this response.

**Question 18:**

**Do you agree with the remedies that we propose for KCOM in the retail TI and AI markets? In particular, do you agree with our proposal that KCOM should be required only to publish maximum prices and to be permitted to offer bespoke discounts?**

We agree with and support Ofcom's proposed approach.

**Question 19:**

**Do you agree with the remedies that we propose for KCOM in the wholesale TISBO and AISBO markets? In particular, do you agree with our proposal that KCOM should be required only to publish maximum prices and to be permitted to offer bespoke discounts?**

We agree with and support Ofcom's proposed approach.

## SECTION 2

### LLCC CONSULTATION QUESTIONS

#### Question 1:

**Do you agree with our proposal to use an RPI-X form of charge control? If not, please explain why and propose an alternative approach with supporting information.**

Notwithstanding our comments elsewhere, particularly those relating to the intended removal of cost orientation and accounting obligations, we fully support Ofcom's proposal to impose an inflation-based charge control.

Ofcom will be aware that we have previously advocated the use of the Consumer Price Index (CPI) as a more appropriate inflation index than RPI. CPI is not only internationally comparable, but the constituent basket is arguably more reflective of the cost of providing communications services than RPI which is significantly influenced by mortgage interest payments and council tax. Indeed, because BT's own pension has changes such that payment increases are now based upon CPI, we believe that it is now time for Ofcom to seriously consider its choice of inflation index.

As Global Crossing, we raised this issue in the context of the previous LLCC, and this continues to be our position. We have previously tendered information regarding the make-up of the respective baskets and as this remains substantially accurate, we do not propose to repeat this here.

With regard to the GBCI that it is proposed be applied to ECCs, it may be open to question whether this index (which relates to the construction of houses and roads) will prove more accurate than RPI/CPI in reflecting the true cost of constructing fibre network facilities. However since the GBCI is at least related to civil engineering costs, which reflect a significant element of street work activity then provided such activity forms the largest proportion of ECC elements, we accept that there is merit in Ofcom's proposal.

#### Question 2:

**Do you agree with our proposal for the charge control to run for a maximum of three years from the date of implementation? If not, please explain why and propose an alternative approach with supporting information.**

Level 3 agrees that it is appropriate to implement a three year control period, running concurrently with the period of the market review.

We note that the new measures will not be in place prior to the start of the control period and notwithstanding BT Wholesale's letter of comfort, this gives rise to some concern. While we understand the complex nature of Ofcom's information gathering exercise, we urge the introduction of a more streamlined and timely approach to data analysis in future. One proposal that would go some way towards making this possible would be for the design of future information requests to be set out well in advance of the planned submission date. Potentially, once the format is standardized to a large extent, it may be possible for CPs to design models that ensure real-time capture against consistent standards.

**Question 3:**

**Do you agree with our overall proposal for the design of the charge control? If not, please explain why and propose an alternative approach with supporting information.**

We agree with Ofcom's stance in not allowing geographic discounts, volume or term discounts to count towards meeting the charge control however we remain cautious about supporting Ofcom's proposal to allow BT pricing freedom on a geographic basis. Whilst we agree that competitive conditions may not be homogenous throughout the UK we are unclear how the underlying costs would differ substantially. CPs need pricing certainty and through the period of the current charge control this has not been the case with BT introducing pricing initiatives at much too short a notice period with no consultation with industry until notification, and so non BT CPs at least, have not been able to take full advantage of the change in commercial position.

Should Ofcom continue with its proposal we would suggest that, prior to any change in BT's geographic pricing structure, Ofcom should require BT to (i) enter a reasonable period of industry collaboration and (ii) provide a minimum of 90 working days following the announcement of each and every change in order to enable CPs to give full consideration to the implications and take maximum advantage of the change.

**Question 4:**

**Do you agree with our proposals for TI, specifically: basket design; anchor pricing approach; base year adjustments; and forecasting assumptions? If not, please explain why and propose alternative approaches with supporting information.**

Provided Ofcom were to reverse its proposal to withdraw the cost orientation and accounting obligations, Level 3 would be content with the proposed basket and sub-basket charge cap structure. However, in the absence of such a change, then we believe the structure of the sub baskets should be more granular in order to deliver appropriate safeguards to CPs.

As we have commented elsewhere, it now appears possible that the base year data could and should be updated to reflect the most recently published figures in BT's 2011/12 RFS.

In terms of prior year weights, we are concerned that this may give a less accurate picture than would be the case were more recent figures used. We believe that these more recent figures will be known so it would be possible for Ofcom to obtain and use to ensure a forecast that can be plausibly verified. On a related topic, we have noted elsewhere that we have some concerns with forecast decline in 2Mb/s volumes and this is something that could be assessed more accurately if recent data were supplied.

**Question 5:**

**Do you agree with our proposal for Ethernet, specifically: basket design; modern equivalent asset approach; base year adjustments; and forecasting assumptions? If not, please explain why and propose alternative approaches with supporting information.**

Notwithstanding our comments elsewhere regarding basket design and the relationship to cost orientation, in principle we fully support Ofcom's proposed use of modern equivalent assets.

Insofar as migration credit is concerned, we repeat our doubts that the volume of WES circuits predicted to migrate to AI is likely to be inflated unless our concerns around migration are satisfactorily addressed.

**Question 6:**

**Do you agree with our approach and proposals for controls for excess construction charges? If not, please explain why and propose an alternative approach with supporting information.**

We broadly agree with Ofcom's approach under the current charging approach and as such welcome the move to subject these charges to a separate control. However we bring to Ofcom's notice that there are missing line items from the current published list for ECC charges. These arise in a significant proportion of circumstances where BT provides the components only and an onsite contractor, rather than BT's own contractor, provides the labour. On occasion it has been our experience for BT continue to charge at the published rate unless challenged, below is a fairly typical example of this concern which arose in relation to a 100Mb EAD circuit.

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We support Ofcom's intention to make a starting charge adjustment and not to follow a glide path approach, this does however raise questions around the historic excessive pricing of ECCs within BT.

We are concerned that the infrastructure which is delivered through the ECC process is done so in a manner which is both inefficient and which is less efficient for the CP than is possible. It is possible that, with a the right amount of encouragement, a satisfactory solution might be found, accordingly we invite Ofcom to encourage BT to engage with industry in further discussion around making real headway into bringing the common network (charging) point much closer to the end users premise, perhaps in a similar solution to which it has for NGA.

Process issues also still exist surrounding the charging of ECCs to CPs who provide access circuits from differing BT Lines Of Business to the same end user or multiple CPs providing services into the same end user that may also be across BT Lines of Business, regardless it is still Openreach that would plan the access circuits into these end user sites and a better solution needs to be sought as the existing process allows for the potential over recovery of costs. Level 3 originally raised this at the PPC forum in June 2010.

**Question 7:**

**Do you agree with our approach and proposals for charge controls for accommodation? If not, please explain why and propose an alternative approach with supporting information.**

We agree with Ofcom's general approach towards regulating the charges for accommodation services. However, and as we have mentioned elsewhere, with regard to WLA we believe there should be adjustments made because of the lack of equivalence, particularly in terms of tie cable usage.

**Question 8:**

**Do you agree with our proposal for charge controls for AI services in the WECLA? If not, please explain why and propose an alternative approach with supporting information.**

In terms of approach, we support Ofcom's proposed approach and so far as the economic analysis is concerned, we agree with Ofcom's conclusions. Where we diverge relates to the definition of the geographic WECLA area, and our concerns in this regard are expressed elsewhere.

**Question 9:**

**Do you agree with our proposal for charge controls for retail analogue services? If not, please explain why and propose an alternative approach with supporting information.**

We agree with and support Ofcom's proposal for charge controls for retail analogue services.

**Question 10:**

**Do you agree with our proposals for the implementation of the new charge controls? If not, please explain why and propose alternative approaches with supporting information.**

It is clear that the implementation will be delayed for several months beyond the originally intended implementation date. We recognize that Ofcom's proposal is intended to bring the new price regulations into effect as soon as practically possible. From the time of the publication of the draft charge control, we have made use of the data to inform our business decisions. Our primary concern is that if the final Statement is were to permit BT to raise its prices for any major product significantly higher than anticipated in the draft, then this could expose us (and potentially our customers) to an unwelcome risk of price shock. Provided prices remain in line with or lower than Ofcom's proposals, then we would support the shorter implementation period, otherwise we would seek a longer period in order that we can take suitable strategic decisions.

**Question 11:**

**Do you agree with our approach to cost forecast modelling? If not, please explain why and propose an alternative approach with supporting information.**

Our views on this matter have been aired fully above.

**Question 12:**

**Do you agree with our assumptions of key inputs? If not, please explain why and propose an alternative approach with supporting information.**

Our views on this matter have been aired fully above.

**Question 13:**

**Do you agree with our approach in relation to POH charges? If not, please explain why and propose an alternative approach with supporting information.**

While we agree with the general direction of Ofcom's approach, we are not convinced that the cost of obsolescence will increase quickly as is being predicted. In our view, given adequate attention to grooming, it is likely that inefficiencies will be kept to a minimum. Likewise, it is our view that there should be no shortage of maintenance spares during the charge control period because, against a progressively reducing demand for PoH capacity, all serviceable decommissioned equipment can be readily reused elsewhere.

Nor are we convinced that full account has been taken of the efficiencies relating to use of PoH at SMA1 and higher rates as opposed to legacy 4x2 and 16x2 muxes.

**Question 14:**

**Do you agree with our proposals for the treatment of cost of capital? If not, please explain why and propose an alternative approach with supporting information.**

In the absence of any new or conflicting evidence regarding cost of capital, we agree with and support Ofcom's proposals.

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